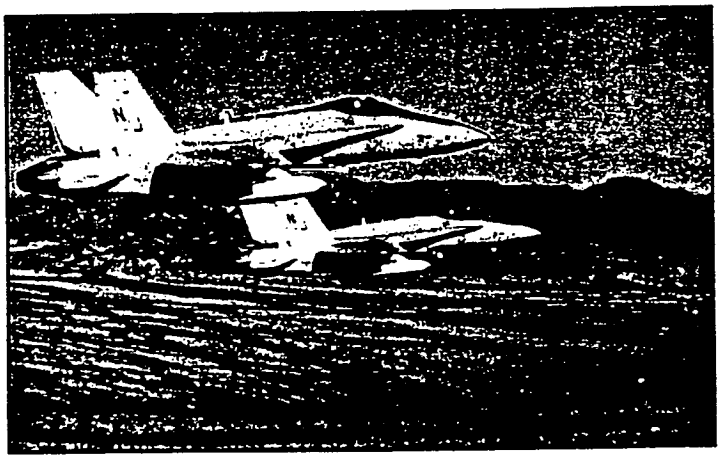
Volume 1

Final Environmental Impact Statement

MOL.20010726.0066

QA: N/A

Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada



May 1998

Department of the Navy
Naval Air Station Fallon
Fallon, Nevada

ERRATA SHEET

June 11, 1999

Final Environmental Impact Statement
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
Volume 1 and Volume 2

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FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS) FOR THE WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES AT NAVAL AIR STATION (NAS) FALLON, NEVADA

Lead Agency:	US Department of the Navy
Cooperating Agency:	US Bureau of Land Management
Title of Proposed Action:	Final Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes at NAS Fallon, Nevada
Affected Jurisdictions:	City of Fallon and Churchill County, Nevada
Designation:	Final Environmental Impact Statement

ABSTRACT

The US Navy proposes to withdraw federally administered public land around the NAS Fallon Range Training Complex (FRTC) in Churchill County, Nevada. The purpose of this proposed action is to provide the necessary land area so the Navy can maintain and improve realistic operational and strategic combat training and to provide safety buffer zones around the training ranges. Three alternative withdrawal footprints were evaluated for potential environmental impacts, in addition to the no action alternative. The withdrawn lands would be placed in land use categories to define compatible uses with training operations and public safety. Category A lands, identified as containing or having the potential to contain off-range ordnance, would be closed to public access. Category B lands would include all other withdrawn lands and would be open for public use. In response to concerns from individuals and officials voiced during scoping, Alternative II, the preferred alternative, fulfills known safety and training requirements while attempting to minimize the amount of land proposed for withdrawal (127,365 acres). The no action alternative would not withdraw any lands, including those lands identified as containing off-range ordnance. "No action" would not meet training requirements nor provide for other public safety measures. Impacts of the withdrawal include the closure of public access on lands containing or having the potential to contain off-range ordnance and potential effects to mining, visual resources, and recreation from development of small sites and from integrated air and ground training activities. Mitigation measures are provided to reduce the level of impact.

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May 1998

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADDU	Additional Duty
AFB	Air Force Base
AFY	Acre-Feet Per Year
AG	Agricultural
AG/LDR	Agricultural/Low Density Residential
AGL	Above Ground Level
AICUZ	Air Installation Compatible Use Zone
AR	Air Refueling Route
ATCAA	Air Traffic Control Assigned Airspace
AUM	Animal Unit Month
BLM	Bureau of Land Management
BOM	US Bureau of Mines
BRAC	Base Realignment and Closure
BUREC	Bureau of Reclamation
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalent Level
CNO	Chief of Naval Operations
CO	Commanding Officer
CO	Carbon Monoxide
CO NASF	Commanding Officer, NAS Fallon
COE	Army Corps of Engineers
CRMP	Cultural Resource Management Plan
CVW	Carrier Air Wing
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DBCRA	Defense Base Closure and Realignment Act
DEIS	Draft Environmental Impact Statement
DOD	Department of Defense
DOE	Department of Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMR	Electromagnetic radiation
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EW	Electronic Warfare
FAA	Federal Aviation Administration
FERC	Federal Electric Regulatory Commission
FL	Flight Level
FLPMA	Federal Land Policy Management Act
FRS	Fleet Replacement Squadrons
FRTC	Fallon Range Training Complex
H_2S	Hydrogen sulfide
HC	Hydrocarbons
HMA	herd management area
HWAD	Hawthorne Army Depot

IFR	Instrument Flight Rules
IMP	Interim Management Policy
IWTS	Imaging Weapons Training System
Ldn	Day-Night Average Noise Level
LEIS	Legislative Environmental Impact Statement
Leq	Equivalent Noise Level
MCAS	Marine Corps Air Station
MOA	Military Operations Area
MOU	Memorandum of Understanding
MSL	Mean Sea Level
MTADS	Multi-sensor Towed Array Detection System
MTR	Military Training Route
NAS	Naval Air Station Fallon
NBMG	Nevada Bureau of Mines and Geology
NDOT	Nevada Department of Transportation
NDOW	Nevada Division of Wildlife
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NNNPS	Northern Nevada Native Plant Society
NOI	Notice of Intent
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRS	Nevada Revised Statutes
NSAWC	Naval Strike and Air Warfare Center
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
NZ	Noise Zones
O_3	Ozone
O&M	Operations and Maintenance
OPNAVINST 5090.1B	Dept. of the Navy Environmental and Natural Resources Program Manual
ORV	Off-Road Vehicle
PA	Programmatic Agreement
Pb	Lead
PL	Public Law
PLO	Public Land Order
PM_{10}	Inhalable Particulate Matter
RAICUZ	Range Air Installation Compatibility Use Zone
RCTC	Reserve Component Training Center
RMP	Resource Management Plan
ROI	Region of Influence
ROW	Right-of-Way
RSZ	Range Safety Zone
SAM	Surface-to-Air Missile
SEAL	Sea-Air-Land
SEL	Single Event Level
SHPO	State Historic Preservation Officer
SO_2	Sulfur Dioxide
SO_x	Sulfur Oxides
SUA	Special Use Airspace

T&E	Test and Evaluation
TACTS	Tactical Aircrew Combat Training System
TCID	Truckee-Carson Irrigation District
TIS	Tracking Instrumentation Subsystem
Top Dome	Carrier Airborne Early Warning Weapons School
TOPGUN	Naval Fighter Weapons School
USC	United States Code
USDA	US Department of Agriculture
USFWS	US Fish and Wildlife Service
VFR	Visual Flight Rules
VRM	Visual Resource Management
WISS	Weapons Impact Scoring System
WSA	Wilderness Study Area

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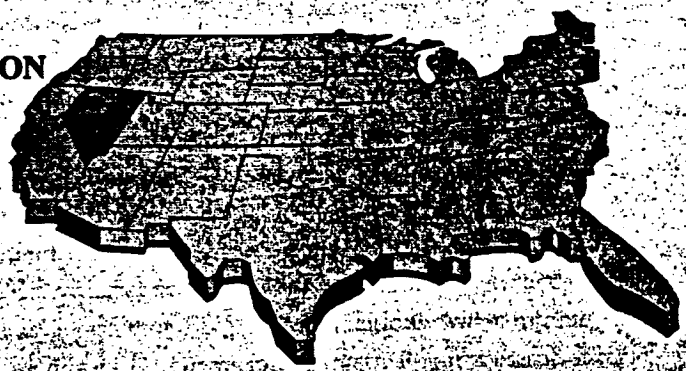
NAS
FALLON



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION

This final environmental impact statement (FEIS), for an action previously referred to as the Master Land Withdrawal, evaluates the potential impacts to the environment that may result from the withdrawal of federally administered public land adjacent to the training ranges at Naval Air Station (NAS) Fallon, Nevada. The withdrawal will not cause an increase in air operations or increase the size of the impact areas within the ranges, but is designed to improve the realistic operational and strategic combat training at Fallon and to increase control and management of safety buffers and areas where off-range ordnance has been found. This FEIS has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations on implementing NEPA (40 CFR 1500-1508), and Navy guidelines (OPNAVINST 5090.1B). The Navy is the lead agency for the withdrawal action, with the Bureau of Land Management (BLM) acting as a cooperating agency.

PURPOSE AND NEED

Improve Realistic Operational and Strategic Combat Training

The mission of NAS Fallon is to provide facilities (including training ranges), services, and materials to tenants and transient units stationed at or being deployed to NAS Fallon for Chief of Naval Operations (CNO) approved aviation training. The Naval Strike and Air Warfare Center (NSAWC) is the major tenant command. NSAWC develops realistic combat training scenarios for military aircrews flying high-performance jet aircraft and helicopters, employing state of the art military equipment and tactics. NSAWC operates, maintains, schedules, develops, and configures the Fallon Range Training Complex (FRTC).

NAS Fallon is the only Navy facility that can support, train, and house an entire carrier air wing (CVW) for initial and refresher integrated strike training. A CVW consists of all aircraft, pilots, crew, and aircraft maintenance personnel assigned to an aircraft carrier. NAS Fallon hosts four to six CVWs and up to two Marine air wings per year for an intensive four-week training program prior to their scheduled deployment aboard aircraft carriers or to air stations overseas (US Navy 1995e). In addition to CVWs, NAS Fallon hosts a fleet replacement squadron (FRS) detachment. The FRS detachment is based permanently at NAS Fallon and operates a maintenance facility for F/A-18s from NAS Lemoore, California, and NAS Cecil Field, Florida, the respective

West Coast and East Coast Hornet fleet replacement squadrons (US Navy 1995e).

In addition to aircraft training, the NSAWC mission supports integrated ground and aircraft training, including combat search and rescue training. Combat search and rescue consists of integrated training with ground personnel and helicopter and fixed wing air support. The objective of the training is rescuing and transporting ground personnel, such as downed pilots, from within enemy territory. NAS Fallon is the only Navy facility where the combat search and rescue training mission is conducted. Ground training at NAS Fallon occurs only as a component of the integrated air and ground training mission; it is not a stand-alone mission. More than 90 percent of the integrated air and ground training takes place during the week, and approximately 50 percent of the training occurs at night.

Some Navy training, such as limited ground training activities, has historically made use of public lands under the management of the Bureau of Land Management, Department of Interior. Those uses are coordinated with the BLM or other appropriate agencies.

Changes in technology and military strategy require that NAS Fallon change and improve its operational and strategic combat training. In order to achieve the most realistic combat training possible, NAS Fallon needs to have the flexibility to develop visual cueing device sites and additional electronic warfare (EW) and tactical aircrew combat training systems (TACTS) sites. NAS Fallon needs to simulate real world conditions for integrated air and ground operations training. Such conditions require large corridors of land with varying terrain (Section 1.4.1). These changes and improvements cannot be effectively carried out on present withdrawn land configurations, even with relatively minor additions to the use of public lands. This proposal to withdraw additional land is calculated to provide the necessary area for effective national defense training and to minimize disruption of the BLM mission to provide for multiple uses on federal lands.

Increase Control and Management of Safety Buffers and Areas Where Off-range Ordnance Has Been Found

Several Navy studies identified safety hazards associated with the NAS Fallon training ranges. These studies include the off-range ordnance sweeps conducted near the ranges in 1989 and 1990 (US Navy 1990), the Range Air Installation Compatible Use Zones (RAICUZ) Study (US Navy 1982b), an updated RAICUZ study for B-16 (US Navy 1995, 1997), and the Hazard Analysis Mitigation Report (US Navy 1995g). These studies pointed out the need for a land withdrawal to increase public safety (Section 1.4.3).

The Naval Air Station Fallon Ranges Hazard Analysis Mitigation Report used the HAZARD methodology to identify lands surrounding the training ranges that have the potential to be contaminated with off-range ordnance for would be withdrawn (Figure 1-3) (US Navy 1995g). A recent B-16 RAICUZ study provided revised safety footprints for B-16 (US Navy 1995h). This study is based on noise data presented in two recent noise studies for B-16 (see Section 5.6.4.7), updated weapon safety footprints (see Section 1.4.3.1), and armed overflight zones (see Section 1.4.3.4).

Off-range ordnance sweeps conducted in 1989 and 1990 found surface ordnance on 24,464 acres of land adjacent to the B-16, B-17, and B-19 training ranges (Figure 1-5). Analysis determined that these lands, now administered by the BLM, should be closed to protect the public from exposure to ordnance hazards (US Navy 1990). The Navy and BLM are in agreement that such closed properties should be withdrawn and placed under Navy control and management.

The 1982 RAICUZ study identified areas surrounding the training ranges where the possibility of accidents and the level of noise from Navy activities exceed Navy guidelines for nonmilitary land uses. The RAICUZ analysis was used to determine the original land withdrawal footprint (Alternative I). More recent studies conducted to address range safety requirements, described above, led to the revision of the RAICUZ findings. A summary of the 1982 RAICUZ report is presented in this FEIS to explain Alternative I. The other alternatives evaluated in this FEIS reflect the findings of more recent studies.

PROPOSED ACTION

The Navy proposes to withdraw federally administered land around NAS Fallon training ranges to facilitate and improve the realistic operational and strategic combat training conducted there and to provide public safety buffers. All lands proposed for withdrawal are administered by the BLM, Bureau of Reclamation (BUREC), or Department of Energy (DOE). The land within the proposed action is expected to fulfill the majority of the training requirement. Any military use that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency.

Three action alternatives are evaluated in detail. These alternatives would withdraw between 127,365 and 189,080 acres of public land around the NAS Fallon training ranges B-16, B-17, B-19, the shoal site, and the Dixie Valley area. The total of all the alternative withdrawal footprints would include lands north, west, and southeast of B-16; lands north, south, east, and west of B-17; and lands north, west, and east of B-19. Lands at the shoal site and Dixie Valley area also are included for withdrawal. Under each action alternative, all

lands known to be contaminated or having the potential to be contaminated with off-range ordnance would be withdrawn (Sections 1.4.3.1 and 1.4.3.3). Specific acreages and maps of the withdrawal areas for each alternative are presented in Sections 2.2.2. and 2.3.3.

The withdrawn lands under each alternative would be placed in one of two land use categories—Category A, Exclusive Navy Use, Potential Ordnance Hazard; or Category B, Navy and Public Use, Limited Land Use Conflicts. Category A includes approximately 40,280 acres of land east of B-16, north, south, and east of B-17, and north and east of B-19. Category B includes all remaining withdrawal lands.

Category A lands will be managed by the Navy and will be closed to public uses. Category B lands will be managed by the BLM with Navy review and approval of certain activities and will remain open to public use with the exception of fenced EW sites. All lands will be managed under a resource management plan that has been developed by the Navy, in consultation with the BLM, BUREC, and DOE. This management plan provides specific land use policies for the withdrawn lands in conformance to the proposed action (Section 2.3.2 summarizes the plan, which is presented in Appendix J).

Up to five EW or TACTS sites and up to 50 sites for visual cueing devices could be developed on the withdrawn lands. Each EW site would occupy fewer than five acres, and each TACTS and visual cueing device site would occupy up to one acre. The maximum land area that would be disturbed if five EW sites and 50 visual cueing device sites were developed would be 75 acres. Although the exact locations of these sites have not been identified, all will be located on withdrawn lands in the Dixie and Fairview Valley areas and east of B-19 where possible. Not all visual cueing device sites would be occupied at one time (i.e., there would never be 50 visual cueing devices on the withdrawn lands at one time). Typically, three to six visual cueing devices are used at a time during air wing training events.

Integrated air and ground training activities will take place on the withdrawn lands. A typical ground training portion of the exercise associated with the four to six air wing training events will consist of up to two vehicles, up to two helicopters, and up to six personnel. Under desert rescue scenarios, which now occur once a year for three weeks, the most intensive training event will consist of four vehicles, two helicopters, and up to 15 personnel. Not all of these forces will be located at the same site at the same time. The Navy will avoid other public land users when conducting ground training operations. Chaff and flares will continue to be dispensed from aircraft over B-17 and the Dixie and Fairview Valleys. These activities are described in detail in Section 2.3.1.

All EW, TACTS, and visual cueing device sites will be located away from sensitive resources where possible to avoid adverse impacts and will undergo National Historic Preservation Act Section 106 and federal Endangered Species Act Section 7 consultations, as appropriate. All actions at the shoal site would take place at or above the ground surface—no subsurface disturbance is proposed.

Any military use that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency; the proposed land withdrawal alleviates the need to use other BLM lands in most cases.

PUBLIC INVOLVEMENT

Public Scoping. Public issues and concerns were solicited during the public scoping process conducted from May 12 through July 7, 1995. Notices describing the proposed withdrawal and preparation of the EIS were published in the Federal Register and two local newspapers. Scoping letters also were mailed to over 200 agencies, organizations, and individuals. Public scoping meetings were conducted in Reno, Nevada, on June 6, 1995, and in Fallon, Nevada, on June 7, 1995.

Comments addressed public land access, airspace safety and availability, noise levels, biological resources, water supply and rights, socioeconomic effects, land use compatibility, public health and safety, and cultural resources. Respondents requested that the EIS address a full range of alternatives, including relocating B-16, and present the alternative selection process.

Comments urged NAS Fallon to make the best use of lands currently under its management and to withdraw the least amount of land possible. In response, the proposed configuration was changed to include a corridor of Navy-owned land connecting to the Dixie Valley area proposed for withdrawal.

In response to public scoping comments related to noise north of B-16 in the Sheckler District, the Navy initiated operational changes at B-16. These changes, discussed in Section 5.6.3, would revise current flight patterns to reduce noise levels north of B-16 in the Sheckler District. The BLM published a NOI for these modifications in the Federal Register and held an open house on July 17, 1996, to discuss these changes.

Draft EIS. The public was invited to review and comment on the DEIS. A notice of availability was published in the Federal Register on July 10, 1997. Public notices were mailed to those on the mailing list (Appendix B). Ads were published in the Reno Gazette and Lahontan Valley News on September

8 and 9, 1997, and September 14 and 15, 1997. The DEIS was circulated for public and agency review from July 10, 1997 to October 10, 1997. This public comment period of 90 days (required to be at least 45 days under NEPA) provided an opportunity for the public to review the issues addressed in the impact analysis and to offer comments on any aspect of the process. The distribution list is included as Appendix B.

Public hearings were held on September 16, 1997, in Reno, Nevada, and on September 17, 1997, in Fallon, Nevada, to formally receive verbal and written comments on the DEIS. The locations, dates, and times of the meetings were announced in the media and were included in a letter mailed to those on the distribution list. Open houses were held prior to each public meeting to give the public an opportunity to discuss their concerns with Navy representatives. Approximately 30 individuals attended the open house, 60 individuals attended the public hearing, and 23 individuals presented oral comments in Reno, Nevada. Approximately 16 individuals attended the open house, 52 individuals attended the public hearing, and 15 individuals presented oral comments in Fallon, Nevada. Comments and responses to the comments are provided as Volume II of this FEIS. An additional meeting was held in Austin, Nevada on September 30, 1997, to respond to concerns of citizens of Eureka, Nye, and Lander Counties voiced at the Reno and Fallon public hearings. Approximately 50 individuals attended this meeting.

Final EIS. This FEIS incorporates and responds to comments received on the DEIS. As required under NEPA, there will be a 30-day no action period after the FEIS is published. After the 30-day no action period, a Record of Decision (ROD) will be prepared.

ALTERNATIVES

Three action alternatives were determined to meet the identified purpose and need, and these are analyzed in detail in the FEIS. Alternative II has been selected as the preferred alternative because it minimizes the amount of land proposed for withdrawal. All action alternatives considered withdraw the lands known to contain off-range ordnance. The three alternatives and the No Action Alternative are summarized below:

- *Alternative I.* Approximately 189,080 acres would be withdrawn. The withdrawal footprint would include all lands recommended for withdrawal in the 1982 RAICUZ study (181,323 acres) plus additional lands closed as a result of off-range ordnance sweeps but not included within the original RAICUZ footprint (7,750 acres). This alternative represents the footprint of the original Master Land Withdrawal proposal, as amended in 1992.

This alternative meets safety requirements and provides adequate land for EW and TACTS site development in the Dixie and Fairview Valley area and east of B-19. The footprint, however, does not contain a corridor connecting the Navy-owned Dixie Valley land holdings with the rest of the Dixie Valley area. Such a corridor is important in maximizing the use of existing Navy land and in providing the necessary land for integrated air and ground training (see Section 1.4.2).

- *Alternative II (Preferred Alternative).* Approximately 127,365 acres of land would be withdrawn, about 62,000 acres less than under Alternative I. Much of the land identified in Alternative I, particularly the land identified as range safety zone C north of B-16 and in the Dixie Valley area in the 1982 RAICUZ study, can be managed effectively under the administrative authority of the BLM with Navy review and approval. The lands identified for withdrawal under this alternative are those lands of immediate importance to the Navy training mission and intended for flexible use in support of that mission or those lands that pose a potential hazard to public safety. BLM administrative management processes are not designed to support this kind of use.

  Approximately 6,100 acres north of B-16 would be withdrawn because of practice/inert off-range ordnance and for integrated air and ground training activities. Lands east of the range would be withdrawn because of off-range ordnance and public safety. Approximately 1,500 acres in the Dixie Valley area, just north of Highway 50 and northwest of B-17, would be included. This area would provide a continuous land management link between the Dixie Valley area and B-17. Lands within the Highway 50 right-of-way are not included in the withdrawal.

  This withdrawal footprint differs from Alternative I in that a portion of the shoal site, the land west of B-16, the land west of Highway 95 near B-19, the land in the Job Peak Wilderness Study Area, and the land west of Scheelite Mine Road near B-17 would not be withdrawn. Approximately 21,000 acres north of B-16 proposed under Alternative I would not be withdrawn.

  As part of this withdrawal, a parcel of land approximately one mile wide (one section wide) will connect the major portion of the Dixie Valley withdrawal with the Navy-owned property on the north end of the valley. This panhandle will facilitate better use of withdrawn public land and Navy-owned property by permitting uninterrupted movement of ground personnel from one area to the other. Additionally, it will permit placing and moving visual cues and mobile EW sites the entire length of the valley, which will add greatly to the realism of the training scenarios created in support of all NSAWC- and CNO-sponsored training

missions. The Dixie Valley area footprint provides a variety of rugged and flat terrain to simulate possible enemy environments. The acreage also would support required integrated air and ground training operations, such as rescuing downed pilots, and developing EW, TACTS, and visual cueing device sites. Alternative II includes all lands closed to the public due to the presence of off-range ordnance. This withdrawal will not include the Nevada Department of Transportation right-of-way along the Dixie Valley Road.

- *Alternative III.* Under this alternative, approximately 152,765 acres would be withdrawn. The footprint is similar to Alternative II but includes more land in the northern portion of the Dixie Valley area. It also includes the land just north of Highway 50 and northwest of B-17 and the corridor of land that connects the Dixie Valley area to Navy-owned lands in Dixie Valley.

  Alternative III allows for integrated air and ground training and operations in concert with CVW training. It allows for multiple realistic training scenarios that require the pilot to react to different combat situations. It provides adequate land for placing realistic visual cueing devices. As compared to Alternative II, the larger Dixie Valley area with the panhandle would allow for maximum combat training flexibility but would not minimize the amount of land withdrawn. All land known to contain off-range ordnance would be withdrawn.

  Alternative III differs from Alternative I in that approximately 21,000 acres north of B-16, the land west of B-16, a portion of the shoal site, the land west of Highway 95 near B-19, and the land west of Scheelite Mine Road would not be withdrawn.

- *No Action Alternative.* Under the No Action Alternative, the Navy would not withdraw any federally administered public lands around the FRTC training ranges. Navy operations would continue on existing ranges. Public lands, including those containing off-range ordnance, would remain under the authority of the current managing agencies. The No. Action Alternative would be the least disruptive of the natural environment of the alternatives evaluated; therefore, it is considered the environmentally preferred alternative. However, the No Action Alternative would not be protective of the human environment, as discussed below, and would not satisfy the purpose and need of the proposed action.

  The No Action Alternative does not establish appropriate management responsibility for land containing off-range ordnance because the lands would not be under Navy control. It does not provide for the safety

buffers defined through HAZARD modeling. The realism and flexibility of combat training activities would be severely limited under this alternative because visual cueing, integrated air and ground training, and close air support operations would be limited to existing Navy lands. This loss of realism would result in incomplete training of combat pilots, thereby increasing the potential for loss of lives in actual combat situations. The No Action Alternative does not meet the mission evaluation criteria (Section 2.2.1); therefore it is not a reasonable alternative for purposes of this action. It is analyzed in this report to provide a baseline of current conditions as required by CEQ regulations (40 CFR 1502.11[d]).

Four other alternatives were eliminated from detailed study because they did not fulfill one or more of the evaluation criteria (Section 2.2.3). Each alternative is presented below, along with a brief discussion on why it is not a reasonable alternative:

- *Increase the Size of the Withdrawal.* This alternative would withdraw over 200,000 acres of public land to include the widest safety buffer specified by the various studies, with the exception of land located on Walker River Indian Reservation. It is not the Navy's intent to withdraw any more public land than is required to support the purpose and need of the withdrawal. While this withdrawal would fulfill the majority of training and safety requirements, it would not minimize the disruption of other public land users. For this reason, this alternative is not considered reasonable and is not analyzed in detail.

- *RAICUZ Withdrawal.* This alternative would withdraw 181,323 acres of public land, as recommended by the 1982 RAICUZ study. The 7,750 acres of land identified as containing off-range ordnance but not included in the 1982 RAICUZ footprint would not be withdrawn. This is not a reasonable alternative because the Navy would not withdraw ordnance-contaminated lands, as requested by the BLM. The BLM would have to continue managing the 7,750 acres containing off-range ordnance but not withdrawn under this alternative. In addition, it would not withdraw the land north of Highway 50 and B-17 or link the withdrawal lands in the Dixie Valley area to the Navy's Dixie Valley land holdings. Therefore, this alternative would not provide the most efficient use of the land for integrated air and ground training.

- *Off-range Ordnance Withdrawal.* This alternative would withdraw only the 24,464 acres of public land identified during the 1989 and 1990 sweeps as containing off-range ordnance (Figure 1-5). This alternative fulfills only part of one of the evaluation criteria objectives—close public access on lands containing off-range ordnance. It does not provide the safety buffers

around the FRTC training ranges defined through HAZARD modeling (Figure 1-3). These buffers, which are based on operational requirements and parameters, are necessary to contain public safety hazards.

The Off-range Ordnance Alternative would not fulfill training-related criteria and would not provide the necessary land area for the Navy to change and improve realistic operational and strategic combat training. The modern Navy uses jets equipped with complex technologies including state-of-the-art weaponry and communication, navigation, and guidance systems. To operate these jets effectively and to maximize their performance in combat situations, pilots must have intense and realistic training under simulated conditions. Visual cueing devices, TACTS sites, and EW sites simulate enemy threat scenarios, counterattacks, and complex targeting scenarios. Under the Off-range Ordnance Alternative, developing visual cueing and mobile EW sites would be allowed on existing Navy training ranges and off-range ordnance lands only. This would limit the Navy's flexibility to vary training combat scenarios and would therefore limit training capabilities at the ranges. The loss of realism in training caused by these restrictions would result in the incomplete training of combat pilots, thereby increasing the potential for loss of life in real world combat situations.

The Off-range Ordnance Alternative would not withdraw the land north of Highway 50 and B-17 or link the withdrawal lands in the Dixie Valley area to the Navy's Dixie Valley land holdings. This alternative would limit the ability of the Navy to provide effective integrated air and ground combat training. Integrated air and ground training is an increasingly important training component of the Navy and other branches of the military. Training in a variety of terrain is invaluable to this mission. Various types of lands are required for landing zones, for long-range patrols, and for simulating the terrain found in various real world scenarios.

This alternative would not give the NSAWC the flexibility to quickly respond to changing training needs because any proposed use on public lands under the authority of the BLM would have to go through BLM administrative processes. Additionally, the compatibility of land uses surrounding the ranges is an issue insofar as it affects the training missions and the viability of the FRTC.

This alternative would not provide the area and diversity required for effective training and does not meet Department of Defense safety requirements and policies. Because this alternative does not meet the above requirements, it was not carried forward for detailed analysis.

- ***Relocate All or Part of the Fallon Range Training Complex.*** This alternative would consist of relocating all or part of the existing ranges. The components of this alternative are: relocate the FRTC, close B-16, relocate B-16 operations to other regional ranges, and relocate B-16 operations to B-20. None of these options present reasonable alternatives to the proposed action, as discussed below.

  - Relocate the FRTC. This option would involve identifying new or available airspace and identifying or constructing facilities for aircraft and personnel. Establishing a new range that could offer the same level of combat training is not viable because of the limited availability of large amounts of airspace and land, the potential for creating new environmental impacts, and the political climate against creating new military installations. Relocating the FRTC to other regional ranges is not a reasonable option because such ranges do not have the available airspace or support facilities to accommodate the amount or type of training activities performed at the FRTC. For these reasons, this alternative was eliminated from further consideration.

  - Close B-16. It was recommended during the public scoping process that B-16 be closed and training activities be relocated to other regional ranges because of noise and safety concerns. Closing B-16 was examined and determined not to be a viable option because it does not meet the evaluation criteria for this project and it would adversely affect NAS Fallon's training mission. The strategic importance of B-16 is discussed in detail in Section 2.2.3.

  - Relocate B-16 Operations to Other Regional Ranges. Moving B-16 to other regional ranges, such as Nellis Air Force Base, does not meet the evaluation criteria and is not a reasonable alternative. Other regional ranges are in excess of 150 nautical miles from NAS Fallon, which adds transit time, increases fuel consumption, and reduces training time and quality for participating pilots. Additionally, the nature of the activities conducted at some regional ranges and their increased use as a result of BRAC consolidations will continue to reduce the availability of other regional targets. Regular use of other regional ranges, therefore, is not a viable alternative.

  - Relocate B-16 Operations to B-20. This option does not meet evaluation criteria and is not a reasonable alternative because the airspace around B-20 lies within the same training area as B-17 and B-19. B-16 has completely separate airspace from the rest of the FRTC and can be used independently of but concurrently with other ranges for basic air-to-ground training.

ENVIRONMENTAL ANALYSIS

Existing Environment

Most of the land proposed for withdrawal is managed by the BLM, with most the area north of B-16 administered by the Bureau of Reclamation and the shoal site administered by the Department of Energy. The withdrawal lands surround the existing NAS Fallon training ranges B-16, B-17, and B-19 and are primarily undeveloped except for roads and utility corridors. Withdrawal lands east and north of B-16 (practice/inert ordnance only), north, south, east, and west of B-17, and east of B-19 have been impacted by off-range ordnance and are closed to public access under a BLM emergency closure order. The Navy has developed communication sites in the proposed withdrawal area, primarily in the Dixie and Fairview Valleys.

The primary public uses on the lands proposed for withdrawal, like on much of the public land in the western US, are recreation, grazing, and mining. The areas of highest recreational value include the Sheckler Reservoir north of B-16 (included in the Alternative I footprint), the Pony Express National Historic Trail that runs adjacent to but is not included within the withdrawal area, the Job Peak Wilderness Study Area in the northern Dixie Valley area (included in the Alternatives I and III footprints), and the Stillwater and Clan Alpine Mountain Ranges.

Grazing occurs south of B-16, around B-19 to the east, north, and west, around B-17, and in the Dixie Valley area. Withdrawal lands fall within the Horse Mountain, Bass Flat, Bucky O'Neil, La Beau Flat, Clan Alpine, Frenchman Flat, and Mountain Well/La Plata grazing allotments.

Mining occurs throughout the withdrawal area. The areas of highest mineral potential are located east of B-19 in the Holy Cross District, southeast of B-17 in the Fairview District, and in the Dixie Valley area in the Wonder District.

Environmental Consequences

The primary impacts of the land withdrawal would be the denial of public access on Category A lands, and the effects to resources on Category A and B lands from integrated air and ground training and development of EW, TACTS, and visual cueing device sites. An overview of impacts to each resource category is provided below. The impacts discussed may apply to any of the three alternatives.

Geology and Soils. Potential minor impacts to soils and geology include potential erosion and soil compaction during development of EW, TACTS, and visual cueing device sites and construction and use of any new roads or

utility corridors, if needed. These effects would be avoided or minimized through natural resource management techniques or through standard geotechnical engineering and design. No impacts to soil quality would occur from the continued use of chaff (Section 4.2.1).

Water Resources. The primary impact to water resources would occur on Category A lands. No new developments would be allowed, and access to the four existing developments would be closed except to BLM or the Nevada Division of Wildlife. No significant impacts to water quality are expected from the continued use of chaff. Chaff is insoluble in water, it would be filtered out before entering drinking water systems, and studies show an insignificant increase in metals content in water spiked with chaff (Section 4.2.2).

Biological Resources. No significant adverse impacts to endangered and threatened species are expected. Siting of Navy-developed facilities will avoid known sensitive species and habitats; and biological surveys will be conducted as required. Noise impacts to wildlife are not expected to be significant. To reduce startle effects, no ground or low-level helicopter training below 500 feet above ground level (AGL) will take place within a one-half mile radius of springs and water troughs. All construction and training activities would adhere to Navy policies of responsible stewardship of natural resources and to the requirements of all federal and state laws. Ground training would take place near B-17. While training is not expected to occur at Scheelite Mine Road, to avoid impacts to migrating tarantulas the Navy will not conduct ground training along Scheelite Mine Road during the migration periods. Integrated air and ground training would increase ground disturbance, potentially harming vegetation and promoting the spread of noxious weeds. The Navy will apply the Natural Resource Management Plan to withdrawn lands to control the spread of noxious weeds. Based on available data, aluminum-based chaff, such as that used at NAS Fallon, is not toxic to plants or wildlife. Development and maintenance of water storage troughs on Category A lands could be affected; the Navy and BLM have a cooperative agreement to allow BLM access to their guzzler on Category A land (Section 4.2.3).

Air Quality. Constructing EW, TACTS, and visual cueing device sites would temporarily impact air quality, especially in the generation of particulate emissions. The effects will be minimized through standard dust controls, such as watering. Integrated air and ground training, which includes helicopter hovering, would create dust impacts. This would be a localized and temporary effect. The continued use of chaff would not significantly impact air quality since chaff quantities released at one time are not great and do not break down to concentrations small enough to cause an impact (Section 4.2.4).

Noise. The land withdrawal would not in and of itself cause an increase in aircraft operations and associated noise. Constructing Navy-developed sites would result in noise of short duration. Noise from integrated air and ground training could result in disturbance to public land users in close proximity to operating helicopters. Most training occurs during the week and half of the training occurs at night, reducing the potential for training to occur during other uses of the land. In addition, it is standard operating procedure to avoid training near other public land users (Section 4.2.5).

Visual Resources. Navy activities, including site development and integrated air and ground training, would be visible to other users of public lands. The visual impacts of site development would be reduced by using colors that blend with the background. Fencing around Category A lands would be visible to travelers on nearby roadways; however, fencing is common throughout the region. The lands to be withdrawn are not to be used as target areas and there is no increase proposed to weapons impact areas. Long-term use of chaff could result in visible aluminum litter, but because of its wide dispersion pattern, it is not expected that chaff would alter the regional viewshed (Section 4.2.6).

Cultural Resources. The Carson Desert Predictive Model is one tool that will be used to delineate areas potentially containing surface and subsurface resources. These areas would be avoided in siting facilities. Site-specific surveys would be conducted as needed. The Navy will comply with the National Historic Preservation Act and with the procedures outlined in the NAS Fallon Cultural Resource Management Plan and Programmatic Agreement. Ground training exercises will not significantly affect cultural resources. Ground vehicles will use existing trails and roadways, and foot traffic will be dispersed over a wide area. Officers in charge of ground training operations will be provided information to assist them to avoid damage to culturally valuable areas (Section 4.2.7).

Land Use. The proposed land withdrawals will eliminate access to Category A lands and will limit the height of structures on Category B lands to 50 feet. The Navy will consider waiver of the height limit in cases where structures exceeding 50 feet are proposed for short-term development. Waivers must not pose a safety hazard to aircrews. Permanent nonconforming structures may be allowed in some areas if such structures are compatible with Navy training operations and do not pose a safety hazard. The land withdrawal will not place jurisdictional constraints on Churchill County or the City of Fallon (Section 4.2.8).

Environmental Justice and Socioeconomics. The proposed land withdrawal will not have disproportionately high and adverse human health or environmental effects on minority or low income populations. Lands belonging to the

Walker River Paiute Tribe and the Paiute-Shoshone Tribe of the Fallon Reservation and Colony are in close proximity to the withdrawal area. However, Native American groups do not use the proposed withdrawal lands for grazing, mining, or recreation in a higher proportion than other segments of the population. Socioeconomic impacts resulting from the closure of Category A lands could occur (Section 4.2.9).

Mineral Resources. The most significant impacts to mining would occur on Category A lands where mining activities would be closed to protect public safety. The Navy will explore means to compensate holders of patented or valid unpatented mining claims, subject to Congressional authorization and appropriation. The loss of revenue from undeveloped resources is an unmitigable impact. Potentially significant impacts to mining on Category B lands could occur in that no patenting of unpatented claims would be allowed after withdrawal. There are no areas of high mineral potential on Category B lands except in the Wonder District located in the Dixie Valley area. Only a small portion of the Wonder District falls within the preferred alternative withdrawal boundary. Applications for BLM permits for mining on Category B lands would require Navy review and approval. Approval would be granted where development was compatible with Navy training operations (Section 4.2.10).

Livestock Grazing. No livestock grazing would be permitted on Category A lands. A maximum of 1,130 animal unit months (AUMs) could be affected, or 1.4 percent of the 80,000 AUMs in the Lahontan Resource Management Area. The Navy will explore means of compensating holders of affected grazing permits, pursuant to the Taylor Grazing Act and subject to Congressional authorization and appropriation. Lost grazing opportunities on Category A lands are an unmitigable impact. Grazing would not be permitted on fenced Navy-developed sites, but this would not be a significant impact because of the small acreage that would be affected. The proposed land withdrawal would not significantly impact grazing or wild horse management on Category B lands. However, to minimize startling cattle and wild horses, the Navy will not conduct ground training or low-level flights below 500 feet AGL within a one-half mile radius of all springs and water troughs. Applications for BLM permits for grazing on Category B lands would require Navy review and approval. Approval would be granted if development was compatible with Navy training operations. Based on available data, the continued use of chaff will not adversely affect livestock (Section 4.2.11).

Recreation and Public Access. The greatest impacts to recreation would occur on Category A lands where access would be denied. While lost recreational activity on these lands is not mitigable, recreational opportunities would still be available on other lands in the area. Potentially significant impacts to recreation also could occur from Navy activities on Category B lands. The

presence of these activities could alter the social character of the area, and may discourage use of the lands for recreation even though recreation itself would not be restricted. The Navy will make every effort to avoid the public during ground training activities and will provide education program materials on Navy training activities on Category B lands to the BLM, NDOW, and BUREC for public distribution. Applications for BLM permits for recreation on Category B lands will require Navy review and approval. Approval will be granted if the proposed recreational use is compatible with Navy training operations. The Pony Express National Historic Trail or American Discovery Trail will not be impacted. The trail is not on lands proposed to be withdrawn, and access on the trail would not be restricted If there is an organized annual re-enactment of the Pony Express Trail ride, the Navy will work with trail personnel to alter flight activities during the event if compatible with training needs at the given time (Section 4.2.12).

Public Health and Safety. The proposed land withdrawal will benefit the public health and safety by improving the public protection from potential and existing off-range ordnance. The operation of Electronic Warfare sites presents no hazards. The levels of electromagnetic radiation associated with the sites are low. The sites are fenced, and lights indicate when the site is operational. The use of chaff will not significantly impact public health and safety. No study was found that indicated that materials in chaff are known to pose a health risk. Studies indicate that the materials pass through the systems of species that ingest them; that chaff doesn't break down into particles small enough to create an inhalation risk, and that the chaff used does not cause allergic contact dermititis (Section 4.2.13).

Transportation. The proposed land withdrawal would not affect any major highway in the region. Local roads historically used to access mining areas would be located in Category A-designated lands. These roads are closed under the BLM emergency closure action and would continue to be closed to public use. While alternative routes may be identified, the loss of an existing road is an unmitigable impact. No increase in local traffic, including on Dixie Valley Road, is expected from the withdrawal (Section 4.2.14).

Airspace Designation and Use. As with current practices, chaff use at B-17 and the Dixie Valley area could affect air traffic control radar. However, any major chaff release will continue to be coordinated with the appropriate FAA facilities, as is standard operating procedure (Section 4.2.15).

Cumulative Impacts

The FEIS evaluates the cumulative effects of DOD use of existing, proposed, and reasonably foreseeable land withdrawals and airspace designations in the region.

Water Resources. It is likely that land-disturbing activities on the withdrawn lands may have increased sedimentation in some of the surface water resources. There is no indication that significant impacts to surface water resources have occurred as a result of land withdrawals and subsequent military use. Ground water resources within withdrawn lands are not expected to be significantly affected by continued military and DOE activities. Most withdrawn lands restrict access for the development of water sources. As the population of Nevada continues to expand and the demand for water increases, these restrictions may hinder growth opportunities.

Biological Resources. Habitat conditions on DOD withdrawn lands have been affected by construction and military activities, including the delivery of explosives ordnance, and from noise due to aircraft overflights and ordnance detonation. Continued use of the withdrawn lands would further degrade habitat conditions near impact areas. The habitat quality at these areas, however, is already low due to past use. The proposed change in flight patterns at B-16 would reduce noise levels near Sheckler Reservoir, thereby benefiting bald eagle habitat and waterfowl. The new flight pattern would result in increased noise levels immediately south of B-16. No sensitive species are known to exist in this area and no significant impacts are expected. Reasonably foreseeable airspace designations potentially would enlarge the area that would be affected by overflights, although there would be no increase in the number of flights. Wildlife in these areas could be subject to some startle effects, but studies of effects from existing flight activities suggest that they would not be significant

Land Use. Lands withdrawn in Nevada for defense-related purposes could contain deposits of gold, molybdenum, tungsten, lead, zinc, copper, and silver, numerous small deposits of base and precious metals, and commercially viable geothermal reservoirs. Most of the defense-related withdrawals are deemed either unfavorable or marginally favorable for oil and gas. Virtually all of these lands contain some form of industrial minerals and materials. Defense-related land withdrawals in Nevada have excluded, and would continue to exclude, mining, petroleum, and geothermal industries from approximately six percent of the total acreage in Nevada that otherwise would be available for exploration and development. Military and DOE withdrawals have restricted some lands from potential livestock grazing and agricultural opportunities. While this has and will result in lost revenue from grazing and agriculture, indirect growth in the private sector in support of military facilities likely exceeds that lost from grazing and agriculture. The Special Nevada Report (SAIC 1991) describes in detail the suitability of withdrawn lands in Nevada for recreational activities. This analysis determined that most withdrawn lands could support the same recreational activities that are performed on other undeveloped arid lands of the Great Basin and Mojave Deserts, including camping, hunting, hiking, off-road vehicle (ORV) use,

horseback riding, and rock hounding (SAIC 1991). While public access is generally restricted on most DOD and DOE withdrawn lands, these areas (and proposed withdrawal lands) do not contain recreational opportunities that cannot be found on nearby public lands.

Environmental Justice and Socioeconomics. Defense-related activities on withdrawn lands in Nevada are projected to contribute $2,027,000 to the state Gross Regional Product by 2000 and to employ approximately 22,000 people (SAIC 1991). This represents approximately four percent of the total state Gross Regional Product and over two percent of total state employment. The primary economic trade-off of DOD and DOE use is the land use restrictions placed on withdrawn lands, which prevent or limit agriculture, grazing, mining, and recreation. The economic value of these foregone opportunities is minimal and would not exceed current contributions to the state economy from the DOD and DOE. All populations would continue to be equally impacted by defense operations; therefore, no disproportionately high or adverse effects are expected to minority or low-income communities. Airspace designations are not expected to have any socioeconomic impact or result in disproportionately high and adverse human health or environmental effects on minority or low-income populations.

Visual Resources. Most withdrawn lands used by the military and DOE are remote and similar in topography and scenic quality with surrounding lands. Land-disturbing activities, such as ordnance detonation, have affected the visual qualities by creating unnatural features, including structures and craters. Continued use of these areas may culminate in additional alterations to the viewshed. These effects, however, would not be significant because of the homogeneity within viewsheds and because there are few sensitive receptors, such as highways, homes, and high-use recreation areas, near the withdrawn lands. Impacts from proposed airspace actions are not expected to impact visual resources.

Cultural Resources. Defense-related activities have impacted the cultural resources located on withdrawn lands in Nevada (SAIC 1991). The Air Force, Navy, Army, and DOE have adopted or are developing cultural resource management plans to minimize future impacts. Inadvertent losses still may occur from military uses; however, significant historical and archeological resources on withdrawn lands are not expected to be impacted. No impacts are anticipated to cultural resources from realignment of airspace at B-16. Project specific studies would be required to assess impacts from proposed airspace actions that involve low-level flights.

Noise. Noise associated with withdrawn lands results from aircraft overflights, helicopter operations, ground-based training, including vehicle operations, and live ordnance explosions. All withdrawn lands are remote

and removed from sensitive noise receptors. As populations increase around DOD facilities, the potential for noise complaints may increase. Fallon has adopted land use and building codes to try to reduce such incompatible land uses. Noise levels from the proposed realignment of airspace over B-16 would benefit residents near Sheckler Reservoir and not have any significant impacts. The reasonably foreseeable airspace designations would have the potential to affect noise levels from low level flights.

Public Health and Safety. Current military activities do not cause unreasonable risks to the health, safety, or property of the citizens of Nevada (SAIC 1991). Although military activities have introduced an element of risk to the public in the region, existing and proposed safety procedures, buffers, and training restrictions at the facilities and the ranges have reduced or would reduce the potential magnitude of risk to an acceptable level. The proposed NAS Fallon land withdrawal would make inaccessible to the public those areas that have been affected by ordnance in the past or that potentially could be affected in the future. The continued use of chaff is not thought to adversely impact public health, though the General Accounting Office currently is studying the effects of chaff use on the human and natural environment. The addition of new airspace could result in risks from aircraft mishaps in previously unaffected areas.

Transportation. Cumulatively, the land withdrawals and airspace designations would not significantly affect ground transportation. No major roads would be closed, and only minor roads would be affected.

Airspace Designation and Use. The military airspace designations have the potential to change civil aviation in the FRTC. Creating new MOAs and restricted areas could place additional restrictions on civil aircraft, but these would be balanced partially by disestablishing portions of other MOAs and restricted areas.

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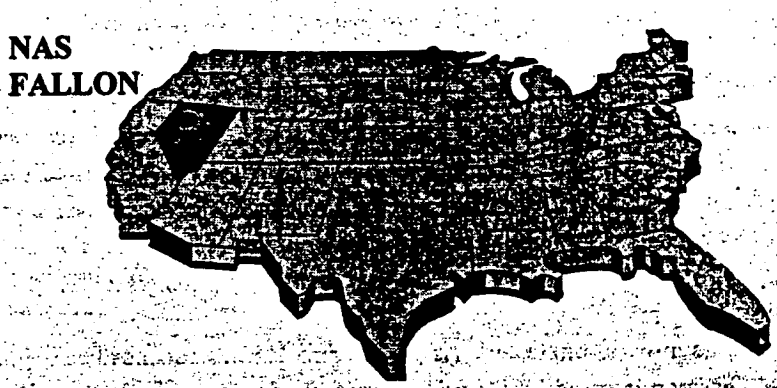

1.0 PURPOSE OF AND NEED FOR ACTION

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1. PURPOSE OF AND NEED FOR ACTION

1.1 INTRODUCTION

This final environmental impact statement (FEIS) evaluates the potential impacts to the environment that may result from the withdrawal of federally administered public land adjacent to training ranges at Naval Air Station (NAS) Fallon, Nevada. The withdrawal will not cause an increase in total air operations or increase the size of the impact areas within the ranges, but is designed to improve the realistic operational and strategic combat training at Fallon and to increase control and management of safety buffers and areas where off-range ordnance has been found.

The purpose of the proposed action is to provide the necessary land area for the Navy to maintain and improve realistic operational and strategic combat training and to provide safety buffer zones around existing training ranges, including lands containing off-range ordnance. The need for the proposed action results from changes in military technology and strategy since establishing NAS Fallon and the Fallon Range Training Complex (FRTC) and from the Navy's responsibility to protect the public from safety hazards. Sections 1.2 and 1.3 discuss the purpose and need of the proposed action in detail.

The Navy would manage the withdrawn public lands in conjunction with the Bureau of Land Management (BLM), Bureau of Reclamation (BUREC), and Department of Energy (DOE) primarily for military purposes, subject to existing valid rights, for a proposed term of 25 years. Land use categories are proposed for the withdrawn public lands to allow continued multiple uses on lands where it is safe for such activities and, where appropriate, to restrict use because of safety hazards. The Navy developed a resource management plan, included as Appendix J, in consultation with the BLM, BUREC, and DOE. The resource management plan will be submitted to BLM for final approval after the Navy issues its Record of Decision (ROD).

The process for pursuing the Range Safety and Training Land Withdrawal, an action previously referred to as the "Master Land Withdrawal," would be done in conformance with the Federal Land Policy and Management Act of 1976 (FLPMA) and the Engle Act of 1958 (PL 85-337). Under this action, jurisdiction (at least in part) of withdrawn lands would be transferred from the Department of the Interior to the Department of the Navy. The withdrawal will require congressional authorization, pursuant to the Engle Act.

As required by the Base Realignment and Closure (BRAC) decisions of 1993, the Naval Fighter Weapons Schools (TOPGUN) and Carrier

Airborne Early Warning Weapons Schools (Top Dome) relocated to NAS Fallon from NAS Miramar, California, in 1996.

The land withdrawal originally was proposed in 1982 as the Master Land Withdrawal. In 1984, a draft environmental impact statement (DEIS) for the Master Land Withdrawal was prepared but was not finalized. Information from the 1984 DEIS, along with new and updated information, has been incorporated into this document. Appendix A provides a detailed history of the land withdrawal proposal.

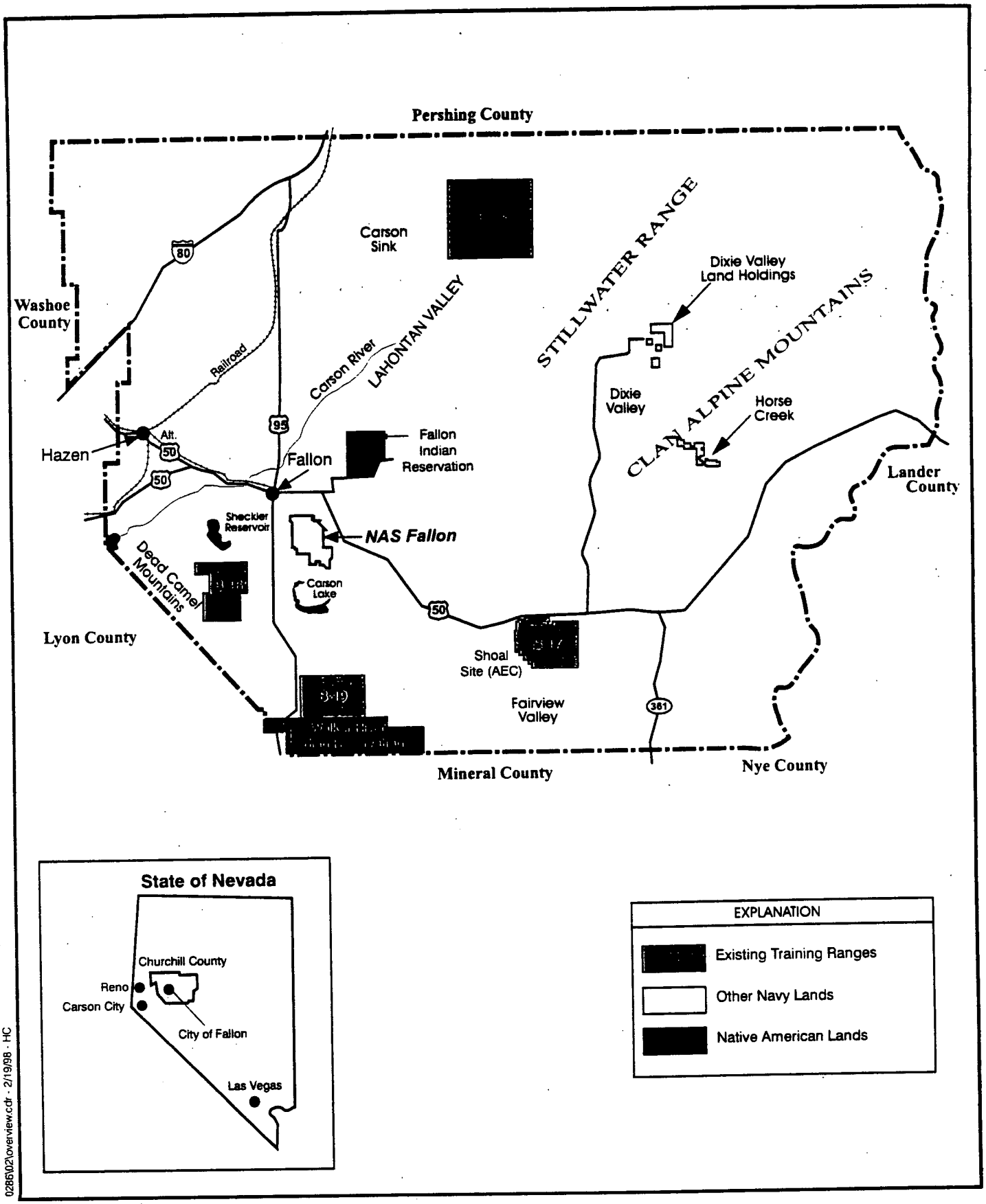
This FEIS has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations on implementing NEPA (40 CFR 1500-1508), and Navy guidelines (OPNAVINST 5090.1B). The Navy is the lead agency for the withdrawal action, with the BLM acting as a cooperating agency. Cooperating agencies have jurisdiction by law or special expertise with respect to certain environmental impacts from a proposed action by another agency. The role of a cooperating agency does not imply concurrence with the proposed action.

This chapter provides a brief overview of NAS Fallon and the training ranges, explains the purpose and need for the land withdrawal, and reviews issues and concerns raised during public scoping. Chapter 2 presents the alternative selection criteria, describes the proposed alternatives in detail, analyzes the degree to which each alternative fulfills the selection criteria, and provides land use classification and reasonably foreseeable military activities that would take place on the withdrawn lands. Chapter 3 presents the existing conditions (baseline data) for the area that would be affected by the withdrawal; Chapter 4 analyzes potential environmental impacts of each alternative; and Chapter 5 evaluates the cumulative effects of this proposal combined with other future military land withdrawals.

1.2 HISTORY AND MISSION OF NAS FALLON

1.2.1 History of NAS Fallon

NAS Fallon is in the Lahontan Valley of Churchill County in west-central Nevada, approximately 70 miles east of Reno and six miles southeast of the City of Fallon. The Dead Camel Mountains and Sheckler Reservoir are west of NAS Fallon, and the Carson River lies to the northwest. The Walker River Indian Reservation is south of NAS Fallon, and the Fallon Paiute-Shoshone Indian Reservation and Stillwater National Wildlife Refuge are northeast of NAS Fallon. The Stillwater Mountain Range is east and Carson Lake is south of NAS Fallon (Figure 1-1).



NAS Fallon is located in Churchill County, Nevada. In addition to the air station, the Navy administers four training ranges and owns lands in the Dixie Valley. The Walker River Indian Reservation extends into Mineral and Lyon Counties.

N

0 10 20 30

Approximate Scale in Miles

Location of NAS Fallon and the FRTC

NAS Fallon, Nevada

Figure 1-1

Source: Tetra Tech

The original facilities at NAS Fallon were established in 1942 by the US Army Air Corps for inland defense during World War II. The Navy took over NAS Fallon in 1943, and in 1944 the facility was commissioned as a naval auxiliary air station under the control of NAS Alameda, California. Under the National Emergency War Powers Act, the NAS Fallon training range was created in April of 1944 with the temporary establishment of Bravo-20 (B-20), a high impact air-to-ground bombing range. Two additional ranges, Bravo-17 (B-17) and Bravo-19 (B-19), were established by use permit in 1945.

Following World War II, NAS Fallon was deactivated to a maintenance level, placed in caretaker status, and turned over to the Bureau of Indian Affairs. The airstrip was reopened in 1951 as a naval auxiliary air station, and in 1953 B-16, B-17, and B-19 lands were transferred to the Navy.

In 1942, the Navy withdrew approximately 623,000 acres of public land to establish the Black Rock Desert Bombing Range, but the withdrawal was revoked in 1943. The range was reestablished in 1944 with 700,000 acres, was reduced in 1949 to 272,000 acres, and was returned in 1963 to the BLM.

In 1944, the Navy withdrew 800,000 acres to establish the Sahwave Gunnery Range. These lands were relinquished in 1946. The range was reestablished in 1958, with 519,000 acres of public land, and was relinquished again in 1965. Black Rock and Sahwave Ranges both were located approximately 50 miles northwest of NAS Fallon in Humboldt and Pershing counties.

In 1972, NAS Fallon was reclassified as a major command and was upgraded to a naval air station with the primary mission of training and supporting naval air groups. NAS Fallon formally established the FRTC in 1977 to provide airspace and range facilities for air warfare training. Lands within B-20 were withdrawn in 1986, formally establishing the range. The FRTC currently includes four geographically separate training ranges (B-16, B-17, B-19, and B-20), three air traffic control gap filler radar stations, a tactical aircrew combat training system (TACTS), an electronic warfare (EW) area, and special use airspace. All of the training ranges originally were designed for the performance and tactics of World War II-era and Korean Conflict-era aircraft.

1.2.2 Naval Air Training

1.2.2.1 Naval Air Training Continuum

Naval air training at NAS Fallon follows a continuum from basic training to increasing levels of training complexity and intensity. The training continuum starts with basic flight training and continues with fleet replacement squadron (FRS) training, unit level training, typewing weapon

school training, integrated airwing training, ship and battlegroup workups, and ends with deployment. NAS Fallon follows the axiom, "Train like you fight."

The components of training are described below:

- ***Basic Flight Training***. This is the initial training administered to all naval aviators from the first day of flight training to the day the aviator earns his or her wings. This basic flight training is conducted in training aircraft and occurs over one to two years.

- ***Fleet Replacement Squadron Training***. FRS training is the initial training in fleet aircraft and takes five to eight months. NAS Fallon has two permanent F/A-18 FRS detachments.

- ***Unit Level Training***. This is the day-to-day training performed in a deployed squadron. It emphasizes single aircraft, section (two aircraft), and division (four aircraft) events. Unit level training achieves initial basic qualifications for new aircrew and maintains proficiency for aircrews that are already qualified. Most West Coast units use NAS Fallon and the FRTC for their unit level training.

- ***Typewing Weapon School***. The typewing weapon school offers a structured syllabus administered by each typewing to standardize squadron unit level training. At the completion of unit level and typewing training, aircrews are familiar with their aircraft, aircraft weapons and weapon systems, and single aircraft, section, and division tactics. Navy F/A-18, F-14, and EA-6B weapon schools train at NAS Fallon training ranges.

- ***Integrated Airwing Training***. The integrated airwing training brings squadrons together to train as a team for the first time. Teams perform integrated airwing strikes. All airwing aircraft types meld their capabilities together to form a coherent fighting force. All Navy airwings train at NAS Fallon and the FRTC.

- ***Battlegroup Workups***. During battlegroup workups an airwing deploys aboard an aircraft carrier to operate and train with an entire battlegroup (aircraft carrier, cruisers, destroyers, frigates, and submarines). The unit level training to the battlegroup training usually takes six to 18 months, depending on the battlegroup deployment schedule. Navy airwings conduct strikes from the carrier to the NAS Fallon ranges.

Because the FRTC is capable of providing all levels of naval air training and because it is the only range with airspace, targets, threats, and instrumentation capable of accommodating an entire carrier airwing, the FRTC is the Navy's best training range.

1.2.2.2 Training Mission at NAS Fallon

The mission of NAS Fallon is to provide facilities (including training ranges), services and materials to tenants and transient units stationed at or being deployed to NAS Fallon for Chief of Naval Operations (CNO) approved aviation training. The Naval Strike and Air Warfare Center (NSAWC) is the major tenant command. NSAWC develops realistic combat training scenarios for military aircrews flying high-performance jet aircraft and helicopters, employing state-of-the-art military equipment and tactics. NSAWC operates, maintains, schedules, develops, and configures the FRTC. The Commanding Officer (CO) of NAS Fallon is assigned an additional duty (ADDU) relationship, subordinate to the Commander of the NSAWC. The NAS Fallon training mission includes, but is not limited to, the regimens presented below.

Carrier Air Wing (CVW) Training. NAS Fallon is the only Navy facility that can support, train, and house an entire CVW for initial and refresher integrated strike training. A CVW consists of all aircraft, pilots, crew, and aircraft maintenance personnel assigned to an aircraft carrier. A typical CVW consists of 75 to 90 aircraft and an aircrew of between 1,500 and 2,000 personnel. NAS Fallon hosts four to six CVWs and up to two Marine airwings per year for an intensive four-week training program prior to their scheduled deployment aboard aircraft carriers or to air stations overseas (US Navy 1995e). This integrated training focuses on combat tactics and team building by allowing aircrews to perform realistic combat warfare techniques, including air-to-air and air-to-ground combat scenarios. In addition, NAS Fallon provides integrated ground personnel and air support scenarios.

The CVW training predominately takes place at B-17, B-19, and B-20 and uses "commodore" airspace. Commodore airspace consists of all restricted airspace and military operation area airspace within the FRTC, except for the restricted airspace over B-16.

Fleet Replacement Squadron Training. In addition to CVWs, NAS Fallon hosts an FRS detachment. The FRS detachment is based permanently at NAS Fallon and operates a maintenance facility for F/A-18s from NAS Lemoore, California, and NAS Cecil Field, Florida, the respective West Coast and East Coast Hornet FRSs (US Navy 1995e). A typical FRS detachment consists of 12 aircraft. FRS training occurs at all of the ranges,

except when a CVW is training; during these times FRS training takes place at B-16.

TOPGUN Training. TOPGUN conducts a syllabus focusing on air-to-air combat and air-to-ground strike training. This program trains aircrews to defeat enemy aircraft through advanced offensive and defensive tactics. The TOPGUN training syllabus has been renamed and incorporated in the NSAWC program. The number of flights and program objectives remains the same.

Integrated Air and Ground Training. In addition to aircraft training, the NSAWC Fallon mission supports integrated ground and aircraft training, such as combat search and rescue training. Close air support operations train pilots to assist ground units by firing on enemy ground or air units. Combat search and rescue consists of integrated training with ground personnel and helicopter and fixed wing air support. The objective of the training is rescuing and transporting ground personnel, such as downed pilots, within enemy territory. NAS Fallon is the only Navy facility where the combat search and rescue mission is conducted. Ground units learn how to mark targets for aircraft and how to neutralize enemy positions, including radar sites, surface-to-air missile sites, and early warning devices. This combat search and rescue scenario generally consists of three to six personnel training with an additional three to six person "opposition" team. Pilots learn how to transport personnel and how to perform reconnaissance for ground personnel. More than 90 percent of the integrated air and ground training takes place during the week, and approximately 50 percent of the training occurs at night. Realistic integrated air and ground training is critical to the successful performance of FRSs and the deployment of CVWs. Ground training at NAS Fallon occurs as a component of the integrated air and ground training mission; it is not a stand-alone mission.

1.2.2.3 Training Facilities and Capabilities

The Aircraft Intermediate Maintenance Department, NSAWC, and the NSAWC Range Department are unique and vital institutions for training operations at NAS Fallon. The mission of the Aircraft Intermediate Maintenance Department is to provide maintenance support for Navy aircraft deployed to NAS Fallon. No other DOD facilities in the region, including Nellis Air Force Base (AFB), have the ability to maintain the various types of Navy aircraft.

The Naval Strike Warfare Center, termed Strike, was established in 1984 to conduct integrated combat strike warfare training. Strike is tasked to improve and maintain at the highest level aviation overland strike and war-at-sea tactical development and to provide training for all warfare areas (US Navy 1995e). Strike provides operational training support and academic

training and oversees CVW training. The NSAWC, as of July 11, 1996, was formed as a new command and has assumed the combined functions and missions of the Naval Strike Warfare Center, TOPGUN, Top Dome, and the NAS Fallon Range Department.

The Range Department operates the four training ranges (B-16, B-17, B-19, and B-20), the EW system, the weapons impact scoring system (WISS), and the TACTS system.

The EW system simulates enemy radar detection systems and radar missile sites, thereby creating a simulated warfare threat environment.

WISS is a visual system that scores the impacts of ordnance on all targets in day and night conditions. The system uses a series of video cameras that can be trained on the various targets. The cameras are controlled remotely from the Range Operations Center at NAS Fallon.

TACTS is a computer system that allows pilots to train in realistic air-to-air and air-to-ground situations without firing air-to-air or air-to-ground ordnance. It also provides a safety margin for pilot operation on the ranges. While TACTS is a valuable training tool, it cannot substitute for air-to-ground ordnance delivery training. Training that involves transporting and delivering live ordnance provides real training on how an aircraft will function and respond during combat conditions. Live ordnance training also provides the most realistic conditions, allowing pilots to conduct laser-weapon delivery and to visually assess delivery accuracy, as well as providing hands-on training to carrier ordnance crews in live ordnance assembly. Practice/inert ordnance does not provide the full spectrum of these benefits. All training conducted on the ranges is scheduled and coordinated through the Range Department.

The most important components of the NAS Fallon operational training capabilities are the training ranges. Following is an overview of current operations conducted at each training range. Note that combat training operations at the ranges have changed dramatically since their establishment.

- *B-16 Range*: The B-16 range is in the southwestern portion of the Carson Desert, east of the Dead Camel Mountains and approximately nine miles southwest of NAS Fallon (Figure 1-1). The range was established in 1953 when Public Land Order (PLO) 898 authorized the indefinite withdrawal of 17,820 acres to support the Navy training mission. The closest of the four training ranges to NAS Fallon, B-16 allows for minimal travel time, thereby maximizing training time. The range is also the only training area in the FRTC independent of

commodore airspace. This provides exclusive airspace away from other military operations.

Most of the basic and intermediate training is conducted at B-16. The range is used for basic and intermediate air-to-ground conventional bombing and for rockets using only practice/inert ordnance. Electronic scoring is available with WISS. The range contains two bull's-eyes and three spotting towers. The approach to the target is from the north with a southern egress. During CVW training, B-16 is the only range available for FRS and visiting squadron training. The Air Force and Marine Corps regularly send aircraft to train at B-16.

Twelve low-level military training routes (MTRs), which accommodate single aircraft and special strike requirements, used to terminate at B-16 (US Navy 1995d). The Navy realigned these 12 MTRs to terminate at B-20, which resulted in reduced noise levels around B-16. Ingress into B-16 for tactical training will be via the restricted airspace above and within the approach of B-16 (identified as R-4803 N/S).

- *B-17 Range*: The B-17 range is in central Fairview Valley, approximately 35 miles southeast of NAS Fallon (Figure 1-1). Consisting of 21,400 acres, the range was established by permit in 1945 and was indefinitely withdrawn in 1953 for Navy use. The range is adjacent to the Dixie Valley area and in the center of the NAS Fallon Dixie Valley threat environment. Like the Dixie Valley area, the target contains some threat emitters, and in conjunction with the Dixie Valley area, provides a realistic electronic threat environment for aircraft approaching the target for weapon delivery. For example, planes can fly through an EW environment under simulated ground-to-air missile attack conditions prior to ordnance delivery on B-17. The range is used for strafing, practice/inert and explosive air-to-ground ordnance delivery training, no-drop bomb scoring, close air support artillery spotting, mortar, small arms, and rocket delivery. Live ordnance is dropped on the east target area. The range also has simulated surface-to-air missile firing and provides for laser ranging and targeting (US Navy 1982b). Targets are marked with a laser beam from the ground or another aircraft. Ordnance with a guidance system that follows the point illuminated by the laser is fired. Chaff, a material that jams enemy radar, and flares are dispensed over B-17 and the Dixie and Fairview Valleys by overflying aircraft (Science Engineering Associates 1989; SAIC 1991, 1994; Naval Research Laboratory 1995). The WISS at the bull's-eye provides electronic bomb scoring.

  Contained within B-17 are one strafing banner, one bull's-eye, a high-explosive target impact area for ordnance up to 1,000 pounds, two

staffed EW radar sites, three spotting towers, and mock tactical target sites, including mock enemy tanks, a mock runway, an army compound, mock aircraft, and simulated industrial building complexes. Some targets are moved to enhance realism and to accommodate training strategies. Remote controlled moving target vehicles, such as mock tanks or missile launchers, are used for targeting but not for ordnance delivery.

- *B-19 Range*: The B-19 range is west of the Blow Sand Mountains and 15 miles south of NAS Fallon (Figure 1-1). Consisting of 17,332 acres, the range was established by permit in 1945 and was indefinitely withdrawn for Navy use in 1953. The range is used for strafing, laser ranging and targeting, close air support, mortar, small arms, artillery spotting, and practice/inert and live air-to-ground ordnance delivery training using bombs and rockets. The range also has facilities to support simulated surface-to-air missile firing. Electronic bull's-eye scoring is available with the WISS. A strafing banner, a conventional bull's-eye, a high explosive impact area, and three spotting towers are contained within B-19. The run-in lines for the range run west to east for most operations and occasionally run from east to west. Live ordnance, up to 1,000 pounds, is dropped on the high explosive impact target area. The southern border of the range is adjacent to the Walker River Indian Reservation.

- *Shoal Site*: The 7,405-acre shoal site consists of public land in the northern part of the Sand Springs Mountain Range, approximately 30 miles southeast of NAS Fallon and two miles west of B-17 (Figure 1-1). The plot is under the jurisdiction of the BLM, and the central portion of the site is withdrawn by the DOE. The DOE site is approximately four square miles in size and was used in 1963 to study seismic waves produced by underground nuclear explosions. Deactivation of the site began in 1964. A preliminary site assessment conducted in 1988 gave the site a Hazard Ranking System score of 3.52. This score is below the minimum score required for listing on the National Priorities List under Superfund. The DOE is currently characterizing and finishing remediation of surface areas so the site may be suitable for unrestricted public use. Access to the deep subsurface will remain excluded (DOE 1996). After nuclear testing stopped, the site was used historically by the Navy for simulated combat search and rescue training, integrated with helicopter support. DOE approval is required for subsurface disturbances in the shoal site. The Navy's use has been and would continue to be surface based.

  The north and south portions of the shoal site were used by the Navy under a BLM special land use permit obtained in 1965, prior to th

enactment of FLPMA in 1976. The Navy's use of the central portion of the shoal site was established in 1966 via a memorandum of understanding (MOU) with the Atomic Energy Commission (now part of the DOE). Navy use of the site terminated with the expiration of the BLM special land use permit and MOU. The shoal site is not equipped with targets, and ordnance is not expended there.

- *Dixie Valley Area*: The portion of Dixie Valley affected by this action begins approximately 35 miles east of NAS Fallon and north of US Highway 50 (Figure 1-1). While the Navy does not have jurisdiction over the land in the Dixie Valley area, it maintains BLM rights-of-way (ROW) permits for 16 one- to seven-acre EW emitter sites and a central command center, termed "centroid," in the Dixie Valley area. These sites include associated powerlines, access roads, and communication cables.

  Aircraft within the Dixie Valley area perform electronic jamming, chaff and decoy flare dispersion, and suppression defensive maneuvers to avoid detection by simulated radar and missile sites prior to entering B-17. No ordnance is authorized to be dropped on the Dixie Valley area. The Dixie Valley area has associated special use airspace that allows for flights as low as 200 feet above ground level. This allows pilots to perform realistic low-level flights over varying terrain to avoid electronic detection prior to ordnance delivery at B-17. The majority of the advanced strategic combat training is conducted at the Dixie Valley area and B-17 range, making them the most intensively used areas in the FRTC.

- *B-20 Range*: The B-20 range is in the Carson Sink, approximately 17 miles east of Highway 95 and seven miles north of the Stillwater Wildlife Management Area (Figure 1-1). Although B-20 is not directly affected by the land withdrawal, it is critical to the FRTC and training operations within commodore airspace. The proposed land withdrawal would not withdraw any public land at B-20.

  The range has been operational since the early 1940s and is composed of 41,007 acres of withdrawn and acquired lands. Of the total acreage, approximately 19,430 acres were acquired by condemnation from the Southern Pacific Land Company. The remaining 21,577 acres were withdrawn in 1986 by the Military Lands Withdrawal Act (PL 99-606) for 15 years and are subject to renewal.

  The B-20 range is used for air-to-ground bombing, strafing, and laser targeting. The range contains one mock submarine, two strafing banners, two bull's-eyes, one laser bull's-eye target, one lighted

helicopter pad, run-in lighting, two spotting towers, and electronic scoring with the WISS. The range provides a high explosive impact target area for high explosive ordnance up to 2,000 pounds and practice/inert bombs.

1.3 PURPOSE

The purpose of the proposed action is twofold:

(1) Provide the necessary land area so the Navy can change and maintain realistic operational and strategic combat training at NAS Fallon; and

(2) Provide safety buffer zones around the training ranges, including Navy control of lands containing off-range ordnance.

1.4 NEED

1.4.1 Introduction

NAS Fallon provides critical training for Navy pilots and aircrews. Changes in technology and military strategy require that NAS Fallon change and improve its realistic operational and strategic combat training. In order to achieve the most realistic combat training possible, NAS Fallon needs to create representative threat scenarios, to provide target location and identification training and accurate tracking, and to replay training events for users of the FRTC. To accomplish this, NAS Fallon must place visual cueing devices on the FRTC and install additional electronic warfare sites and TIS units supporting the TACTS. Such conditions require large corridors of land with varying terrain. Within its training mission, NAS Fallon also must protect the public from operational hazards. As discussed below, the Navy has conducted a number of studies to define safety footprints.

This section discusses in detail the needs for the land withdrawal. The section is presented in two parts, the first of which addresses the operational need for the withdrawal and the second of which presents the need for a public safety buffer.

1.4.2 Realistic Operational and Strategic Combat Training

The mission of NAS Fallon is to train and support Department of the Navy and DOD activities. The Navy needs the public land withdrawal to maintain and improve its training function. The availability of airspace over a sparsely populated area and the proximity of the targets to the air station make NAS Fallon an ideal, highly cost-effective training facility that must

be maintained. In order to retain current training capability and to meet new training requirements resulting from changes in technology, this public land withdrawal initiative is critical to the Navy's training mission.

- *Changes in Military Technology and Training Operations:* Military technology has changed dramatically since the training ranges at NAS Fallon were established. The modern Navy uses high-speed jets equipped with state-of-the-art weaponry and communication, navigation, and guidance systems. These jets can achieve high speeds and accurately target enemy installations. However, to be effective and to maximize their performance in combat situations, pilots must have intense and realistic training. Today's pilots face a variety of threats, including heat-seeking, radar-guided surface-to-air missiles and enemy aircraft. These threats require pilots to engage in countermeasures to avoid enemy detection and attack. Examples of such measures include dispersing chaff to interfere with enemy radar, releasing flares to decoy surface-to-air or air-to-air missiles, and executing low evasive flight patterns over varying terrain to avoid radar detection. Ordnance delivery often must be conducted at high speeds and at varying altitudes. Pilots also must be trained to engage in close air-to-air combat with enemy aircraft equipped with similar technology. A pilot's actions and reactions must be second nature under combat conditions. The only way to achieve such skills is extensive training under representative threat conditions. This is the objective of the training ranges.

  Unlike the visual-only ordnance delivery techniques of World War II, modern tactics rely on complex technology. There are three procedures used for conventional combat targeting. First the pilot must identify an object in the terrain, for example a military vehicle or building. This can be done with or without radar or infrared assistance. The pilot then must mark and lock onto the specific target, using lasers and radar technology. Lastly the pilot must arm and fire the weapon.

  To be effective, training operations must simulate enemy threat environments, counterattacks, and complex targeting scenarios. The mission of NSAWC at NAS Fallon and the incorporated Naval Strike Warfare Center, TOPGUN, and Top Dome programs is to provide such tactical training. This training requires greater levels of realism using state-of-the-art equipment at the training ranges. In order to improve realism, the Navy needs to provide diverse combat training scenarios. This can be achieved by using portable visual cueing devices and by installing additional EW systems. Visual cueing devices allow pilots to perform target identification and to simulate enemy sites, such as surface-to-air missile launchers or radar sites. EW sites have been

authorized through ROW reservations. It is critical for effective combat training that these devices be portable and easily relocated to multiple sites on different terrain. This mobility provides the flexibility to vary training combat scenarios and to avoid redundant unrealistic tactical combat training events. The current topography of land available to the Navy near the ranges does not provide sufficient terrain or area to simulate all threat environments.

Developing additional EW systems and TACTS would provide greater training capability and would increase the margin of safety in the training ranges. These EW systems provide electronic threat environments, simulating enemy counter attack methods. Additional TACTS systems would provide the flexibility for range operators to increase or decrease the density of simulated threats to pilots and would improve accountability and safety.

Chaff and decoy flares are used with such training. Section 2.3.1 describes these systems in greater detail. EW sites historically were authorized on public lands through BLM right-of way permits. Because of a recent amendment to the BLM's Resource Management Plan, initiated by the BLM Carson City District administrative interpretation of FLPMA, EW sites now can be located on public lands only through the withdrawal process. The Navy will continue to work through BLM direction and policies to locate and establish these systems.

Another critical component of effective combat training is integrated air and ground training, including combat search and rescue, SEAL unit training, noncombatant evacuation training, and desert rescue training. All of these activities require realistic combat training for effective combat performance. Such training requires helicopter insertion/extraction landing zones, parachute drop zones, and foot patrol areas. Search and rescue and reconnaissance training also use desert patrol vehicles (a modified dune buggy) for personnel transports. Such activities require a linear corridor to simulate ingress/egress scenarios and the varying terrain that could be encountered on enemy territory.

The NSAWC FRTC is the only tactical training range where the combat search and rescue mission is conducted. The Navy recently integrated combat search and rescue and intelligence training with NATO allies. The amount of ground training integrated with aircraft support is expected to continue at NAS Fallon, thereby requiring suitable areas for quality training.

The changes in military training requirements and the BLM Carson City District administrative interpretation of FLPMA described above have resulted in the inability of the Navy to meet current training requirements within the footprint of present training range boundaries. In addition to meeting public health and safety concerns, the proposed withdrawal would allow the Navy to meet the training requirements of its current and foreseeable training mission. Any Navy activity that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency.

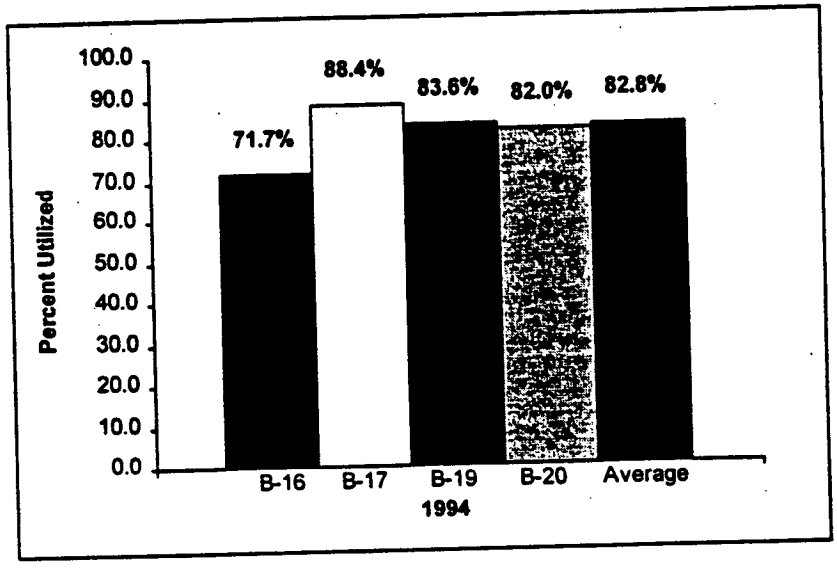
- *Tactical Training Requirements of the Navy:* The strategic importance of NAS Fallon has been further defined under the Defense Base Closure and Realignment Act of 1990 (PL 101-510), commonly referred to as BRAC. Pursuant to this act, many military facilities are being closed or realigned. Three rounds of base closure and realignment decisions have resulted in the closure of many western military facilities, including five Navy facilities in the San Francisco Bay Area alone. Base closure decisions have resulted in the realignment of training missions to facilities, such as NAS Fallon, that were not slated for closure. This has made NAS Fallon and the FRTC more strategically important for the combat readiness of the Navy. The realignment of TOPGUN and Top Dome to NAS Fallon are examples of BRAC actions and demonstrate the long-term commitment of the Navy to NAS Fallon and its tactical importance to the combat readiness of the military.

  NAS Fallon, along with the FRTC, is the only naval air station capable of providing lodging, support, and integrated combat training for an entire CVW. The Navy requires all CVWs to train at NAS Fallon for four weeks as a prerequisite to deployment aboard aircraft carriers or on overseas stations, highlighting the strategic importance of NAS Fallon. In addition to training for CVWs, NAS Fallon is homeport to an FRS detachment. When deployed to NAS Fallon, CVWs routinely require exclusive use of the portion of the FRTC covered by the TACTS systems that overlies B-17, B-19, and B-20, which can make these ranges unavailable for non-CVW training. FRS units or other activities desiring concurrent use of a training range are scheduled for B-16, which is outside the TACTS tracking area. During these times, the training ranges are fully allocated.

  In 1994, 31,147 sorties were flown at the training ranges (US Navy 1995c). A sortie is a take-off and landing and can include up to 12 ordnance deliveries. Such efficient training per sortie is attributable to the proximity of the ranges. The 1994 sorties included over 1,600 from the Air Force and approximately 1,000 from the Marines (US Navy 1995c).

Based on range use data for calendar year 1994, the four training ranges (B-16, B-17, B-19, and B-20) had an average annual utilization rate of 83 percent (US Navy 1995c). Utilization rates are determined by the number of hours used at each range divided by the total hours available at the ranges. Available hours are based on time of day (most operations are conducted during the eight hour work day), range maintenance schedules, and closure schedules for the ranges. Because of these variables, a range is not available 100 percent of the time. Recognizing that a training range is not available 100 percent of the time, the utilization rate of 83 percent is near range capacity. Furthermore, the annual average does not highlight variances in use, such as when both CVW and FRS training activities are being conducted. During these times, demand for use of the ranges often exceeds range availability. Figure 1-2 shows the 1994 utilization rates at each of the ranges. Based on number of actual and projected sorties flown at NAS Fallon, range utilization rates for 1995 to present would be similar to 1994 as shown on Table 1-1.

Figure 1-2
Range Utilization in 1994[1]



Source: US Navy 1995c.

[1]Based on number of actual and projected sorties flown at NAS Fallon, range utilization rates for 1995 to present would be similar to 1994.

Table 1-1
Annual Number of Sorties Flown at NAS Fallon 1994 to 1998[1]

Year	Total Sorties
1994	31,147
1995	29,577
1996	32,227
1997	33,802
1998	30,000

[1]Actual sorties (1994 to 1997) based on NAS Fallon range utilization reports (US Navy 1995c, 1996c, 1997c, 1998a). Projected sorties based on airfield and airspace operational study report (US Navy 1996d).

- *Strategic Location and Cost-effectiveness of the FRTC:* NAS Fallon has the facilities, airspace, weather, remoteness, equipment, ranges, and impact areas necessary to conduct integrated strategic training for Navy forces. Because NAS Fallon is in a remote location, it does not interfere with major civilian airports. Unlike other remote Department of Defense (DOD) air stations, NAS Fallon has the facilities and infrastructure to accommodate an entire CVW, FRS detachment, and visiting Navy, Air Force, Marine, and NATO allies units. The FRTC is set up to simulate contingency operations typical of Navy missions. All of the training ranges are within 30 air miles of NAS Fallon. This allows for integrated range training, promotes fuel efficiency, and reduces risk from travel time. In short, proximity of the ranges minimizes operational costs and maximizes training time, thereby allowing pilots to fly more training missions during their stay at NAS Fallon. Similarly, the ranges are utilized by other aircrews, including those from NAS Lemoore and Nellis AFB.

  Transferring NAS Fallon training functions to other military facilities is unlikely given that the FRTC is already in place. Large continuous tracts of open land and airspace, as required for today's military aircraft training, would be difficult and costly to obtain, even if available. This is discussed in more detail in Section 2.2.

- *Other Concerns Related to Training.* Some uses of lands adjacent to training ranges are incompatible with range operations and can hinder combat training efforts and degrade training.

  New technologies that demand higher levels of combat training, particularly with high-speed low-altitude flights, require wider margins for safe operations. The Navy is concerned about current developments discussed below. Land use compatibility concerns include urban growth

near the training ranges and increased public use and development on public lands.

Urban Growth. Most of the recent growth in Churchill County has been west of the City of Fallon toward Sheckler Reservoir, specifically along Highway 50, north of training range B-16. Continued development around Fallon is expected. Development has raised land use conflicts and noise complaints associated with modern training operations at B-16.

Increased Use and Development On Public Lands. As the population has increased in the Fallon area, more people are using public lands, including lands around the NAS Fallon training ranges, for recreation, motorized off-road activities, wildlife viewing, hunting, horseback riding, and mining. The Sheckler Reservoir, north of B-16, is an overflow water storage area that may support occasional recreational activities.

Public lands east of B-17 historically have supported mining activity and contain patented and unpatented mining claims. Most federal lands near training areas support livestock grazing. Hazards to military uses could result from nonmilitary uses in areas adjacent to the training ranges, endangering pilots and aircrews. For example, tall structures built adjacent to the training ranges could pose hazards to low-flying aircraft by forcing aircraft to make nonstandard approaches to the target. Such structures also may be mistaken for targets. The Navy is working with the BLM to develop policies to avoid conflicts between public land use and military training.

1.4.3 Increase Control and Management of Safety Buffers

Several Navy studies identified potential safety hazards associated with the NAS Fallon training ranges. These studies include the Hazard Analysis Mitigation Report (US Navy 1995g), off-range ordnance sweeps conducted near the ranges in 1989 and 1990 (US Navy 1990), the Range Air Installation Compatible Use Zones (RAICUZ) study (US Navy 1982b), and an updated RAICUZ study for B-16 (US Navy 1995, 1997). These studies pointed out the need for a land withdrawal to increase public safety. Each study is discussed individually below in Sections 1.4.3.1 through 1.4.3.5.

Hazards to the public, including off-range ordnance, aircraft mishaps, and objects dropped from aircraft, can result from normal military operations. Ordnance release is addressed in Sections 1.4.3.3 and 3.13.2 of this document. As discussed in these sections, areas likely to be impacted by off-range ordnance have been delineated by off-range ordnance sweeps (U.

Navy 1990), a HAZARD analysis mitigation report (US Navy 1995h), and a B-16 RAICUZ study (US Navy 1997); these areas are included in the proposed withdrawal boundary as Category A lands (closed to public use).

Aircraft mishaps and objects dropped from aircraft are discussed in Section 3.13 of this document. Most aircraft mishaps occur at the air station or on FRTC training ranges. Between 1989 and 1996, there were 18 mishaps associated with NAS Fallon operations. Nine occurred on the air station and nine occurred on the training ranges or on public or private sector land. No civilians were involved in the mishaps.

It was estimated that an average of 1.5 parts, consisting primarily of screws and rivets, per 1,000 sorties fall off aircraft (SAIC 1991). Approximately 32,000 sorties were performed at NAS Fallon in 1994, resulting in approximately 50 dropped objects. Most dropped objects occur between the air station and the training ranges. Based on the analysis performed for the Special Nevada Report, the statistical probability of people or structures being struck by dropped objects is infinitesimal. The probabilities of being struck by lightning, dropped ordnance, and dropped objects are $1{:}10^{5}$, $1{:}10^{12}$, and $1{:}10^{15}$, respectively (SAIC 1991). This generated analysis does not account for proximity to training ranges or airfields (i.e., the chances of being involved in a mishap would be greater closer to the training ranges and airfields). Given that the target areas within the NAS Fallon training ranges and the air station are surrounded by withdrawn or Navy-administered lands, the probability of a mishap approaches the stated statistical probabilities.

1.4.3.1 Hazard Analysis Mitigation Report

The Naval Air Station Fallon Ranges Hazard Analysis Mitigation Report, September 1995, used the HAZARD methodology to identify land surrounding the training ranges necessary to contain the ordnance delivered during training activity (US Navy 1995g). The HAZARD analysis examines effects of live and practice/inert ordnance delivery. Range safety zone A represents the minimum land area needed to contain ordnance deployed during air-to-ground training.

The HAZARD methodology develops safety footprints showing the total ground area needed to contain potential live and practice/inert off-range ordnance for that range based on operational requirements and parameters. The analysis accounts for specific types of aircraft, types of ordnance, delivery parameters (including dive angle, release altitude, aircraft heading, and airspeed), terrain, and self-imposed operational restrictions. Range composite weapons safety footprints are developed by combining the requirements and parameters for footprints developed for specific targets on each range. Appendix D provides the executive summary and addendum of

the HAZARD report. The range composite weapon safety footprints for B-16, B-17 and B-19 are presented on Figure 1-3. The safety footprint for B-20 is within the existing range boundary (US Navy 1995g; US Navy 1995h).

1.4.3.2 RAICUZ Study for the B-16 Range Complex

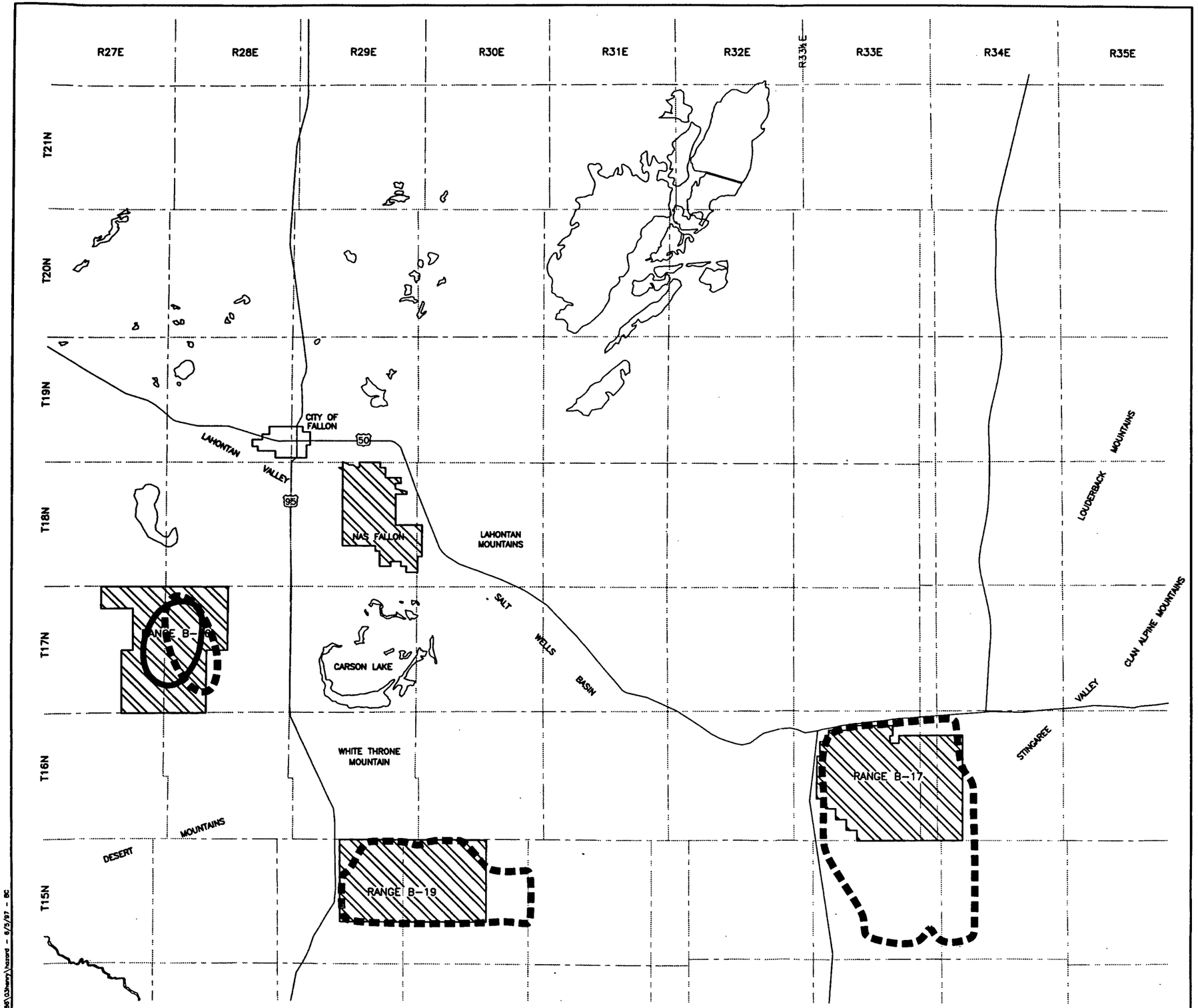
Several factors have changed since the 1982 RAICUZ study was performed that prompted the Navy to undertake an updated RAICUZ analysis for B-16. The use of different aircraft, changes in growth patterns west of the City of Fallon, and changes in flight patterns are among these factors. The changes in aircraft flight patterns, resulting in part from concerns voiced by state officials and residents of the Sheckler District north of B-16 that noise levels from overflights near B-16 be reduced, include the recent realignment of 12 MTRs to terminate at B-20, and the proposed changes to the flight patterns and airspace designations around B-16 (Section 5.6.5).

The Navy conducted noise studies for these actions in 1995 and 1996; the results of these studies are discussed in Section 5.6.6.7 of this document. The revised B-16 RAICUZ Study is based on the noise data presented in the new noise studies, updated weapon safety footprints (see Section 1.4.3.5), and armed overflight zones (see Section 1.4.3.4). The revised B-16 RAICUZ range safety zones (RSZ) are shown on Figure 1-4. Since the 1982 RAICUZ study, the average noise exposure has decreased substantially. The 1982 RAICUZ study encompassed almost twice as much area in the 65 to 75 Ldn (day-night average noise level) range over B-16 as the 1997 RAICUZ study. The majority of lands within this 1997 area are immediately to the west of the targets and over the B-16 training range. In addition, the noise exposure levels above 75 Ldn have decreased dramatically since 1982.

RSZ A is the surface impact area and is centered on the range targets. The area of armed overflight where the pilot arms the weapon system is referred to as RSZ B. RSZ C is the area of safety concern and coincides with the restricted airspace. RSZ A has decreased slightly in size, while both RSZ B and RSZ C have decreased dramatically in size since 1982. RSZ C, in particular, has decreased from over 167,000 acres to less than 30,000 acres, and is limited to the restricted airspace in the immediate vicinity of the range. There are no residences located under RSZ A or RSZ B. There are 12 residences located under the northeast extreme outside boundary of RSZ C.

The major findings of the 1997 RAICUZ include the following:

- RSZ A is entirely within the B-16 training range; portions of RSZ B and RSZ C are located outside the range on undeveloped federal land.



LEGEND:

- NAS Fallon and Ranges
- Weapon Safety Footprint (RSZ A) (current conditions)
- Weapon Safety Footprint (RSZ A) (Proposed B–16 Modifications)

N

0 2.5 5

1"=5MI. (APPROXIMATE)

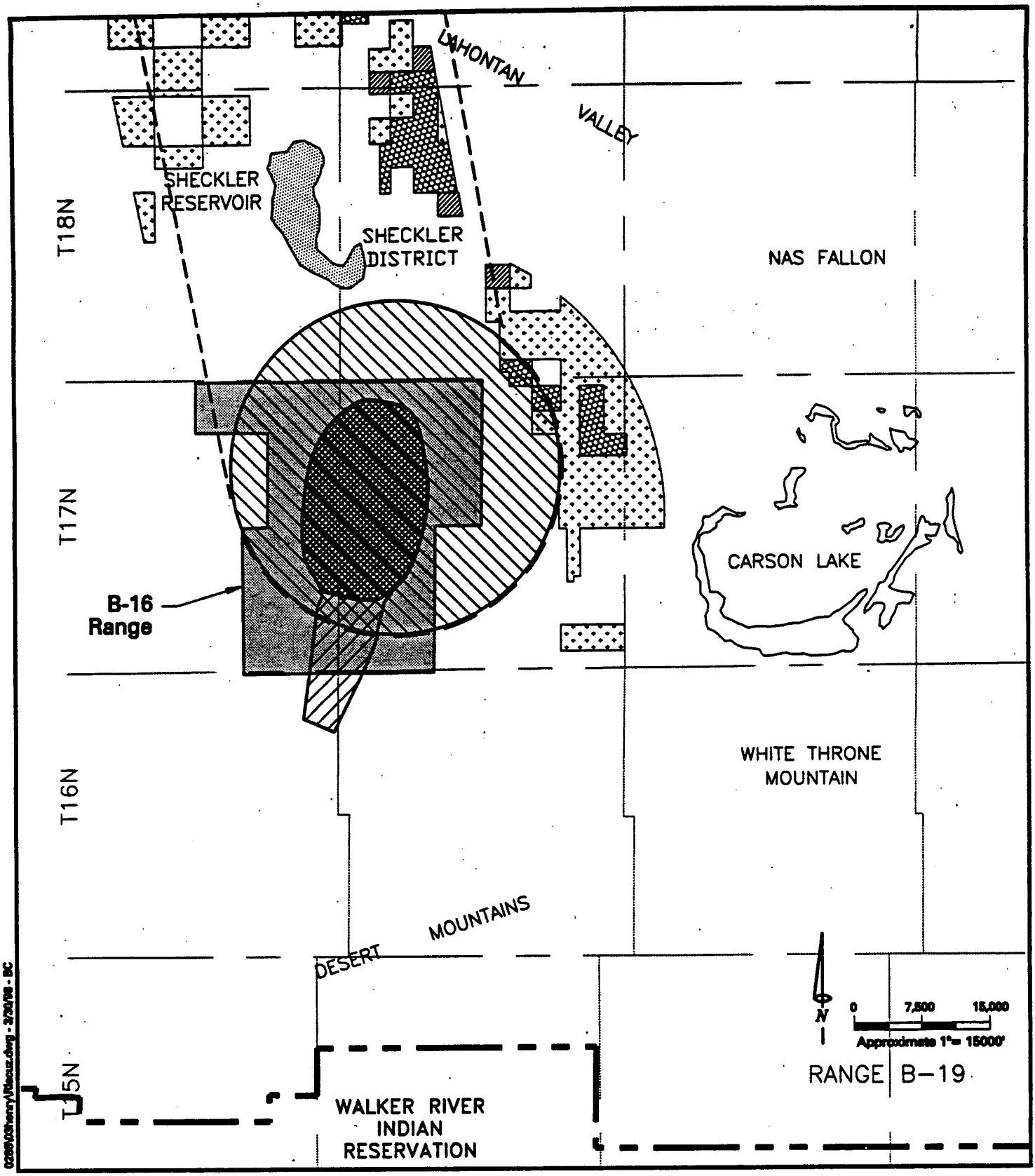
The 1995 Hazard Study and the revised 1995 RAICUZ Study for B–16 developed weapon safety footprints for the training ranges. A 1997 RAICUZ Study for B–16 developed a weapon safety footprint for B–16 based on modified run–in lines as discussed in Section 5.6.3.

Weapon Safety Footprints

NAS Fallon, Nevada

Figure 1-3

Source: U.S. Navy 1995g; 1995h; 1996c.



RSZ A covers the target area and RSZ B covers the run-in line.

LEGEND:

Dwelling Units per Quarter Section (160 acres)

- 0-5
- 6-15
- 16 and Greater

Range Sound Zones

- RSZ A
- RSZ B
- RSZ C

Restricted Airspace

Source: US Navy, 1997

B-16 RAICUZ Study

NAS Fallon, Nevada

Figure 1-4

- Land uses within the RAICUZ are primarily undeveloped, agricultural, and rural residential in nature; therefore, relatively few incompatibilities can be expected.

- There are no land use incompatibilities around B-16 identified as a result of noise or from safety concerns related to RSZ A as RSZ A is contained within the existing range area. Potential incompatibilities within RSZ B areas include height limits and restrictions on large public congregations such as staging areas for recreational events.

- Land use areas of concern based on RSZs include only privately owned lands within RSZ C.

- No residences are located within RSZ A or B.

- Within RSZ C, 12 residential units were identified under the extreme northeast corner of RSZ C, resulting in an estimated 31 people residing within this area.

1.4.3.3 Off-range Ordnance Sweeps

Off-range ordnance sweeps conducted in 1989 and 1990 found surface ordnance on lands adjacent to the B-16, B-17, and B-19 training ranges (Figure 1-5). Areas containing ordnance hazards were defined based on the distribution of surface ordnance located during sweeps.

Sweep Methodology

The personnel involved in the ordnance sweeps included a team of 115 military personnel, a helicopter survey/debris removal team, consisting of eight personnel, and an explosive ordnance disposal (EOD) team. The survey area covered 226,592 acres. Surface ordnance, suspected ordnance, and scrap were located through systematic sweeps of the survey area. EOD teams followed the sweep to identify and to detonate any ordnance located. The effectiveness of the search operations was calculated through a sweep effectiveness probability test. During this test, the area ahead of the sweep line was "salted" with several control ordnance items, and the items were collected by the sweep team as it proceeded through the salted area. The sweep effectiveness is expressed as the percentage of the known salted items actually collected by the sweep team.

Sweep Findings

This analysis determined that 24,464 acres of land now administered by the BLM contain off-range ordnance and should be closed to protect the publi

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from exposure to ordnance hazards (US Navy 1990). In January 1991, the BLM requested the Navy to post notices or to fence off all 24,464 acres and requested that the Navy submit a withdrawal application. Approximately 16,714 acres of this area overlapped the areas that were previously identified in the 1982 RAICUZ recommendation for withdrawal. Therefore, approximately 7,750 additional acres were recommended for withdrawal on the basis of the sweeps. BLM and the Navy agree that such closed properties should be withdrawn and placed under Navy control and management.

The BLM land near B-16 contained only practice ordnance, which may or may not have spotting charges or other reactive materials for scoring purposes, but has no live explosive fillers (see Section 3.13). Practice ordnance may be described as inert ordnance, though to be classified as inert, ordnance must be verified by an inspector and then certified as inert. An additional 12,180 acres north of B-16 and administered by BUREC were found to contain practice/inert ordnance (Figure 1-5). The BUREC did not request that the Navy fence or withdraw these lands. Should the BUREC ever propose to relinquish its control of these public lands, the Navy would submit an application to BLM for withdrawal.

The effectiveness of sweeps in clearing surface ordnance is estimated to be 92.7 percent. This means that approximately seven percent of off-range ordnance has not been identified. Subsurface off-range ordnance is more likely to remain than surface ordnance, given the difficulty of locating it. New ordnance remediation technology has been developed by the Naval Research Laboratory. This technology, tested at the Badlands Bombing Range in South Dakota and demonstrated at several other test ranges throughout the country, had an estimated detection efficiency of 96 percent. NAS Fallon is working with the Walker River Paiute Tribe to investigate the potential use of this technology for off-range ordnance lands at NAS Fallon. Section 3.13 provides additional information on off-range ordnance sweep methodology and results.

In December 1989, the Navy, BLM, and the Nevada Department of Conservation and Natural Resources signed a memorandum of agreement requiring the Navy to conduct annual reconnaissance sweeps around the training ranges for off-range ordnance. The memorandum of agreement, updated in 1995, provides a process for the retrieval, transport, and disposal of off-range ordnance (US Navy 1995j). The memorandum will terminate upon implementation of the proposed action, though the Navy will continue the sweeps.

1.4.3.4 Armed Overflight Zones

RSZ B begins where the pilot arms the weapon system. Arming is required for both practice/inert and live ordnance. Inadvertent release of ordnance in

these areas could pose safety hazards to other users. Land uses that have the potential to attract congregations of people or require structures above 50 feet in height are not compatible in RSZ B.

The distance from the target at which arming occurs is determined by the location of the targets on the range as well as the weapons delivery tactics selected on those targets. Ingress to the target and electronic warfare threats also need to be taken into consideration.

The armed overflight zone for the B-16 modifications discussed in Section 5.6.5 begins south of the southern range boundary, as shown in Figure 1-4. It continues to where it meets RSZ A. The RSZ B area south of B-16 was not needed for withdrawal because the Navy and BLM agreed that the BLM could effectively manage this area by implementing land use restrictions, such as height limitation, in armed overflight areas. For B-17 and B-19, the overflight zones begin at points coincident with or well inside the proposed withdrawal boundaries. The BLM can not manage armed overflight areas associated with these two training ranges because these areas are also proposed for integrated air and ground training.

1.4.3.5 RAICUZ Study

The 1982 RAICUZ study identified areas surrounding the training ranges where the possibility of accidents and the level of noise from Navy activities exceed Navy guidelines for nonmilitary land uses. The study mapped noise contours for each range, identified areas where potential noise and safety hazards conflict with existing land use, and recommended withdrawal buffer areas for each range (summarized in Figure 1-6). The RAICUZ analysis was used to determine the original land withdrawal footprint, recommending that 181,323 acres of federally controlled land around the training ranges be withdrawn to provide for tactical training and to create a buffer. Appendix C presents an overview of the RAICUZ process and a summary from the RAICUZ report.

Since the 1982 RAICUZ was conducted, the studies above (see Section 1.4.3) were conducted to address range safety requirements and to revise the RAICUZ findings. These efforts updated and improved upon the 1982 RAICUZ modeling process, refining the data and analysis and providing for changes in types of aircraft and training at NAS Fallon and the FRTC. A summary of the 1982 RAICUZ report is presented in this EIS to express the need for the original proposed action (Alternative I). The other alternatives evaluated in this FEIS reflect the findings of more recent studies.

1.5 PUBLIC INVOLVEMENT

1.5.1 Public Scoping

Pursuant to NEPA, a public scoping process for the land withdrawal EIS was conducted from May 12, 1995, through July 7, 1995. The public was notified of the Navy's intent to prepare this EIS by a notice of intent (NOI) published in the May 12, 1995, issue of the Federal Register (Vol. 60, No. 92). To initiate the scoping process, a public notice was published on two consecutive days in two local newspapers, the Reno Gazette-Journal and Lahontan Valley News. Scoping letters, with an attached summary of the proposed public land withdrawal, were mailed to over 200 public agencies, public interest groups, and individuals either known to have an interest in or expected to have an interest in the land withdrawal. Appendix B lists the agencies, organizations, and individuals on the distribution list.

Both the scoping letter and public notices invited written comments and announced that public scoping meetings would be held at the Airport Plaza Hotel in Reno, Nevada, on June 6, 1995, and at the Fallon Convention Center in Fallon, Nevada, on June 7, 1995. Each scoping meeting was attended by approximately 80 individuals, including agency representatives and members of the public. Approximately 40 individuals spoke at the meetings. During this EIS scoping process, 53 letters were received from members of the public, interested groups, and federal, state, and local agencies. The written and oral comments identified several issues and areas of concern.

Comments addressed public land access, airspace safety and availability, noise levels, biological resources, water supply and rights, socioeconomic effects, land use compatibility, public health and safety, and cultural resources. Respondents requested that the EIS address a full range of alternatives, including relocating B-16, and present the alternative selection process.

Comments urged NAS Fallon to make the best use of lands currently under its management and to withdraw the least amount of land possible. In response, the proposed configuration was changed to include a corridor of Navy-owned land connecting to the Dixie Valley area proposed for withdrawal.

In response to public scoping comments related to noise north of B-16 in the Sheckler District, the Navy initiated operational changes at B-16. These changes, discussed in Section 5.6.5, would revise current flight patterns to reduce noise levels north of B-16 in the Sheckler District. The BLM published a NOI for these modifications in the Federal Register and held an

open house on July 17, 1996, to discuss these changes. The Navy is continuing to work closely with FAA regarding these changes and this issue.

Public scoping also was conducted for the land withdrawal proposal in 1982 and 1987. These scoping processes included publishing notices in the Federal Register and local papers, conducting scoping meetings, and sending notification letters. Comments received during these periods were similar to those discussed above and were considered in the EIS.

1.5.2 Draft EIS

The public was invited to review and comment on the DEIS. A notice of availability was published in the Federal Register on July 10, 1997. Public notices were mailed to those on the mailing list (Appendix B). Ads were published in the Reno Gazette and Lahontan Valley News on September 8 and 9, 1997, and September 14 and 15, 1997. The DEIS was circulated for public and agency review from July 10, 1997 to October 10, 1997. This public comment period of 90 days (required to be at least 45 days under NEPA) provided an opportunity for the public to review the issues addressed in the impact analysis and to offer comments on any aspect of the process. The distribution list is included as Appendix B.

Public hearings were held on September 16, 1997, in Reno, Nevada, and on September 17, 1997, in Fallon, Nevada, to formally receive verbal and written comments on the DEIS. The locations, dates, and times of the meetings were announced in the media and were included in a letter mailed to those on the distribution list. Open houses were held prior to each public meeting to give the public an opportunity to discuss their concerns with Navy representatives. Approximately 30 individuals attended the open house, 60 individuals attended the public hearing, and 23 individuals presented oral comments in Reno, Nevada. Approximately 16 individuals attended the open house, 52 individuals attended the public hearing, and 15 individuals presented oral comments in Fallon, Nevada. Comments and responses to the comments are provided as Volume II of this FEIS. An additional meeting was held in Austin, Nevada on September 30, 1997, to respond to concerns of citizens of Eureka and Lander Counties voiced at the Reno and Fallon public hearings. Approximately 50 individuals attended this meeting.

1.5.3 Final EIS

This FEIS incorporates and responds to comments received on the DEIS. As required under NEPA, there will be a 30-day no action period after the

FEIS is published. After the 30-day no action period, a ROD) will be prepared.

1.6 OTHER RELATED ACTIONS

The Military Lands Withdrawal Act of 1986 (Public Law 99-606) withdrew Bravo-20 Training Range, Nevada (21,576 acres); Nellis Air Force Range, Nevada (2,945,000 acres); Barry M. Goldwater Air Force Range, Arizona (2,664,423 acres); McGregor Range, New Mexico (608,385 acres); Fort Greely Maneuver Area (571,995 acres) and Fort Greely Air Drop Zone, Alaska (51,590 acres); and Fort Wainwright Maneuver Area, Alaska (247,952 acres). Section 6 of the act specified that "no later than five years after the date of enactment of (the) Act, the Secretary of the Air Force, the Secretary of the Navy, and the Secretary of the Interior shall submit to Congress a joint report." This report, entitled the "Special Nevada Report," was to include an analysis and evaluation of the effects on public health and safety resulting from DOD and DOE military and defense-related uses on withdrawn public lands in Nevada and in airspace overlying the state. The Draft Special Nevada Report was released to the public in December 1990; the final report was released in 1991. Although not a NEPA document, the report contains an extensive analysis of the cumulative environmental effects of military land withdrawals in Nevada.

The Military Lands Withdrawal Act also requires the Navy and Air Force to prepare environmental impact statements that analyze the potential environmental effects of their continued use of withdrawn lands in Nevada. The Navy's EIS will be completed by November 1998.

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2. PROPOSED ACTION AND ALTERNATIVES

This chapter presents the proposed action, alternative selection process, alternatives considered in detail, and alternatives considered but eliminated. Land use classifications that would be applied to the withdrawn areas are discussed, along with reasonably foreseeable military activities on the withdrawn lands. All alternatives considered in detail are consistent with the purpose and need described in Chapter 1 and represent reasonable choices of options that meet safety, training, and mission requirements of NAS Fallon. A comparison of the relative environmental impacts of each alternative also is provided. Detailed analyses of environmental consequences and proposed mitigations are presented in Chapter 4.

2.1 PROPOSED ACTION

The Navy proposes to withdraw federally administered land around NAS Fallon training ranges to facilitate and improve the realistic operational and strategic combat training conducted there and to provide public safety buffers. All lands proposed for withdrawal are now administered by the BLM, BUREC, or DOE.

As discussed in Section 2.2, three action alternatives are evaluated in detail. These alternatives would withdraw between 127,365 and 189,080 acres of public land around NAS Fallon training ranges B-16, B-17, B-19, the shoal site, and the Dixie Valley area. The total of all the alternative withdrawal footprints would include lands north, west, and southeast of B-16; lands north, south, east, and west of B-17; and lands north, west, and east of B-19. Lands at the shoal site and Dixie Valley area also are included for withdrawal. Under each action alternative, all lands known to be contaminated or having the potential to be contaminated with ordnance would be withdrawn (see Sections 1.4.3.1 and 1.4.3.3 and Figures 1-3 and 1-5). Specific acreages and maps of the withdrawal areas for each alternative are presented in Sections 2.2.2 and 2.3.3. The Navy would withdrawal the 2,765 acres of DOE land at the shoal site under all action alternatives. The DOE would retain responsibility for all subsurface resources and activities. The Navy would be responsible only for surface training activities.

The withdrawn lands under each alternative would be placed in one of two land use categories: Category A, Exclusive Navy Use, Potential Ordnance Hazard; or Category B, Navy and Public Use, Limited Land Use Conflicts. Category A includes approximately 40,280 acres of land east of B-16, north, south, and east of B-17 and north and east of B-19. Category B includes all remaining withdrawal lands.

Category A lands will be managed by the Navy and will be closed to public uses. Category B lands will be managed by the Navy in conjunction with the BLM, BUREC, and DOE and will remain open to public use with the exception of fenced EW sites. All lands will be managed under a resource management plan that has been developed by the Navy, in coordination with the BLM, BUREC, and DOE. This management plan provides specific land use policies for the withdrawn lands in conformance to those presented in this FEIS (Appendix J). The land use categories are discussed in detail in Section 2.3.2.

The land withdrawal will not cause an increase in total air operations or the size of the training range impact areas. Realistic military combat training requires using visual cueing devices, developing EW and TACTS sites, and employing tactical training scenarios, including ground-based combat search and rescue, close air support operations, and the use chaff and flares.

Up to five EW or TACTS sites and up to 50 sites for visual cueing devices could be developed on the withdrawn lands. Each EW site would occupy fewer than five acres, and each TACTS and visual cueing device site would occupy up to one acre. The maximum land area that would be disturbed if five EW sites and 50 visual cueing device sites were developed would be 75 acres. Although the exact locations of these sites have not been identified, all will be on withdrawn lands in the Dixie and Fairview Valley areas and east of B-19. Not all visual cueing device sites would be occupied at one time (i.e., there would never be 50 visual cueing devices on the withdrawn lands at one time). Typically, only three to six visual cueing devices are used at a time during air wing training events.

Integrated air and ground training activities also will take place on the withdrawn lands. A typical ground training portion of the exercise will consist of two vehicles and six personnel. Under desert rescue scenarios, the most intensive training event will consist of four vehicles, two helicopters, and up to 15 personnel. Not all of these forces will be located at the same site at the same time. If other public land users are on the withdrawn land to be used for training, the Navy would avoid other public land users. These activities are described in detail in Section 2.3.1.

All EW, TACTS, and visual cueing device sites will be located away from sensitive resources to avoid adverse impacts and will undergo National Historic Preservation Act, Section 106, and Endangered Species Act, Section 7, consultations as appropriate. All actions at the shoal site would take place at or above the ground surface—no subsurface disturbance is proposed.

Any military use that became necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency; the proposed land withdrawal alleviates the need to use other BLM lands in most cases.

2.2 ALTERNATIVES

2.2.1 Alternatives Formulation Process

In developing potential alternatives, the Navy coordinated a number of actions, including the following:

- Assessed current and future training and operational requirements for the FRTC;
- Conducted RAICUZ and noise modeling analyses, off-range ordnance sweeps, and HAZARD modeling to assess, quantify, and illustrate safety hazards on lands around the training ranges;
- Consulted with the BLM on their administrative authority to manage land for public safety and the Navy mission;
- Identified types of land uses incompatible with military operations;
- Established an interdisciplinary team of Navy environmental planners, training range operators, natural resource specialists, ordnance experts, flight commanders, and real estate specialists;
- Consulted with the BUREC, Federal Aviation Administration (FAA), DOE, Bureau of Indian Affairs, state of Nevada, and other federal, state, and local agencies and organizations with an interest in the action; and
- Conducted public scoping in 1982, 1987, and 1995 (Section 1.5 and Appendix A).

From this process, seven action alternatives, in addition to the No Action Alternative, were developed. To determine if the alternatives were reasonable and would meet the purpose and need of the proposed action, three evaluation criteria were established. For an alternative to be considered in detail, it had to fulfill all three evaluation criteria summarized below.

1. The action must preserve the training mission of NAS Fallon, as required for national defense. To achieve this the action must:

- Monitor and prevent incompatible land uses that could jeopardize aircrew safety or military training needs, including high- and low-altitude high-speed aerial weapons training.

- Plan land withdrawal configuration to facilitate the combat search and rescue, close air support, and other small ground training operations, such as those conducted by groups of special forces personnel. Maintain and improve state-of-the-art realistic military combat training, including the continued use of chaff, installation of EW, TACTS, and visual cueing devices, and combat search and rescue and close air support training scenarios.

- Allow for the most effective and efficient use of training time while minimizing fuel consumption and unnecessary expenditure of aircraft service life in a nonproductive transit mode.

2. The action must protect the public from safety hazards that relate to air-to-air combat training, evasive air-to-ground combat tactical training, and ordnance delivery training. Potential hazards include off-range ordnance and low-flying aircraft. To achieve this, the action must meet the requirements of the HAZARD modeling report for all training ranges and the B-16 RAICUZ study; and must protect the public from areas that are known to be contaminated with off-range ordnance.

3. The action must minimize disruption of the BLM mission to provide for multiple uses on federal lands and the BUREC mission to administer the Newlands project. The action also should allow maximum public access within safety parameters by minimizing the size of the withdrawal area and by limiting restrictions proposed for withdrawn lands. In addition, the action should not interfere with BUREC operations of the Newlands reclamation project.

   The BLM's mission is to manage, protect, and improve lands to serve the needs of the public for all times. Management is based on the principles of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air, and scenic, scientific, and cultural values.

2.2.2 Alternatives Considered in Detail

Three action alternatives were determined to meet the identified purpose and need, and these are analyzed in detail in the FEIS. Alternative II has

been selected as the preferred alternative because it meets most training and safety requirements and minimizes the amount of land proposed for withdrawal. All action alternatives considered withdraw the lands known to contain off-range ordnance. The alternative withdrawal footprints are shown on Figure 2-1. Table 2-1 provides the proposed withdrawal acreages for each alternative by training area. Section 2.3 provides detailed maps and discussions of each withdrawal alternative. The alternatives considered in detail are summarized below.

- *Alternative I.* Approximately 189,080 acres would be withdrawn. The withdrawal footprint would include all lands recommended for withdrawal in the 1982 RAICUZ study (181,323 acres) plus additional lands closed as a result of off-range ordnance sweeps but not included within the original RAICUZ footprint (7,750 acres). This alternative represents the footprint of the original Master Land Withdrawal proposal, as amended in 1992.

  This alternative meets safety requirements and provides additional land for EW and TACTS site development in the Dixie and Fairview Valley area and east of B-19. The footprint, however, does not contain a corridor connecting the Navy-owned Dixie Valley land holdings with the rest of the Dixie Valley area. Such a corridor is important in maximizing the use of existing Navy land and in providing the necessary land for integrated air and ground training (see Section 1.4.2).

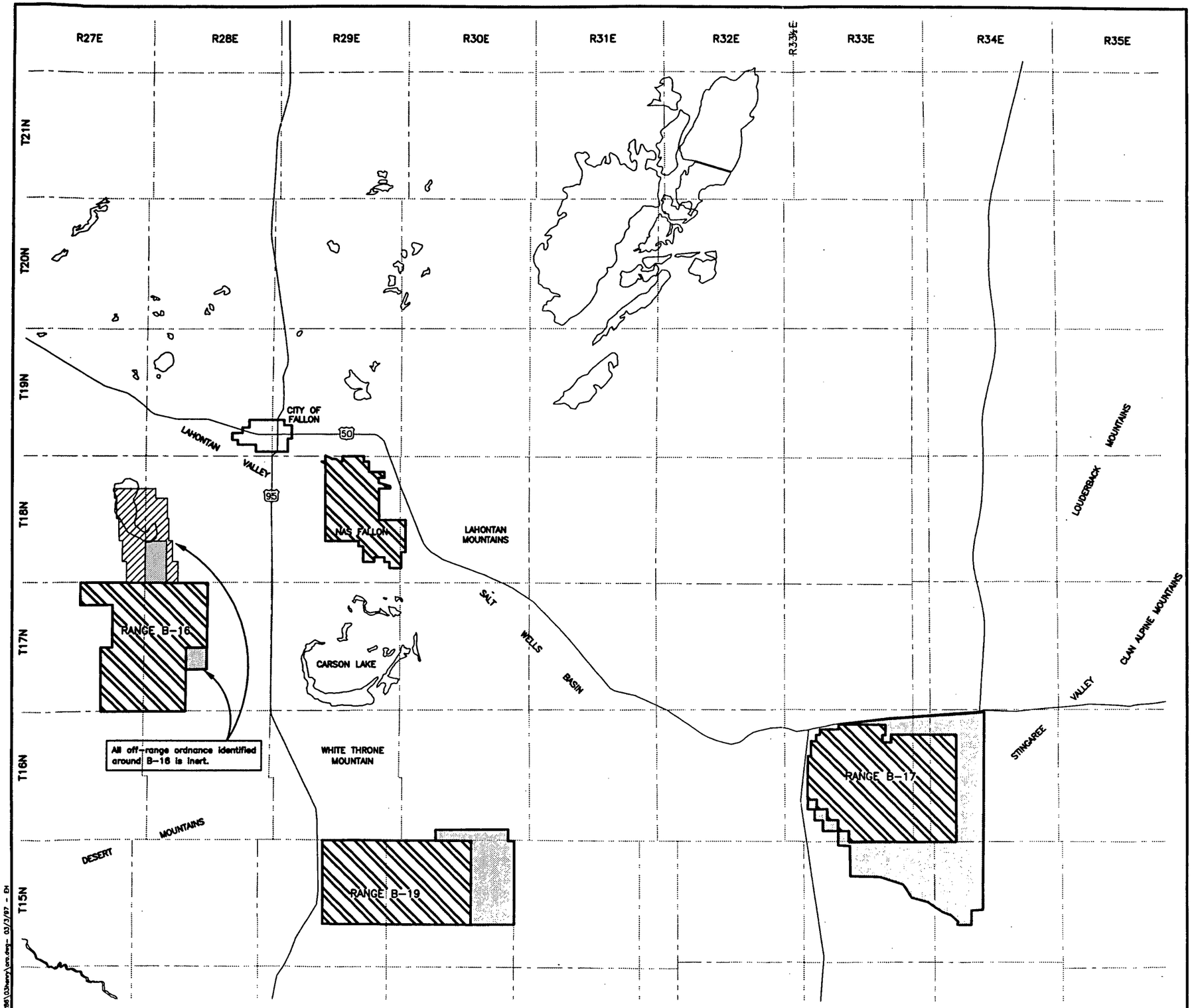
- *Alternative II (Preferred Alternative).* Approximately 127,365 acres of land would be withdrawn, about 62,000 acres less than under Alternative I. Much of the land identified in Alternative I, particularly the land identified as range safety zone C north of B-16 and in the Dixie Valley area in the 1982 RAICUZ study, can be managed effectively under the administrative authority of the BLM with Navy review and approval. The lands identified for withdrawal are those lands of immediate importance to the Navy training mission and intended for flexible use in support of that mission or those lands that pose a potential hazard to public safety. BLM administrative processes are not designed to support this kind of use.

  Approximately 6,100 acres north of B-16 would be withdrawn because of practice/inert off-range ordnance and for integrated air and ground training activities. Lands east of the range would be withdrawn because of off-range ordnance and public safety. Approximately 1,500 acres of land in the Dixie Valley area, just north of Highway 50 and northwest of B-17, would be included (areas in blue on Figure 2-1). This area would provide a continuous land management link between the Dixie

TABLE 2-1
COMPARISON OF ALTERNATIVES BY ACREAGE

Withdrawal Area	Existing Acreage[1]	Alternative I[2]			Alternative II (Preferred)[2]			Alternative III[2]			No Action Alternative[2]
		Category A	Category B	Total	Category A	Category B	Total	Category A	Category B	Total	
B-16	17,280	640	33,385	34,025	640	9,760	10,400	640	9,760	10,400	0
B-17	21,400	33,400	2,495	35,895	33,400	0	33,400	33,400	0	33,400	0
B-19	17,332	6,240	12,840	19,080	6,240	5,960	12,200	6,240	5,960	12,200	0
Shoal Site	0	0	7,405	7,405	0	2,765	2,765	0	2,765	2,765	0
Dixie Valley area	200 (ROW)	0	92,675	92,675	0	68,600	68,600[3]	0	94,000	94,000[3]	0
TOTAL	56,212	40,280	148,800	189,080	40,280	87,085	127,365	40,280	112,485	152,765	0

ROW: Right-of-way permits issued by the BLM to the Navy
[1] Current withdrawn acreage
[2] Additional approximate acreage proposed for withdrawal
[3] Includes 6,100-acre panhandle



LEGEND:

- NAS Fallon and Ranges
- Public Land Administered by BLM Containing Off-Range Ordnance
- Public Land Administered by BUREC Containing Inert Off-Range Ordnance

N

0 2.5 5

1"=5MI. (APPROXIMATE)

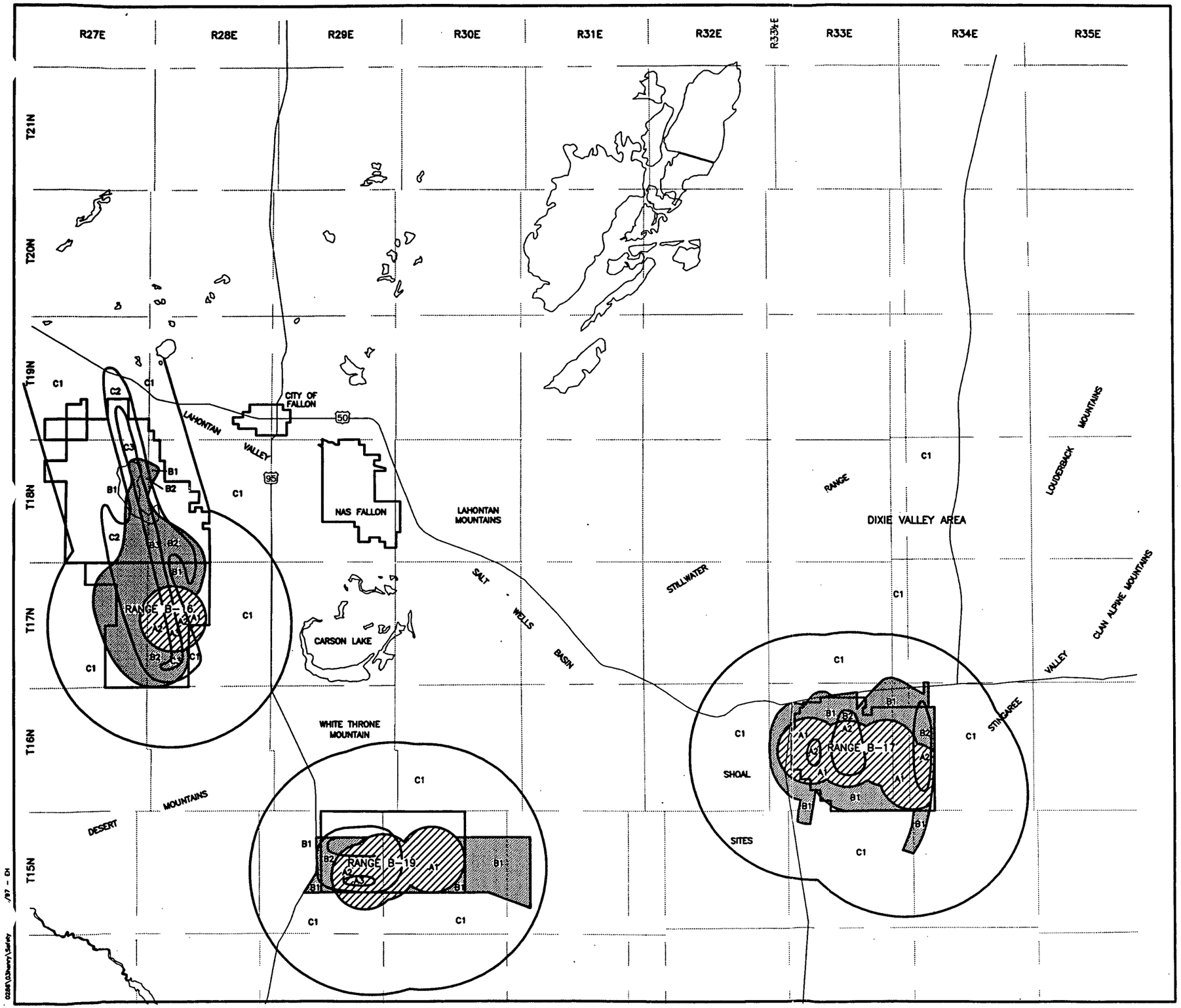
Off-range ordnance sweeps identified 24,464 acres of public land administered by the BLM that potentially contain off-range ordnance. Of these lands, 1,920 acres around B-16 contain inert ordnance while the remaining lands potentially contain live ordnance. The sweeps also identified 12,180 acres of public land administered by the BUREC north of B-16 that potentially contain off-range ordnance, all of which is inert.

Off-Range Ordnance Lands

NAS Fallon, Nevada

Figure 1-5

Source: USFWS 1995



LEGEND:

- Range Safety Zone (RSZ) A
  Noise Zone (NZ) 1–3 (subzones A1,A2,A3)
- Range Safety Zone (RSZ) B
  Noise Zone (NZ) 1–3 (subzones B1,B2,B3)
- Range Safety Zone (RSZ) C
  Noise Zone (NZ) 1–3 (subzones C1,C2,C3)

Key

RSZ A	=	Minimum surface impact area around targets, zone of maximum concern
RSZ B	=	Area of armed overflight, zone of moderate concern
RSZ C	=	Minimum restricted airspace, zone of minimum concern
NZ 1	=	65 L_{dn} and below
NZ 2	=	66 through 75 L_{dn}
NZ 3	=	76 L_{dn} and above
Ldn	=	Average noise level day/night in decibels

N

0 2.5 5
1"=5MI.
(APPROXIMATE)

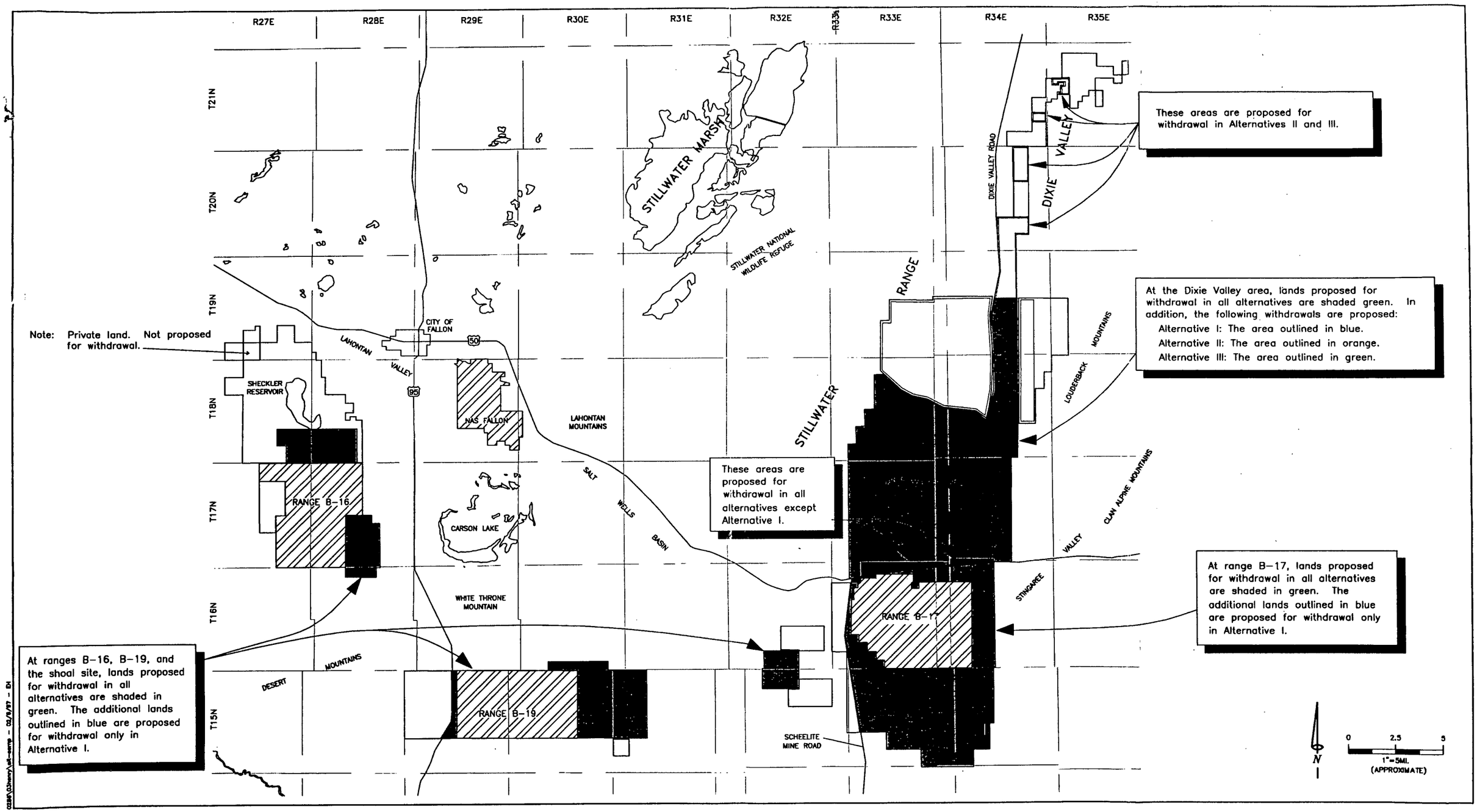
The 1982 RAICUZ Study provides detailed analysis of safety and noise zones around the training ranges. The results of this study were used to develop the original (Alternative I) proposed land withdrawal area.

RAICUZ Study: Range Safety Zones and Noise Zones

NAS Fallon, Nevada

Figure 1-6

Source: U.S. Navy, 1982b.



The three action alternatives would withdraw varying amounts of land around the NAS Fallon training ranges. The No Action Alternative would not withdraw any land.

LEGEND:

- NAS Fallon and Ranges
- Navy-owned Land in Dixie Valley
- Proposed for Withdrawal in all Alternatives
- Additional Land Proposed for Withdrawal in Alternative I
- Additional Land Proposed for Withdrawal in Alternative II
- Additional Land Proposed for Withdrawal in Alternative III

Source: Tetra Tech

Comparison of Alternative Withdrawal Footprints

NAS Fallon, Nevada

Figure 2-1

Valley area and B-17. Lands within the Nevada Department of Transportation Highway 50 right-of-way are not included in the withdrawal.

This withdrawal footprint differs from Alternative I in that a portion of the shoal site, the land west of B-16, the land west of Highway 95 near B-19, the land in the Job Peak Wilderness Study Area (WSA), and the land west of Scheelite Mine Road near B-17 would not be withdrawn. Approximately 21,000 acres north of B-16 proposed under Alternative I would not be withdrawn.

As part of this withdrawal, a parcel of land approximately one mile wide (one section wide) will connect the major portion of the Dixie Valley withdrawal with the Navy-owned property on the north end of the valley. This panhandle will facilitate better use of withdrawn public land and Navy-owned property by permitting uninterrupted movement of ground personnel from one area to the other. Additionally, it will permit the placement and movement of visual cues and mobile EW sites the entire length of the valley, which will add greatly to the realism of the training scenarios created in support of all NSAWC- and CNO-sponsored training missions. The Dixie Valley area footprint provides a variety of rugged and flat terrain to simulate possible enemy environments. The acreage also would support required integrated air and ground training operations, such as rescuing downed pilots, and developing EW, TACTS, and visual cueing device sites. Alternative II includes all lands closed to the public due to the presence of off-range ordnance. This withdrawal will not include the Nevada Department of Transportation right-of-way along the Dixie Valley Road.

- *Alternative III.* Under this alternative, approximately 152,765 acres would be withdrawn. The footprint is similar to Alternative II but includes more land in the northern portion of the Dixie Valley area. It also includes the land just north of Highway 50 and northwest of B-17 and the corridor of land that connects the Dixie Valley area to Navy-owned lands in Dixie Valley.

  Alternative III allows for integrated air and ground training and operations in concert with carrier air wing training. It allows for multiple realistic training scenarios that require the pilot to react to different combat situations. It provides adequate land for placing realistic visual cueing devices. As compared to Alternative II, the larger Dixie Valley area with the panhandle would allow for maximum combat training flexibility but would withdraw more land. All land known to contain off-range ordnance would be withdrawn.

Alternative III differs from Alternative I in that approximately 21,000 acres north of B-16, a portion of the shoal site, the land west of B-16, the land west of Highway 95 near B-19, and the land west of Scheelite Mine Road would not be withdrawn.

- *No Action Alternative.* Under the No Action Alternative, the Navy would not withdraw any federally administered public lands around the FRTC training ranges. Navy operations would continue on existing ranges. Public lands, including those identified as containing off-range ordnance, would remain under the authority of the current managing agencies. The No Action Alternative would be the least disruptive of the natural environment of the alternatives evaluated; therefore, it is considered the environmentally preferred alternative. However, the No Action Alternative would not be protective of the human environment, as discussed below, and would not satisfy the purpose and need of the proposed action.

  The No Action Alternative does not establish appropriate management responsibility for land containing off-range ordnance because the lands would not be under Navy control. It does not provide for the safety buffers defined through HAZARD modeling. The realism and flexibility of combat training activities would be severely limited under this alternative because visual cueing, integrated air and ground training, and close air support operations would be limited to existing Navy lands. This loss of realism would result in incomplete training of combat pilots, thereby increasing the potential for loss of lives in combat situations. The No Action Alternative does not meet the mission evaluation criteria; therefore it is not a reasonable alternative for purposes of this action. It is analyzed in this report to provide a baseline of current conditions as required by CEQ regulations (40 CFR 1502.11[d]).

2.2.3 Alternatives Not Considered in Detail

Four alternatives were eliminated from detailed study because they did not fulfill one or more of the evaluation criteria. Each alternative is presented below, along with a discussion on why it was not considered further. This analysis is consistent with CEQ regulations that require agencies to "rigorously explore and objectively evaluate all reasonable alternatives, and for all alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" (40 CFR 1502.14 [a]).

- *Increase the Size of the Withdrawal.* This alternative would withdraw over 200,000 acres of public land to include the widest safety buffer specified by the various studies, with the exception of land located on

Walker River Indian Reservation. It is not the Navy's intent to withdraw any more public land than is required to support the purpose and need of the withdrawal. While this withdrawal would fulfill the majority of training and safety requirements, it would not minimize the disruption of other public land users. For this reason, this alternative is not considered reasonable and is not analyzed in detail.

- *RAICUZ Withdrawal.* This alternative would withdraw 181,323 acres of public land, as recommended by the 1982 RAICUZ study. The 7,750 acres identified as containing off-range ordnance but not included in the 1982 RAICUZ footprint would not be withdrawn. This is not a reasonable alternative because the Navy would not withdraw ordnance-contaminated lands, as requested by the BLM. The BLM would have to continue managing the 7,750 acres containing off-range ordnance but not withdrawn under this alternative. In addition, it would not withdraw the land north of Highway 50 and B-17 or link the withdrawal lands in the Dixie Valley area to the Navy's Dixie Valley land holdings. Therefore, this alternative would not provide the most efficient use of the land for integrated air and ground training.

- *Off-range Ordnance Withdrawal.* This alternative would withdraw only the 24,464 acres of public land identified during the 1989 and 1990 sweeps as containing off-range ordnance (Figure 1-5). This alternative fulfills only part of one of the evaluation criteria objectives—close public access on lands containing off-range ordnance. It does not provide the safety buffers around the FRTC training ranges defined through HAZARD modeling (Figure 1-3). These buffers, which are based on operational requirements and parameters, are necessary to contain public safety hazards.

  The Off-range Ordnance Alternative would not fulfill training-related criteria and would not provide the necessary land area for the Navy to change and improve realistic operational and strategic combat training. The modern Navy uses jets equipped with complex technologies including state-of-the-art weaponry and communication, navigation, and guidance systems. To operate these jets effectively and to maximize their performance in combat situations, pilots must have intense and realistic training under simulated conditions. Visual cueing devices, TACTS sites, and EW sites simulate enemy threat scenarios, counterattacks, and complex targeting scenarios. Under the Off-range Ordnance Alternative, EW sites would be allowed on existing Navy training ranges and off-range ordnance lands only. This would limit the Navy's flexibility to vary training combat scenarios and would therefore limit training capabilities at the ranges. The loss of realism in training caused by these restrictions would result in the incomplete

training of combat pilots, thereby increasing the potential for loss of life in real world combat situations.

The Off-range Ordnance Alternative would not withdraw the land north of Highway 50 and B-17 or link the withdrawal lands in the Dixie Valley area to the Navy's Dixie Valley land holdings. This alternative would limit the ability of the Navy to provide effective integrated air and ground combat training. Integrated air and ground training is an increasingly important training component of the Navy and other branches of the military. Training in a variety of terrain is invaluable to this mission. Various types of lands are required for landing zones, for long-range patrols, and for simulating the terrain found in various real world scenarios.

This alternative would not give the NSAWC the flexibility to quickly respond to training needs because any proposed use on public lands under the authority of the BLM would have to go through BLM administrative processes. Additionally, the compatibility of land uses surrounding the ranges is an issue insofar as it affects the training missions and the viability of the FRTC.

This alternative would not provide the area and diversity required for effective training and does not meet DOD safety requirements and policies. Because this alternative does not meet the above requirements, it was not carried forward for detailed analysis.

- *Relocate All or Part of the FRTC.* This alternative would consist of relocating all or part of the existing ranges. The components of this alternative are: relocate the FRTC, close B-16, relocate B-16 operations to other regional ranges, and relocate B-16 operations to B-20. None of these options present reasonable alternatives to the proposed action, as discussed below.

  Relocate the FRTC: Relocating the FRTC would involve identifying new or available existing airspace and identifying or constructing aircraft and personnel support facilities. New restricted airspace would have to be allocated by the FAA in order for the Navy to operate at a new location. Current FAA regulations require that all land under newly designated restricted airspace be owned by or be under the control of the user of the airspace if the user's operations require flights under 1,200 feet above ground level. NAS Fallon's restricted airspace covers approximately 2,000 square miles, or over 1.2 million acres, and NAS Fallon performs operations below 1,200 feet. This amount of land or more would therefore be required to relocate the FRTC. Figure 5-2

depicts the existing restricted and military operations area designated for NAS Fallon.

Establishing new restricted airspace for Navy operations would require the Navy to purchase or withdraw more land than is withdrawn at existing ranges. For example, relocating B-16 to a new range would require the Navy to purchase or withdraw at least 10 square miles of land for the training area and approximately 100 square miles of land for the restricted airspace, as required by FAA regulations. In addition, there are very few tracts of land this large available in the United States that would be compatible with military operations. The environmental impacts from relocation would be decidedly greater than the impacts from withdrawing land around the current ranges.

Neither Nellis AFB nor any other DOD facility has the available range and airspace capacity to accommodate the training mission of NAS Fallon. In addition, the ranges at Nellis AFB are test and evaluation (T&E) ranges that focus on research and development operations, while the FRTC is an operations and maintenance (O&M) combat training range facility. While some training may be conducted at T&E ranges, it is not a priority within the T&E mission, and the availability of combat training systems, targets, and resources is severely limited. In addition, the FRTC offers a unique configuration of land and airspace designations, allowing for types and levels of combat training not available elsewhere in the region. NAS Fallon has the airspace, weather, remoteness, training systems, ranges, and range impact areas necessary to conduct the required training operations.

NAS Fallon is the only regional facility capable of supporting the 1,500 to 2,000 personnel during the four-week CVW training. No other regional DOD facility has the available operational infrastructure, such as hangar and ramp space or maintenance facilities for F/A-18 aircraft. While additional facilities could be constructed at another installation, Congressional approval for funding would be required at a time when the political climate tends towards downsizing military facilities.

Relocating the FRTC does not offer a reasonable alternative to the proposed action. Establishing a new FRTC that could offer the same level of combat training is not viable because of the limited availability of large amounts of airspace and land, the potential for creating new environmental impacts, and the impracticability of creating new military installations. Relocating the FRTC to other regional ranges is not an option because regional ranges do not have the available airspace or support facilities to accommodate the amount or type of training

activities performed at the FRTC. For these reasons, this alternative was eliminated from further consideration.

Close B-16: It was recommended during the public scoping process that B-16 be closed and training activities be relocated to other regional ranges because of noise and safety concerns. The Navy has rerouted 12 MTRs from B-16 and is proposing changes to the approach pattern to B-16, thereby reducing noise and safety concerns.

Closing B-16 without replacement is not a reasonable option because it would adversely affect the training mission of NAS Fallon. If it were possible to relocate training from B-16 to another training range at NAS Fallon, it would adversely affect the long-term viability and strategic importance of the FRTC and NAS Fallon The strategic importance of B-16 is described below:

- Most of the basic and intermediate training is performed at B-16, leaving the remaining NAS Fallon ranges available for advanced training.

- B-16 is the only range at NAS Fallon that is not used during a major air wing event and therefore is the only range available for other training events during these times.

- B-16 is used daily under current operating conditions. In 1994, over 1,500 basic air-to-ground practice/inert ordnance delivery sorties used B-16 (US Navy 1995c). B-16 has become increasingly important since TOPGUN and Top Dome relocated to NAS Fallon.

- In addition to servicing training functions at NAS Fallon, B-16 has a separate airspace that is used by other air training units from NAS Lemoore, California, NAS Cecil Field, Florida, NAS Whidbey Island, Washington, Marine Corps Air Station (MCAS) Yuma, Arizona, Nellis AFB, Nevada, MCAS Miramar, California, Mt. Home AFB, Idaho, Luke AFB, Arizona, and Hill AFB, Utah. Therefore, closing B-16 without replacement would affect training operations throughout the DOD.

- Under BRAC, many Navy air stations and Air Force bases are being closed or realigned. Consolidating those facilities makes NAS Fallon and the FRTC, which includes B-16, more strategically important for combat readiness training.

Relocate B-16 Operations to Other Regional Ranges: Moving B-16 operations to other regional ranges, such as Nellis AFB, does not meet the evaluation criteria and is not a reasonable alternative to the proposed action for the following reasons:

- Using B-16 for training minimizes en route travel time, thereby maximizing actual training time. Relocating B-16 operations would not promote efficiency or maximize training time.

- Other regional ranges also are reaching capacity because of military realignments under BRAC. Therefore, combat training time could not be guaranteed, preventing NAS Fallon from fulfilling its mission as a training facility.

- The ranges at Nellis AFB are T&E ranges that focus on research and development operations, while the FRTC is an O&M combat training range facility. While some training may be conducted at T&E ranges, it is not a priority within the T&E mission, and the availability of combat training systems, targets, and resources is severely limited.

- Using other ranges would not be cost-effective because additional fuel would be required for transit to the ranges.

- Relocating B-16 to a new range would require the Navy to purchase or withdraw at least 10 square miles of land for the training area and approximately 100 square miles of land for the restricted airspace, as required by FAA regulations.

Relocate B-16 Operations to B-20: Moving B-16 operations to an expanded B-20 range does not meet the evaluation criteria and is not a reasonable alternative to the proposed action for the following reasons:

- B-20 is commonly used concurrently with the FRTC airspace in major air wing and joint service training events. This limits its availability to the fleet replacement squadrons and the other DOD services for basic air-to-ground training.

- B-16 has completely separate airspace from the rest of the FRTC. When advanced combat training is taking place in the FRTC (using most or all of the FRTC airspace), B-16 can be used independently but concurrently for basic air-to-ground training.

- B-20 is comprised of alternating sections of private and public land. The Navy acquired the private land and in 1986 withdrew the

public land. The approximately 21,500 acres of withdrawn public lands within B-20 could revert out of Navy control in 2001.

A summary matrix that compares each alternative considered to the evaluation criteria is presented in Table 2-2. The table is divided into two sections, "Alternatives that Meet the Evaluation Criteria" and "Alternatives that Do Not Meet the Selection Criteria."

2.3 USES AND CLASSIFICATION OF WITHDRAWN LAND

This section addresses the military activities that could take place on withdrawn lands under all action alternatives that were considered in detail. It also describes land use categories in which withdrawn land would be placed. The land use categories describe the public access conditions and reasonably foreseeable land management procedures on the lands that would promote multiple uses as appropriate with safety hazards.

2.3.1 Military Activities Common to All Action Alternatives

The purpose of Navy training at NAS Fallon is to present a coordinated integrated air wing training scenario representative of combat situations Navy personnel may face around the world. Realistic and strategic combat training requires using visual cueing devices, developing additional EW and TACTS sites, conducting integrated air and ground training operations, and continued use of chaff and flares. One purpose of the proposed land withdrawal is to provide the area necessary to accommodate these training activities. Each military activity as currently conducted is briefly discussed below. The majority of military use of the withdrawn lands would occur during the four to six air wing events that occur each year. Each air wing event lasts for four weeks, with one week of that training spent in the classroom. Types of training conducted and requirements supporting that training may change from time to time, reflecting changes in military technology developed by our forces as well as that of potential adversaries.

- **EW and TACTS Sites:** Up to five EW or TACTS sites would be developed on the withdrawn lands. Each EW site would occupy fewer than five acres, while each TACTS site would occupy less than one acre. Establishing five new EW or TACTS sites would bring the total number of such sites within the FRTC to 67. This includes the 62 sites already established through BLM rights-of-way. These 62 sites are in remote locations throughout central Nevada. The exact locations of the new sites have not been determined, but all would be within the withdrawn lands at B-17, B-19, and the Dixie Valley area where possible. Any military use that becomes necessary outside of the

TABLE 2-2
COMPARISON OF ALTERNATIVES TO EVALUATION CRITERIA

CRITERIA / ALTERNATIVES	NAS FALLON MISSION		PUBLIC SAFETY		Provides Multiple Use and Maximum Access on Public Lands
	Permits Realistic State-of-the-art Training Operations	Allows for Integrated Air and Ground Training	Meets RAICUZ/ HAZARD Study Requirements	Withdraws All Lands Contaminated With Off-range Ordnance	
ALTERNATIVES THAT MEET EVALUATION CRITERIA AND THE NO ACTION ALTERNATIVE					
Alternative I [189,080 acres]	Partially provides operational areas for modern training	Provides moderate training capabilities. Does not connect to existing Navy-owned land	Withdraws all land recommended in studies	Withdraws all land identified in BLM emergency closure	Allows for public use, except on off-range ordnance lands, HAZARD areas, and fenced EW sites where use is restricted
Alternative II (Preferred Alternative) [127,365 acres]	Provides operational areas for modern training	Connects Dixie Valley area to existing Navy-owned lands, providing training corridor	Withdraws identified land except where no longer required because of operational changes	Withdraws all land identified in BLM emergency closure	Allows for public use, except on off-range ordnance lands, HAZARD areas, and fenced EW sites where use is restricted. Smallest Dixie Valley footprint
Alternative III [152,765 acres]	Provides operational areas for modern training	Provides maximum training capabilities with corridor and large Dixie Valley area	Withdraws identified land except where no longer required because of operational changes	Withdraws all land identified in BLM emergency closure	Allows for public use, except on off-range ordnance lands, HAZARD areas, and fenced EW sites where use is restricted
No Action Alternative [0 acres]	Does not provide for realistic state-of-the-art operations	Does not provide improved training capabilities	Withdraws no land. Does not meet study requirements	Withdraws no land identified in BLM emergency closure	Off-range ordnance lands would remain closed to public use. Multiple use would remain on other lands
ALTERNATIVES THAT DO NOT MEET EVALUATION CRITERIA					
Increase the Size of the Withdrawal [200,000 acres]	Provides operational areas for modern training	Provides moderate training capabilities. Does not connect to existing Navy owned land	Withdraws all land recommended in studies	Withdraws all land identified in BLM emergency closure	Allows for public use but withdraws more land than required for operations
RAICUZ Withdrawal [181,323 acres]	Provides operational areas for modern training	Provides moderate training capabilities. Does not connect to existing Navy-owned land	Withdraws all land recommended in studies	Would not withdraw all off-range ordnance land identified in BLM emergency closure	Allows for public use, except on off-range ordnance lands, HAZARD areas, and EW sites where use is restricted
Off-range Ordnance Withdrawal [24,464]	Does not provide for realistic state-of-the-art operations	Does not provide improved training capabilities	Withdraws only off-range ordnance lands	Withdraws all land identified in BLM emergency closure	Off-range ordnance lands would remain closed to public use. Multiple use would remain on other lands
Relocate All or Part of the FRTC [0 acres]	May not allow state-of-the-art training since integrated training missions (e.g., CVWs) would most likely not be possible because of lack of large land tract/airspace	Relocation may not allow for adequate training capabilities since less land would be available at relocation site(s)	Relocation would transfer noise and safety issues to other area(s)	No off-range ordnance would exist at new sites. Existing off-range ordnance areas would remain closed pending the development of improved removal technology	Would close access and some uses on different areas of land. Existing range(s) would still be closed to the public because of ordnance contamination

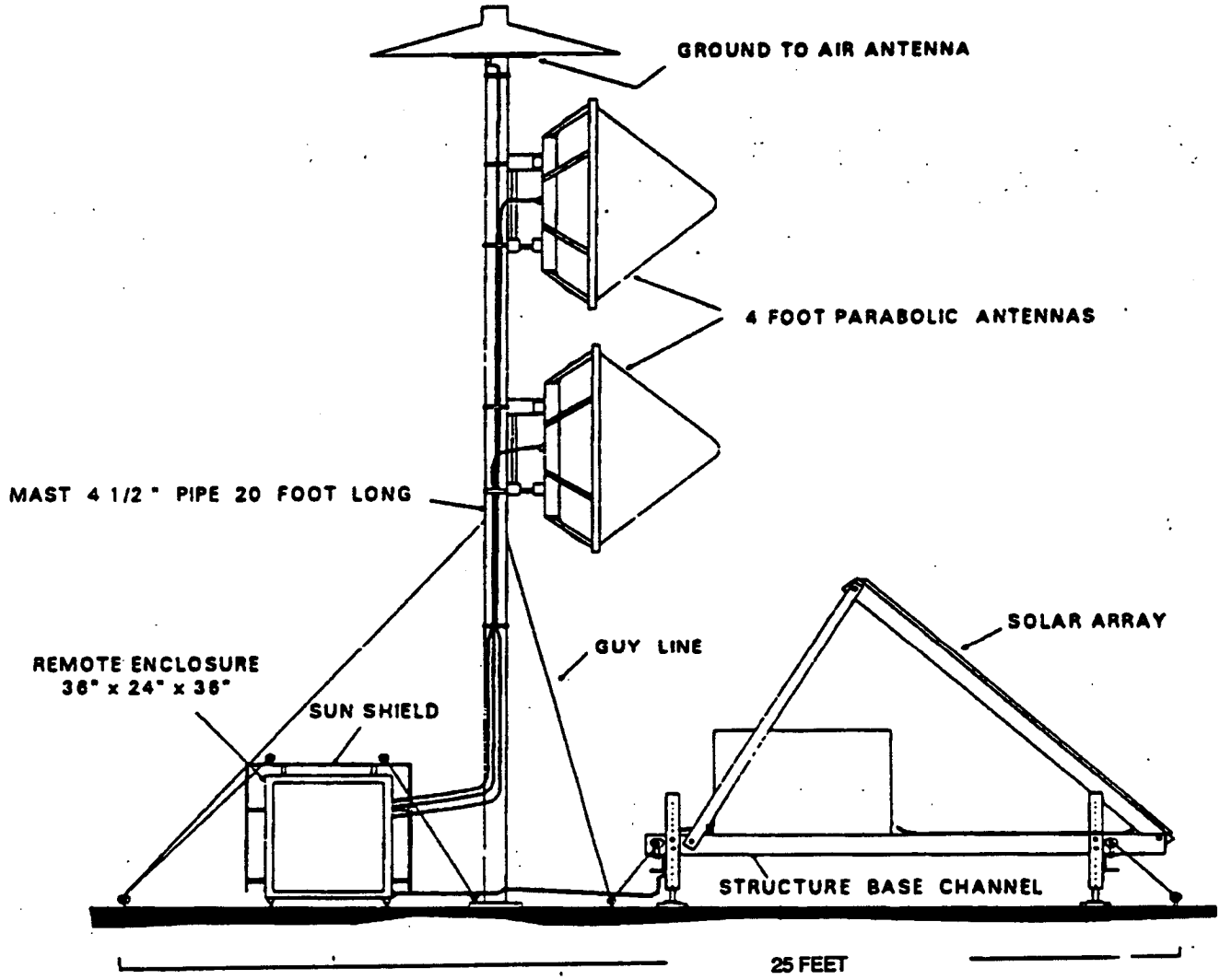
proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency. Existing access roads and utility corridors would continue to be used wherever possible. Most sites would be fenced for security, unless located in remote areas. The following briefly describes EW and TACTS sites:

EW Sites: The NAS Fallon EW sites represent a diversified complex of staffed and unstaffed multiple range radar systems that transmit search and tracking signals that simulate training scenarios (US Navy 1995b). Each EW site consists of one or more emitter units that can be employed to provide different presentations for different training scenarios. Equipment at each site may include height finder radars, search radars, a communications shelter, a microwave voice transmitter and data communications link, a maintenance van, a diesel aboveground storage tank, and a 200-kW or smaller generator. Equipment at these sites is powered by electric lines, with an emergency diesel generator as backup. Three to five personnel are stationed at each site for six-day periods.

Figure 2-2 depicts a staffed EW site. These sites occupy between one and five acres, with radar antennas extending as high as 50 feet. This specific radar is designed for long-range search and detection of tactical military aircraft conducting training in the Dixie Valley area. The control van simulates real-world radar emissions that could be experienced by aircrews on operational deployment outside the continental United States.

TACTS Remote Communication Relay Stations: TACTS is made up of a network of Tracking Instrumentation Subsystem (TIS) sites that provide real-time tracking weapons simulation and an electronic replay of the movements and performance of aircraft within the FRTC. This tracking is necessary to evaluate training practices and pilot performance and to provide increased aviation safety by increasing the ability to identify participating military aircraft locations throughout the FRTC.

The generic TACTS remote communication relay station equipment, shown in Figure 2-3, occupies a ground surface area of 25 feet by 25 feet. It consists of a solar panel, which provides electrical power to the system, and a relay station. The relay station operates in conjunction with an airborne aircraft pod and a distant TACTS master station. The remote relay receives and retransmits telemetry data about the aircrafts' geographic and vertical position, plus dynamic flight parameters to the TACTS master station. From this point, the data are transmitted to a central computer for processing, display, and evaluation.



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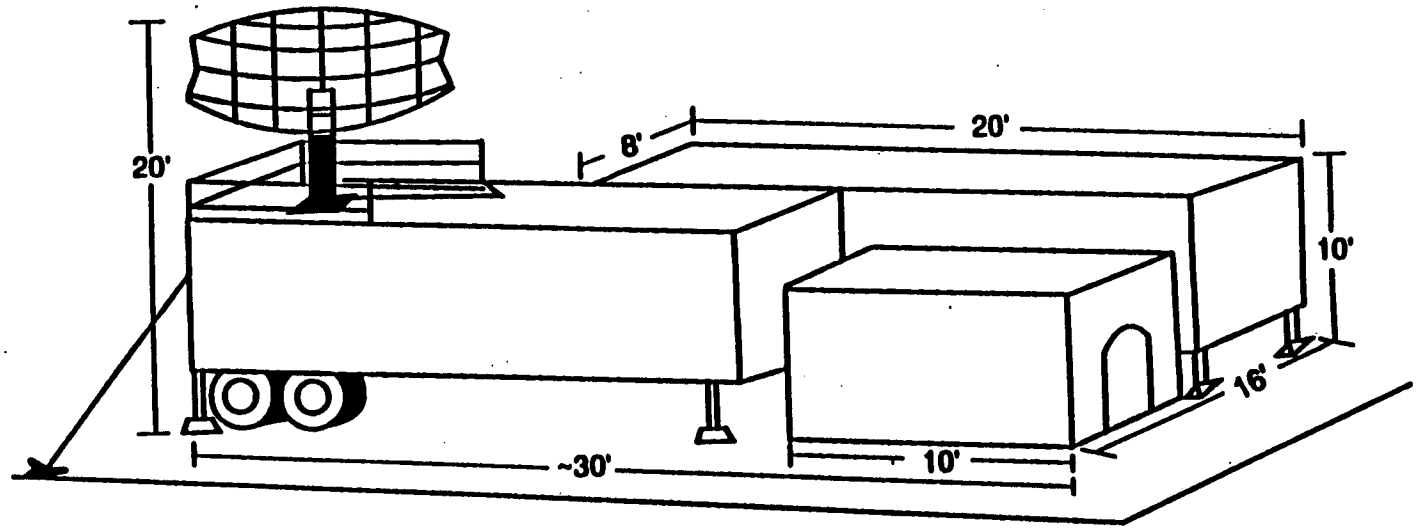
The TACTS sites occupy a ground surface area of 25 feet by 25 feet and transmit data to a central computer to determine aircraft position.

Typical TACTS Remot
Communication Relay Sta

NAS Fallon, Nevad

Source: NAS Fallon

Figure 2-



NOTE: Dimensions are approximate

Up to five EW sites occupying no more than five acres each would be developed on proposed withdrawal land. EW sites are designed for long range search and detection of military aircraft.

Source: NAS Fallon

Typical Electronic Warfare Emitter Site

NAS Fallon, Nevada

Figure 2-2

- **Visual Cueing Devices:** Visual cueing devices provide combat strike pilots with a variety of necessary visual scenario challenges to enhance aircrew situational awareness. The aircrew's ability to sight and recognize ground threats is an essential element of overland air combat strike training. It is anticipated that up to 50 visual cueing device sites would be developed on the withdrawn lands. Not all the sites would be occupied at one time; typically, only three to six visual cueing devices are in use at a time during air wing training events. Each site would occupy no more than one acre and would consist of leveled land to provide a foundation for mobile passive and active cueing devices. Some sites may be developed with a concrete or gravel pad. None of the visual cueing device sites would contain permanent structures. The exact locations of the sites have not been determined, but most would be within the withdrawn lands at B-17, east of B-19, and in the Dixie Valley area. The proposed panhandle area considered under Alternatives II and III would provide additional flexibility in placing visual cueing devices, thereby enhancing realism. Existing access roads would continue to be used wherever possible. Following are brief descriptions of the active and passive cueing devices that could be placed on the sites.

  Active Visual Cueing Devices: The primary active visual cueing device that would be used is the "Smokey SAM," a 6-inch by 15-inch pyrotechnic-powered projectile constructed of formed paper used during CVW training. The projectile simulates the initial boost phase of a surface-to-air missile (SAM).

  The Smokey SAM projectile can attain a maximum altitude of approximately 1,500 feet above ground level and travels approximately 500 feet from the launch point. This visual cue enhances the realism of training for aircrews by simulating potential surface-to-air missile threats that may be encountered in real world combat situations. Active cueing devices would be moved from one site to another to increase realism. The Smokey SAM is and will be launched only on existing Navy-controlled ranges. The emptied cardboard cylinder, the only debris from the Smokey SAM, is picked up by the launching crew after each training cycle. Less than one percent of Smokey SAMs don't launch and there have been no documented safety problems.

  Another active visual cueing device that would be used on the withdrawn lands is the Imaging Weapons Training System (IWTS). This device, which is smaller than a jeep, transmits a target image to attacking aircraft. It gives pilots the capability to guide a simulated stand-off weapon to the ghost target using their cockpit weapons guidance systems.

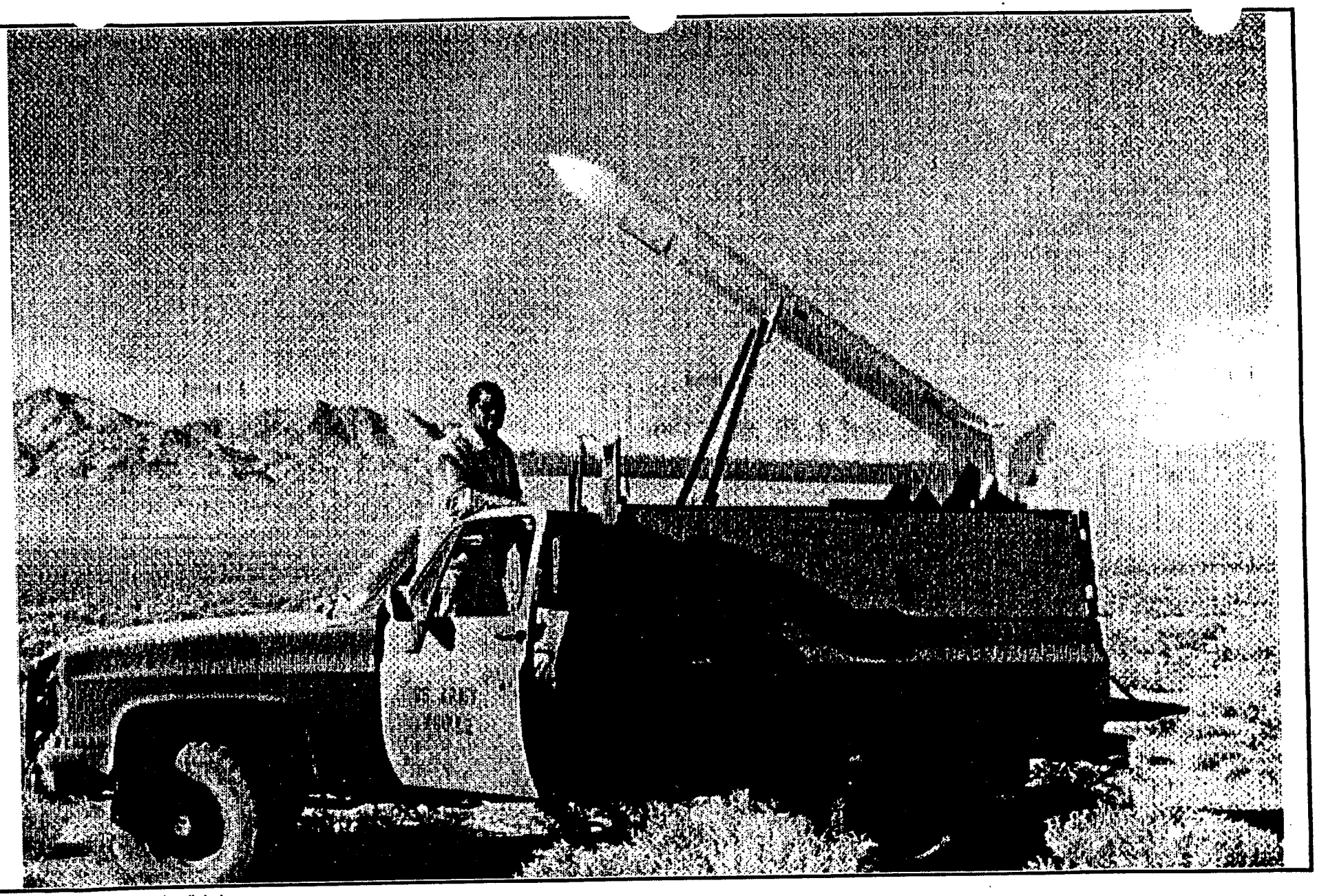
Passive Visual Cueing Devices: Figure 2-4 shows a mock mobile launch vehicle used as a passive visual cueing device. Inert SAM missiles are placed atop mobile launcher vehicles to train pilots to identify SAM batteries in threat environments. Each launcher vehicle is configured with three inert (simulated, nonexplosive/nonfiring) missiles for simulated training purposes (Figure 2-5). The launcher mount turns to point the missiles toward the aircraft being tracked by the missile radar system. Two launcher vehicles with missiles normally accompany the missile battery setup. No missiles are launched, as this is a passive cueing device only.

Other passive cueing devices that may be used on withdrawn lands include replicated or actual foreign mobile (vehicular) weapon systems, tanks, and personnel carriers. Different tanks that could be used as passive visual cueing devices are shown in Figure 2-6. These types of passive visual cueing devices would be temporary in terms of site location. The devices would be moved around to sites on a rotating basis to ensure a maximum change in threat scenarios. The devices would be driven to different locations, if operational, or more likely moved on trailers using existing roads and trails.

- **Ground Activities:** The Navy will use the withdrawn land for integrated air and ground training operations. Training in a variety of terrain is invaluable to the integrated air and ground training mission. Various types of land are required for drop and landing zones and for simulating the terrain that ground personnel may encounter in real world scenarios. The terrain of lands proposed for withdrawal would provide the area and diversity required for effective and realistic training.

  Table 2-3 details the amount and locations of integrated air and ground training that could occur on the proposed withdrawal lands; these numbers are not reflective of current training intensities but are included as a worst case scenario to evaluate the potentially greatest level of impact. The Navy would avoid public land users when conducting the ground portion of integrated air and ground training.

  As discussed in Section 1.2.1.2, most of the ground training is conducted on foot and is integrated with air support, including helicopter and fixed-wing operations. Special desert patrol vehicles, such as modified dune buggies, also may be used by ground personnel. These vehicles will be used only on existing roadways and trails and will be used alone or in pairs primarily during air wing deployments. Approximately 50 percent of the training occurs during the day and 50



Passive cueing devices train pilots to identify surface-to-air missile batteries. No missiles are actually launched from these passive cueing devices.

Example of Passive Cueing Device - Mock Mobile Launch Vehicle

NAS Fallon, Nevada

Figure 2-4

Source: NAS Fallon

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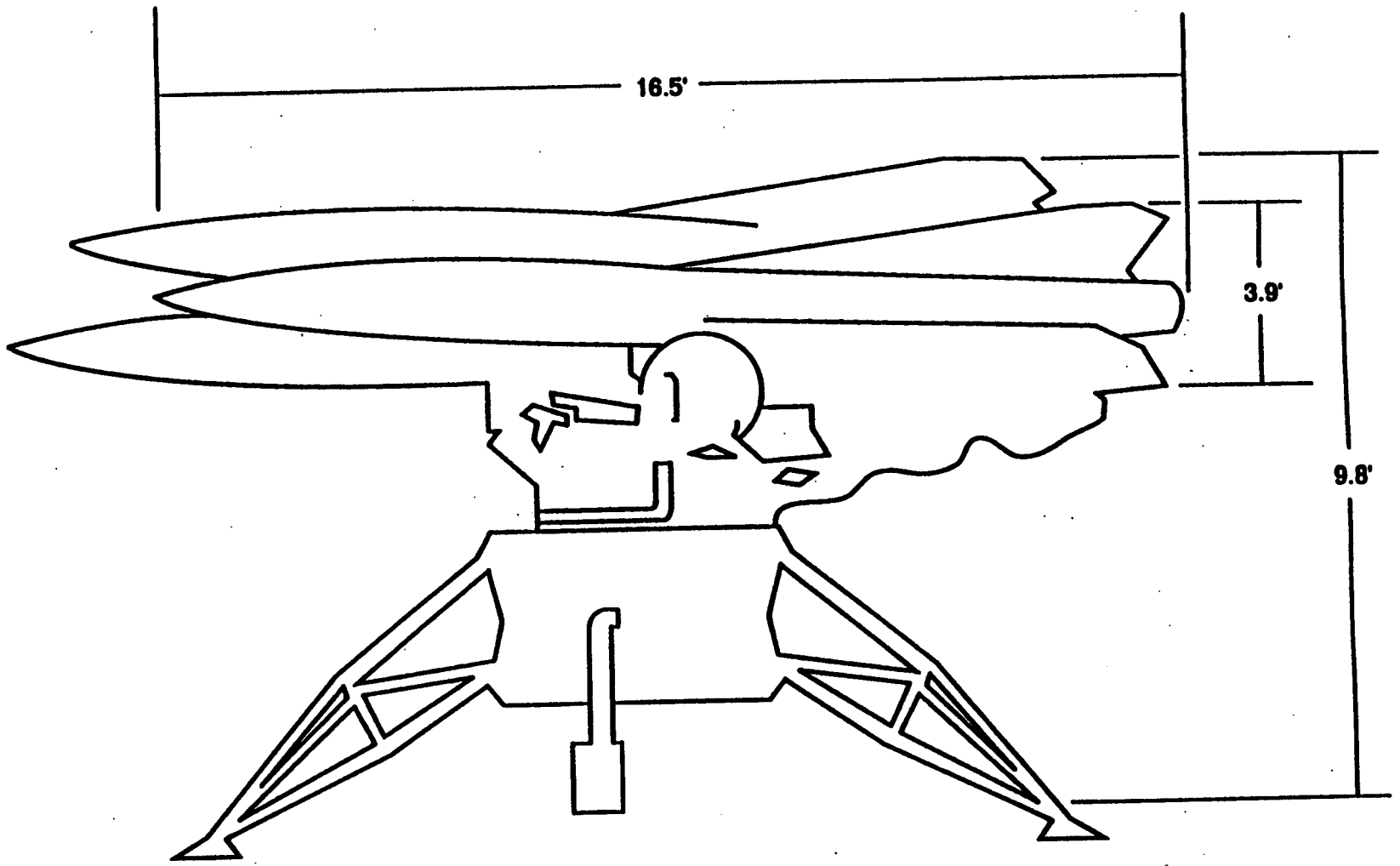


NOTE: Dimensions are approximate

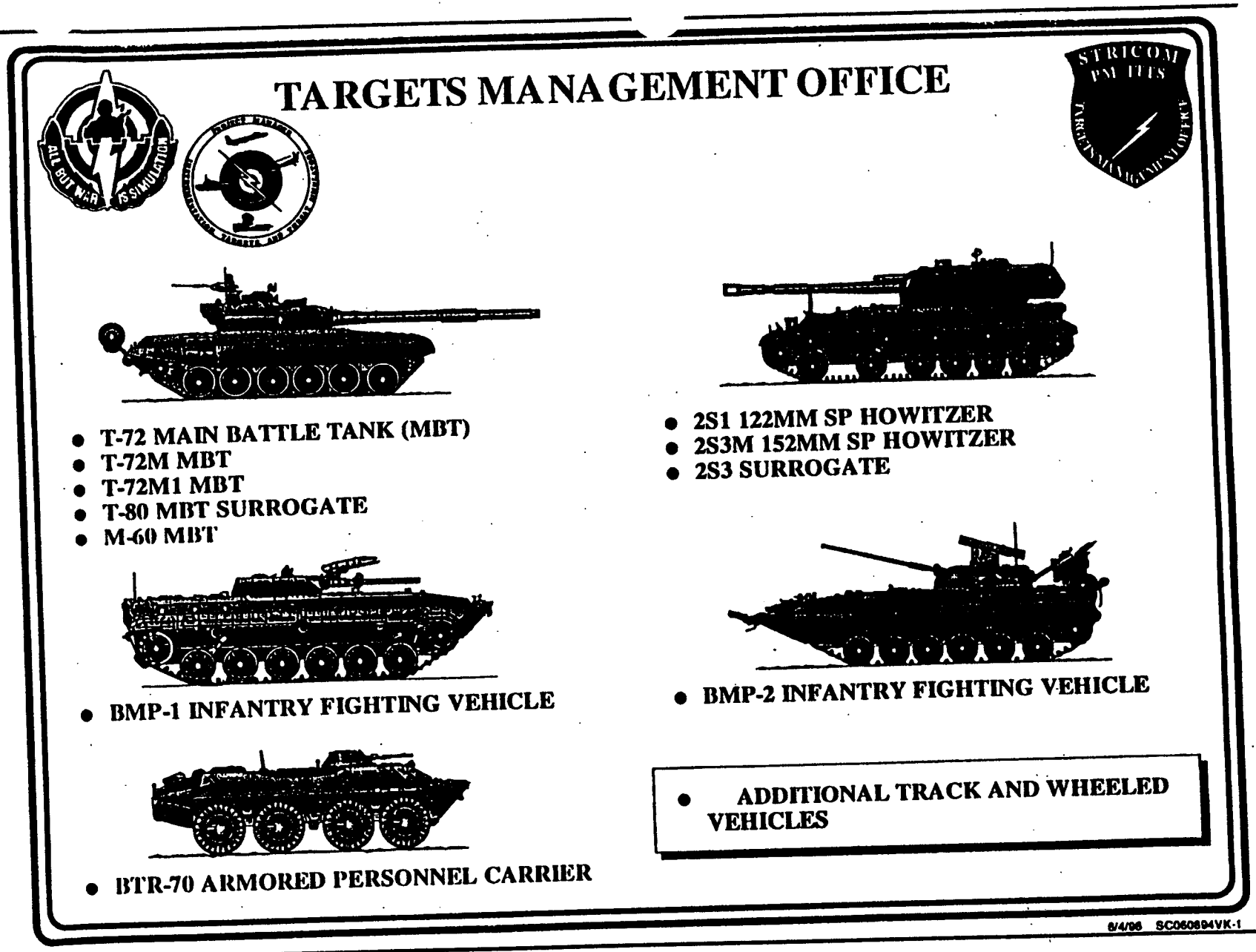
Although not actually launched during the training activities, these devices train pilots to identify ground based surface-to-air missiles.

Inert Missiles on Launcher

NAS Fallon, Nevada

Figure 2-5

Source: NA[illegible]ion



Passive cueing devices train pilots to identify foreign military equipment. This equipment is used for site recognition purposes only.

Example of Potential Passive Cueing Devices - Foreign Mobile Systems

NAS Fallon, Nevada

Figure 2-6

Source: NAS Fallon

TABLE 2-3
INTEGRATED AIR AND GROUND TRAINING

Area		INTEGRATED AIR AND GROUND TRAINING				
		Maximum Number of Ground Events per Year	Maximum Number of People per Event	Maximum Number of Vehicles per Event	Maximum Number of Helicopters per Event	Maximum Number of Parachute Drop Event[2]
B-16[1]	North	30	15	4	2	100
	East	30	15	4	2	0
B-17	North	45	6	2	2	0
	South	45	6	2	2	0
	East	45	6	2	2	0
	West	45	6	2	2	0
B-19	East	30	15	4	2	0
	West	30	15	4	2	0
Dixie Valley Area		200	6	3	2	10
Shoal Site		20	15	4	2	0

[1] Alternative I also withdraws land west of B-16. This land would be used for a maximum of 20 events per year, with a maximum of 15 people, four vehicles, and two helicopters.
[2] Only one parachute drop occurred in 1997.

percent occurs at night. Over 90 percent of the training takes place on weekdays and a maximum of 10 percent occurs on the weekend. No small arms weapons live fire or other live ordnance will be fired on withdrawn lands; use of such ordnance and ammunition is authorized only on existing training ranges (flares are discussed under subsection Chaff and Flares). Any Navy training activity that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency; the Navy is negotiating a limited cooperative agreement with the BLM to allow for combat search and rescue training only on other BLM lands. The specific types of integrated air and ground training, including combat search and rescue, Sea-Air-Land (SEAL) training, noncombatant evacuation training, and desert rescue, are discussed below.

Combat Search and Rescue: Combat search and rescue training integrates air operations with the rescue of downed pilots; this training takes place during the four to six air wing events that occur each year. Components of this training include locating, authenticating, and retrieving the downed personnel and avoiding opposition forces. The ground component of this training includes driving out and dropping off the downed pilot and bringing in a helicopter and rescuing the pilot. On some events, an opposition force of two to four personnel are used

to try and capture the downed pilot. The typical ground training portion of the exercises involves up to two vehicles, up to two helicopters, and up to six personnel (not including two to four opposition forces).

SEAL Unit Training: SEAL training, also associated with air wing events, includes search and reconnaissance, forward air controllers, and navigational patrols. Components of the training include inserting four to six personnel via vehicle or helicopter, navigating, searching for a target, marking targets (on range lands only), and extracting personnel via vehicle or helicopter. SEAL units require large training areas so that they can prepare realistically for long-range patrols. The proposed panhandle would provide an area for long-range patrols by linking together existing Navy-controlled lands.

Noncombatant Evacuation Training: Noncombatant evacuation operation training, performed during air wing events, involves inserting personnel to rescue civilians. This training involves numbers similar to combat search and rescue and SEAL training. Currently, this training occurs only on B-17, but personnel could be inserted on withdrawn lands prior to entering the range.

Desert Rescue Training: Desert rescue training is similar to combat search and rescue but is a joint exercise involving different branches of the military; this training now occurs once a year for three weeks and is not associated with air wing events. The most intensive desert rescue event consists of four vehicles and up to 15 personnel. Not all these forces would be located at the same site at the same time.

- Chaff and Flares: To enhance realism in training activities, chaff and flares currently are deployed over B-17 and the Dixie and Fairview Valleys. The use of chaff is authorized by the FAA and other federal agencies and is regulated under Navy instruction OPNAVINST 3430.9. Chaff use on the NAS Fallon ranges is authorized specifically by the Naval Emissions Center in its message, date-time group 011715Z SEP 95. The two types of chaff currently approved for use at NAS Fallon are RR-129 and RR-144, both of which are composed of glass fibers, aluminum coating, and stearic acid. Each chaff fiber resembles a fine silver hair. A canister, or bundle, of chaff contains approximately 2.1 million fibers and weighs approximately 1.5 ounces. Chaff is discussed in more detail in Section 4.2. The Navy is examining the feasibility of using degradable chaff, which includes degradable chaff and end caps.

  Chaff is dispensed from aircraft for two purposes. The first purpose is to confuse enemy radar by saturating radar signals so that the radar

cannot distinguish between the aircraft and the dispensed chaff. The second purpose is to act as a decoy to enemy missiles, causing them to follow the chaff cloud rather than the aircraft. Chaff is dispensed from an aircraft in bundles that disperse to form a cloud behind the aircraft. The cloud, which may be 300 to 600 feet in diameter, reflects radar signals and obscures the aircraft; the cloud is not visible to the naked eye. Chaff settles at an estimated fall rate of 50 feet per minute or less. Initial chaff concentrations are about 120 micrograms per cubic meter, but dissipate quickly because of chaff's lightweight and the effects of wind and air currents. As a result, extremely wide dispersion patterns are produced (US Air Force 1996). Occasionally chaff bundles do not disperse completely and clumps of chaff may be found. Chaff has been used in a portion of the FRTC for over 30 years and NAS Fallon uses approximately 2,350 bundles of burst chaff per month, or 28,000 bundles per year (SAIC 1991).

Chaff deployment would continue over B-17 and the Dixie and Fairview Valleys within the Gabbs North MOA and Gabbs Central MOA, limited to the west near the Stillwater Mountain Range. The potentially affected area encompasses approximately 4,220 square miles. The total approximate weight of chaff that would continued to be dropped per year would be 7,500 pounds, less than two pounds per square mile or 0.0028 pounds per acre.

The Navy took the initiative to study chaff in the Dixie Valley area to determine the concentration of chaff on the ground in areas under which chaff is deployed. The survey, conducted in 1994 and 1995, detected chaff fibers, parts of chaff bundles, and debris on the ground within portions of the Dixie Valley area. In a survey that covered approximately 0.14 percent of the Dixie Valley area, the most commonly found debris included the caps that come off the end of chaff bundles when chaff is released. One intact chaff bundle was found. Chaff debris was found most frequently near Dixie Valley Road in the eastern portion of the Dixie Valley area (US Navy 1995a).

Decoy flares are magnesium pellets that burn for less than 10 seconds at 2,000 degrees Fahrenheit. The burn temperature is hotter than the exhaust of an aircraft and therefore attracts heat-seeking weapons targeted on the aircraft (SAIC 1991). Approximately 120 decoy flares are dropped each month.

Parachute training flares are dropped over the training ranges but may occasionally be found off-range. Parachute flares are used infrequently; currently, approximately 60 parachute flares are dropped per year.

Beginning in 1989, the Navy organized recurring helicopter, vehicle, and foot traffic sweeps at a minimum of two per year of areas adjacent to ranges to remove any ordnance and flares. These sweeps and reconnaissances are coordinated with the BLM and Nevada State Division of Environmental Protection as outlined in a memorandum of agreement regarding off-range military ordnance. This memorandum of agreement was developed by the Navy, BLM, and the State of Nevada in 1989 to minimize risks to the public from off-range ordnance. This agreement was updated in December 1995 (US Navy 1995j). In 1989 and 1990, off-range sweeps of the ranges discovered 406 unspent flares in the off-range ordnance areas. It was concluded from these sweeps that approximately 20 flares per year accumulate in off-range ordnance areas (SAIC 1991). All unspent ordnance and flares are rendered safe at the site location.

2.3.2 Land Use Categories

The withdrawn land would be distributed into one of two land use categories: Category A—Exclusive Navy Use, Potential Ordnance Hazard, or Category B—Navy and Public Use, Limited Land Use Conflicts. This distribution is based on the same operational conditions and needs and safety considerations that led to the withdrawal proposal. For each proposed land use category, public access and reasonably foreseeable land management procedures are described. The land use categories, along with the access characteristics, land use implications, and management procedures for each, are discussed below. The breakdown of the withdrawal area into land management categories for each alternative is described in Section 2.3.3.

Pursuant to federal regulations regarding the management of withdrawn land, the Navy has developed a resource management plan in consultation with the BLM, BUREC, and DOE. This plan provides specific land use policies for the withdrawn lands, based on the public uses and land management procedures described here. The management and adjudication procedures for the withdrawn land will be defined by agreement between the Navy, BLM, BUREC, and DOE. The resource management plan for withdrawn lands is summarized below and provided in Appendix J.

2.3.2.1 Category A—Exclusive Navy Use, Potential Ordnance Hazard

Category A lands are the 40,280 acres of land identified by off-range ordnance sweeps and training range HAZARD modeling as containing, or having the potential to contain, off-range ordnance. Based on present technologies, 100 percent "sanitation" of these lands cannot be guaranteed since surface and subsurface ordnance may remain undetected in sweeps (Figure 1-5). The BLM has determined that public access is not appropriate

on lands identified as containing off-range ordnance. Given the limited nature of ground training activities, the experience of Navy personnel in identifying, avoiding, or handling off-range ordnance, and annual sweeps of off-range ordnance areas, integrated air and ground training may be conducted on these lands.

Lands designated for this category lie east of B-16; north, south, and east of B-17; and north and east of B-19. The Navy will manage Category A lands and public uses will be closed. Designation of Category A lands will not change or expand actual impact areas within the ranges. The purpose of Category A lands is to enhance public safety by segregating lands where ordnance has been found through range sweeps and by identifying potential ordnance impact areas associated with air-to-ground training.

Public Access/Recreation. Public access to Category A lands would not be permitted. All public access would be denied for safety reasons by fencing existing access roads and by posting signs. No recreational uses, organized or otherwise, would be permitted. Public access currently is closed on 24,464 acres of land containing off-range ordnance under a BLM emergency closure action.

Future Development/Structures. Category A lands would be closed to future public development. Any Navy-proposed development would be subject to all environmental laws and regulations, including NEPA and guidelines of NAS Fallon's Cultural Resource Management Plan (CRMP). Non-Navy agency proposals, such as wildlife guzzlers, would be addressed on a case-by-case basis.

Livestock Grazing. No grazing would be permitted on Category A lands. Existing permits would be revoked after the land was withdrawn. The Navy will explore means to compensate holders of permits on Category A lands, subject to Congressional authorization and appropriation.

Mining. Category A lands would be closed to all mining and mineral exploration including locatable, leasable, and saleable minerals. Mining new or existing claims would not be allowed. No leasing or development of salable minerals would be permitted on Category A lands. The Navy will explore means to compensate holders of impacted patented claims and valid unpatented claims, subject to Congressional authorization and appropriation.

Cultural Resources/Natural Resources. No field investigations for cultural or natural resources would be allowed on Category A lands unless an ordnance sweep could be completed prior to field work. NAS Fallon maintains a CRMP and a programmatic agreement (PA) with the Advisory

Council on Historic Preservation (ACHP) and the Nevada State Historic Preservation Officer (SHPO) that describes compliance requirements for the Navy's management of cultural resources, including Section 106 of the National Historic Preservation Act (NHPA). The PA has been signed by the Commanding Officer of NAS Fallon, the SHPO, and the ACHP. Navy actions will undergo the appropriate NHPA Section 106 review and consultation for cultural resources and Endangered Species Act (ESA) Section 7 review and consultation for biological resources.

In developing the resource management plan, NAS Fallon would use the Carson Desert predictive model to determine the potential for cultural resources on withdrawal lands. The Navy would attempt to avoid those areas potentially containing cultural resources when siting military equipment and when conducting air and ground training operations. Where areas cannot be avoided, appropriate consultation and mitigation will be undertaken.

Wilderness. There are no wilderness study areas or wilderness areas within the lands designated as Category A.

Water Access and Developments. Access to existing water developments and new water developments generally would not be allowed on Category A lands. Existing water developments include one guzzler and three watering troughs. As laid out in a cooperative agreement between the Navy and BLM, the Navy will provide BLM access for maintaining the guzzler (US Navy 1994a). The Navy will explore means to compensate holders of water rights on Category A lands, subject to Congressional authorization and appropriation.

Leases, Easements, Utility Corridors, and Rights-of-way. Existing nonmilitary uses on Category A lands, such as for utility corridors, would be managed by the Navy. Limited proposed land uses, such as guzzlers, would be considered on a case-by-case basis.

2.3.2.2 Category B—Navy and Public Use, Limited Land Use Conflicts

Between 87,085 and 148,800 acres of the land withdrawn, depending on the alternative, would be classified as Category B. The Category B designation would allow the Navy to meet its major training requirements, including integrated air and ground training and siting of EW, TACTS, and visual cueing device sites while still allowing for public use and access.

The BLM would manage Category B lands with Navy review and approval. Any new activities on Category B lands would be subject to the requirements laid out in the resource management plan (Appendix J). To ensure public safety and meet training requirements, the Navy would retain

the right to review and approve activities, such as site development and organized recreation actions. The BLM Carson City District is concerned that it may not be able to adequately manage Category B lands and is therefore considering the potential need for the Navy to manage the lands. If the Navy were to manage Category B lands instead of the BLM, the Navy would work with the BLM to develop management programs similar to those of the BLM to allow for continued public use of Category B lands, including recreation and grazing.

Although Category B lands would retain present access characteristics for public use, some controls would be applied if the activity affected operations or safety; these controls include limiting the height of structures in run-in line approach areas and prohibiting patenting of lands. Except for fenced EW sites, Category B lands would remain open to public uses. The Navy would conduct integrated air and ground training activities, such as combat search and rescue , on some Category B lands. The Navy will avoid other public land users when conducting ground operations.

EW, TACTS, and portable visual cueing devices also would continue to be placed within these lands. The Navy foresees the possible need for developing approximately five EW or TACTS sites, and up to 50 active and passive visual cueing device sites on withdrawn lands. The EW sites would require one to five acres per site, and the TACTS sites would require up to one acre per site, not including road, power, and other utility requirements. EW sites near areas of public use would be fenced. Existing access roads and utility corridors would continue to be used wherever possible. Visual cueing device sites would require no more than one acre. Not all visual cueing device sites would be occupied at one time (i.e., there would never be 50 visual cueing devices on the withdrawn lands at one time). Some sites, particularly visual cueing device installations, could be closed, reopened, and relocated over time. The specific locations to be proposed for EW, TACTS, and visual cueing device sites have yet to be selected, but all would be within withdrawn lands at B-17, B-19, and the Dixie Valley area, where possible.

Current management practices for resources, including recreation, grazing, and mining, would continue on Category B lands. For activities currently requiring permits, such as site development and organized recreational events, the Navy would review and have the authority to approve actions that are in conformance with public safety or Navy training activities. For activities not requiring permits, the Navy would be notified of known activities to avoid conflict between Navy and public users. Management practices for each resource area are detailed below.

Public Access and Recreation. Any organized activities currently subject to BLM, BUREC, or DOE permitting procedures, such as off-road vehicle races, also would require Navy approval. Proposed Navy EW and TACTS sites would not be fenced if they are in remote locations but would be fenced in more accessible areas. EW, TACTS, and visual cueing device sites would not be chosen if they contain existing mining claims or ROWs. Should access to fenced areas be requested, Navy approval would be required. Organized recreational activities, such as off-road vehicle races, would not be permitted on developed sites. Abandoned sites would become available for organized recreational activity, in accordance with the surrounding land management categories.

Future Development/Structures. Category B lands are included in the proposed withdrawal primarily as a means for the Navy to provide training scenarios and to ensure operational safety. New developments would be subject to the requirements of the resource management plan. The Navy would obtain the right to approve new or modified developments. New structures or modifications to existing structures generally would be subject to a height limitation of 50 feet, though individual proposals such as those related to existing rights-of-way and utility corridors would be reviewed on a case-by-case basis. The Navy could waive height limits in cases where exceeding 50 feet is necessary for a short-term development, such as for an oil well, or where such a waiver does not pose a safety hazard to aircrew. Permanent nonconforming structures also could be allowed in some areas if, in the judgment of the Navy, such structures were compatible with Navy training uses.

Livestock Grazing. Livestock grazing on Category B lands would continue to be managed under current applicable laws, including the Taylor Grazing Act of 1934, the FLPMA of 1976, and the Public Rangelands Improvement Act of 1978. Grazing would continue, and existing grazing permits would be unchanged by withdrawal enactment. There would be no access restrictions to existing cow camps and range improvements. The renewal of grazing permits would continue to be handled by the BLM. BLM range improvement permits would be subject to Navy review and approval. Were the Navy to manage the Category B lands, current Navy programs for managing grazing would be implemented.

Livestock grazing on EW, TACTS, and visual cueing device sites would continue to be managed in accordance with current applicable laws. Grazing could continue on unfenced developed sites, but cattle would be excluded from fenced sites. Cow camps or other range improvements would be avoided when establishing developed sites. Since most developed sites would be small, generally less than one acre, restricting on-site grazing is not expected to affect forage availability or the value of grazing allotments.

Mining. Mining would be permitted on most Category B lands under existing mining laws (Mining Act of 1872, Mineral Lands Leasing Act of 1920, as amended, Mineral Lands Act for Acquired Lands of 1947, and Geothermal Steam Act of 1970). These lands would be open for mineral exploration, for working existing patented and unpatented claims, and for staking new claims. The proposed withdrawal would preclude patenting of unpatented mining claims because patenting gives the claimant absolute title to the land; such title would not allow the Navy to monitor for incompatible land uses. Operations on claims (including leasable and salable materials) on Category B lands would continue to be managed through the standard issue of permits, leases, plans of operations, licenses, contracts, and grants. The Navy would have final approval authority for any permits to ensure compatibility with Navy usage. For example, mining developments may not be authorized if they are within aircraft run-in lines and proposed structures taller than 50 feet.

Existing valid mining claims and areas of known mineralization would be avoided in the development of Navy EW, TACTS, and visual cueing device sites. No mineral leases or sales would be authorized during site development or use by the Navy. No exploration or operations would be permitted within fenced EW and TACTS sites during their development or use. Unfenced sites could be explored, but mining operations could not take place. Abandoned sites would revert to Category B status and would be subject to Category B land use policies. Existing access and utility corridors for EW and TACTS sites would be available for mining exploration, subject to BLM regulations and Category B land use policies.

Cultural Resources/Natural Resources. Cultural resources would be managed according to the NAS Fallon CRMP and the PA with the Advisory Council and SHPO for Navy actions. The BLM would be responsible for cultural resource protection for non-Navy actions. Cultural and natural resources would continue to be afforded protection under applicable legislation and regulations. As with Category A lands, the Navy will identify the lands potentially containing cultural resources using the Carson Desert predictive model.

Natural resources, including soils, flora, and fauna, on EW, TACTS, and visual cueing device sites would be subject to identification, analysis, and impact mitigation, as required by various federal environmental laws and regulations. Site investigations and, where appropriate, mitigation plans will be completed prior to development. These areas would be available for field investigations until developed Navy sites are fenced.

Wilderness. Alternatives I and III evaluated in this FEIS include a portion of the Job Peak WSA in the withdrawal footprint. The Navy has no plans for

Category B lands that would impair the wilderness characteristics of lands in the Job Peak WSA. Public access to these lands would not be closed. If Job Peak is designated by Congress to be a wilderness area, it would be removed from any alternatives that propose it for withdrawal. The Navy has no plans for EW, TACTS, or visual cueing device site development in the WSA.

Water Access and Developments. The Navy would be notified and given the opportunity to review and approve new water developments on Category B lands, such as for cattle range improvements.

Establishing EW, TACTS, and visual cueing device sites would have no impact on existing or future water developments or water rights. Existing water developments would be avoided in site selection. Site selection also would avoid areas that could restrict future access to water or in any other way affect water rights. No water development would be permitted on fenced EW or TACTS sites during the term of its use.

Leases, Easements, and Rights-of-way. The BLM would be responsible for issuing new leases, easements, and ROWs, or any other authorization with respect to the nonmilitary use of Category B lands. Navy opportunity to review and approve proposals is required to assess land use compatibility. Rights as established by existing ROWs, such as utility corridors, would not change. Future development of structures over 50 feet in height generally would be restricted. Grants or issuance of new ROWs may contain this height restriction for all structures including, but not limited to, transmission lines.

2.3.2.3 Land Use Summary

The Navy would manage Category A lands, and public access would be closed. Category B lands would be managed by the BLM and coordinated with BUREC and DOE where appropriate. Navy opportunity to review and approve proposals would be required to assess land use compatibility. Table 2-4 provides a summary of access characteristics, land use implications, and management procedures for each category.

2.3.3 Land Use Categories by Alternative

This section describes how the land proposed for withdrawal under each alternative would be categorized for public access and use (Category A or B) and the reasons for withdrawing each area (Table 2-5). All Category A lands would be closed due to ordnance hazards or due to potential public safety risks as defined in HAZARD modeling (see Figure 1-3). Although practice/inert ordnance may contain spotting charges, the Navy does not

TABLE 2-4
SUMMARY OF LAND USE CATEGORY CONTROLS

	Category A-Exclusive Navy Use: Potential Ordnance Hazard	Category B-Navy and Public Use: Limited Land Use Conflicts
General Land Management Description	Closes land to public use because of safety concerns. Includes land identified as containing, or potentially containing, off-range ordnance.	Least restrictive land use. Would maintain multiple land uses with few regulations. Most lands fall into this category and would be managed by the BLM with Navy review and approval.
Public Access; Recreational Use	Closed to access to protect public safety.	Public access, recreational use not controlled. Organized events are subject to existing laws and must receive Navy approval. EW sites generally would be closed to the public except for remote sites.
Future Development/ Structures	None allowed; exceptions require Navy review and approval.	Navy: NEPA compliance. Non-Navy: NEPA and BLM regulations and Navy review; 50' height limit on new or modified structures.
Mining *Exploration*	No new exploration permitted.	Regulated under existing laws with Navy review and approval of mining developments. Developed Navy sites closed to exploration during period of use. Open to public once site is abandoned.
Mining *Existing Claims*	No mining activity would be permitted because of safety hazards to miners from ordnance.	Claims access and operations regulated by BLM with Navy review and approval of mining developments. Developed Navy sites would avoid existing claims.
Mining *New Claims*	No new claims permitted.	Regulated under existing mining laws with Navy review and approval of mining developments. The proposed withdrawal would preclude patenting of unpatented mining claims.
Leasable/Salable Minerals	No new leases, sales, developments; exceptions would be considered on a case-by-case basis with Navy review and approval.	BLM issues leases, permits, licenses, contracts, and grants with Navy review and approval. No new leases would be permitted once developed Navy site was proposed or in use. Leases allowed once site is abandoned.
Grazing	No grazing would be allowed on Category A lands because of existing and potential off-range ordnance hazards.	The BLM will continue to administer permits and to regulate activities under existing with Navy review and approval of range improvements. Use and maintenance of existing range improvements and cow camps permitted. Grazing permitted on unfenced developed Navy sites but excluded from fenced sites.
Cultural/ Natural Resources	Field investigations generally not allowed unless preceded by ordnance sweep; CRMP and PA describe compliance requirements (such as Section 106) for cultural resources.	Navy responsible for Section 106 and Section 7, as applicable for Navy actions; BLM responsible for Section 106 and Section 7, as applicable for non-Navy actions.
Wilderness	No Category A lands are designated as Wilderness Areas or Wilderness Study Areas.	Navy has no plans that would affect wilderness designation of Job Peak. Navy will delete Job Peak WSA from withdrawal request if it is designated a wilderness area. Developed Navy sites would avoid WSA.
Water Access and Developments	New water developments and access to existing water developments would not be allowed on Category A lands to anyone other than BLM.	Navy to review and approve new water development proposals. New development restricted on developed Navy sites during period of use.
Leases, Easements, Rights-of-way	Existing nonmilitary uses, such as utility corridors, managed by the Navy. Limited proposed land uses, such as guzzlers, considered on a case-by-case basis.	BLM issues with Navy review and approval required to avoid incompatible land uses. Existing utility corridors and rights-of-way subject to existing rights.

TABLE 2-5
PURPOSE AND USES OF WITHDRAWAL AREAS[1]

Range	Land Area[2] (acres) Alt I/Alt II/Alt III	Land Use Category	Purpose and Use of Withdrawal Alternative I	Purpose and Use of Withdrawal Alternative II	Purpose and Use of Withdrawal Alternative III
B-16 North	27,225/ 6,160/ 6,160	B	RAICUZ, practice/inert off-range ordnance, armed overflight, integrated air and ground training	Integrated air and ground training, practice/inert off-range ordnance	Integrated air and ground training, practice/inert off-range ordnance
B-16 East	640	A	RAICUZ, practice/inert off-range ordnance, integrated air and ground training	HAZARD footprint, practice/inert off-range ordnance, integrated air and ground training	HAZARD footprint, practice/inert off-range ordnance, integrated air and ground training
	3,600	B	RAICUZ, integrated air and ground training	Integrated air and ground training	Integrated air and ground training
B-16 West	2,560/ 0/ 0	B	RAICUZ, integrated air and ground training	Not included in withdrawal area	Not included in withdrawal area
B-17	33,400	A	RAICUZ, off-range ordnance, armed overflight, EW/visual cueing, integrated air and ground training	HAZARD footprint, off-range ordnance, EW/visual cueing, integrated air and ground training	HAZARD footprint, off-range ordnance, EW/visual cueing, integrated air and ground training
	2,495/ 0/ 0	B	RAICUZ, EW/visual cueing, integrated air and ground training	Not included in withdrawal area	Not included in withdrawal area
B-19 North/East	6,240	A	RAICUZ, off-range ordnance, armed overflight, EW/visual cueing, integrated air and ground training	Off-range ordnance, HAZARD footprint, integrated air and ground training, EW/visual cueing	Off-range ordnance, HAZARD footprint, integrated air and ground training, EW/visual cueing
	5,760/ 5,120/ 5,120	B	RAICUZ, armed overflight, EW/visual cueing, integrated air and ground training	Integrated air and ground training, EW/visual cueing	Integrated air and ground training, EW/visual cueing
B-19 West	7,080/ 840/ 840	B	RAICUZ, EW/visual cueing, armed overflight, integrated air and ground training	Integrated air and ground training	Integrated air and ground training
Shoal Site	7,405/ 2,765/ 2,765	B	Integrated air and ground training	Integrated air and ground training	Integrated air and ground training
Dixie Valley Area	92,675/ 62,500/ 87,900	B	EW/TACTS/visual cueing, integrated air and ground training	EW/TACTS/visual cueing, integrated air and ground training	EW/TACTS/visual cueing, integrated air and ground training
Panhandle	0/ 6,100/ 6,100	B	Not included in withdrawal area	Integrated air and ground training, EW/TACTS/ visual cueing, connect to Navy land holdings in Dixie Valley	Integrated air and ground training, EW/TACTS/ visual cueing, connect to Navy land holdings in Dixie Valley

[1] See Figures 2-7 through 2-9 for a depiction of the land withdrawal areas by land use category.
[2] When one acreage figure is provided, the acreage is the same under all alternatives.

consider practice/inert ordnance located north of B-16 to be a public safety hazard because of the low risk of occurrence and low probability of harm from exposure. Therefore, these lands would be managed under Category B status.

2.3.3.1 Alternative I

This alternative would withdraw approximately 189,080 acres of public land (Figure 2-7). Table 2-5 details the reasons for withdrawing each area. The lands proposed for withdrawal would be categorized as follows:

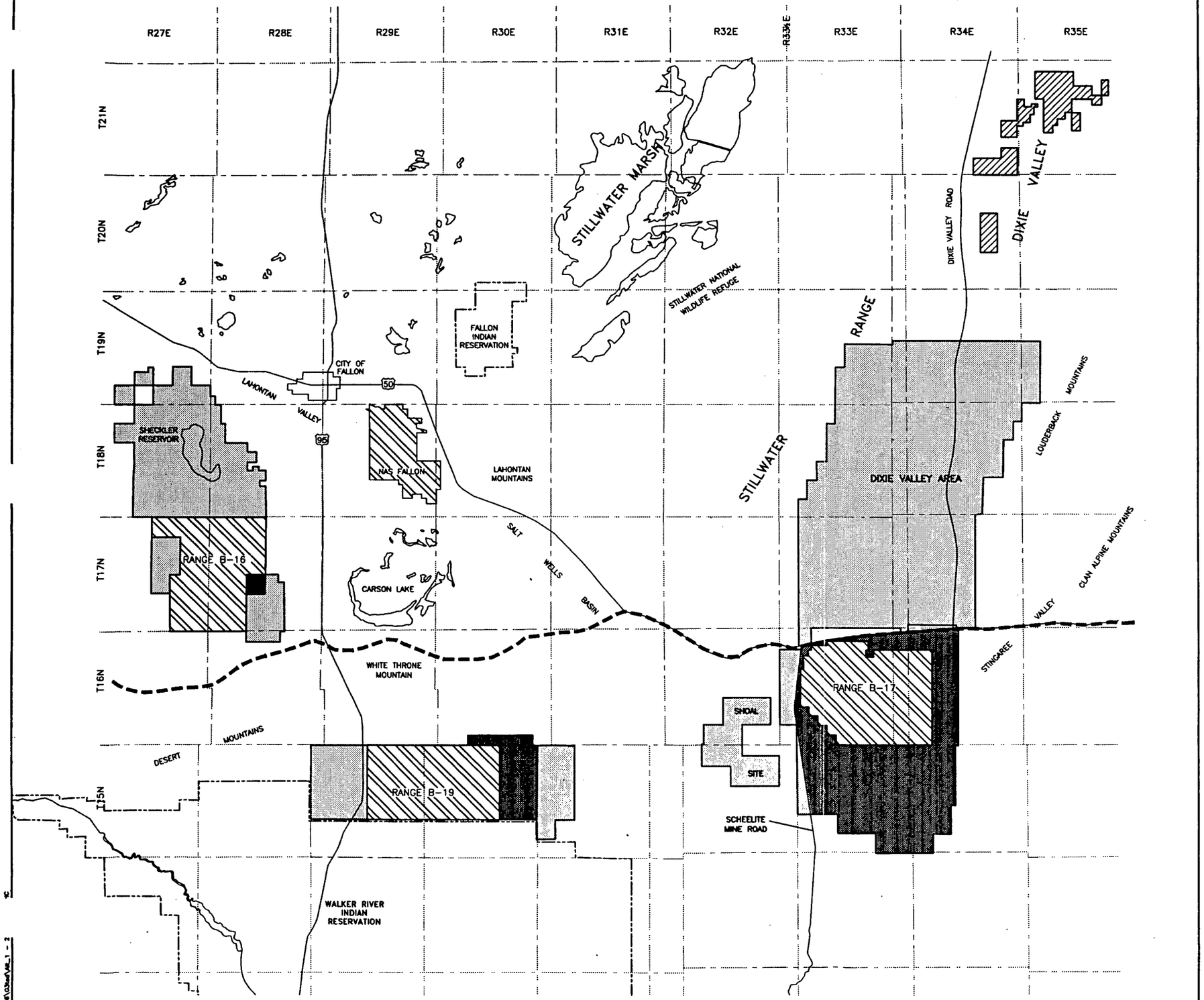
- Bravo-16—34,025 acres located north, west, and southeast of the range are proposed for withdrawal. Of these, 640 acres east of B-16 would be managed under land use Category A. The remaining withdrawal land around B-16 would be managed under land use Category B. These lands provide a safety and armed overflight buffer and integrated air and ground training areas.

- Bravo-17—35,895 acres located primarily south of the range are proposed for withdrawal. Of these lands, 33,400 acres would be managed under land use Category A. These lands provide a safety buffer and integrated air and ground training areas and allow for placement of EW, TACTS, visual cueing device sites.

- Bravo-19—19,080 acres surrounding the range are proposed for withdrawal. Of these, approximately 6,240 acres located east and north of B-19 would be managed as Category A land, and the remainder would be managed as Category B land. These lands provide a safety buffer, training areas, and a location for EW and visual cueing sites.

- Shoal Site—7,405 acres containing the DOE shoal site are proposed for withdrawal. The entire area would be designated Category B. The site would be used for integrated air and ground training, such as close air support and combat search and rescue. The Navy would withdraw the 2,765 acres of DOE land. Because this would be a withdrawal over a withdrawal, the DOE would retain responsibility for all subsurface resources and activities. The Navy would be responsible only for surface training activities, primary combat search and rescue scenarios. This is applicable for all alternatives.

- Dixie Valley Area—92,675 acres located north of Bravo-17 are proposed for withdrawal. The entire area would be managed under Category B status. Individual EW, TACTS, and visual cueing device sites would be developed. The Dixie Valley area also provides areas for integrated air and ground training.



LEGEND:

- Category A Land (Restricted Use)
- Category B land (Regulated Development)
- Navy–owned Land in Dixie Valley
- NAS Fallon and Ranges
- Boundary of Indian Reservation
- Pony Express National Historic Trail/ American Discovery Trail

N

0 2.5 5

1"=5MI. (APPROXIMATE)

This alternative would result in the withdrawal of over 189,000 acres, the largest withdrawal among the alternatives.

Alternative I

NAS Fallon, Nevada

Figure 2-7

Source: Tetra Tech

2.3.3.2 *Alternative II (Preferred Alternative)*

Under this alternative, approximately 127,365 acres would be withdrawn. Lands proposed for withdrawal are shown in general in Figure 2-8. Appendix I provides detailed maps of each withdrawal area. The amount of land withdrawn in the Dixie Valley area would be approximately 24,000 acres less than in Alternative I. The land west of B-16 would not be withdrawn. Only the central portion of the shoal site would be withdrawn. A panhandle of land would be withdrawn to connect the Dixie Valley area with the Navy-owned Dixie Valley lands.

The Alternative II footprint would avoid the Job Peaks WSA and would encompass all of the existing EW sites in the Dixie Valley area. Approximately 1,500 acres of land north of B-17 and Highway 50 and less than 100 acres off the northwest corner of B-17 are included to provide a continuous land management link between the Dixie Valley area and B-17 (see Figure 1-2). The withdrawal would not include the Highway 50 right-of-way or the Nevada Department of Transportation right-of-way along Dixie Valley Road. The 24,464 acres of BLM land closed because of off-range ordnance would still be withdrawn. Table 2-5 details the reasons for withdrawing each area. The withdrawn lands would be categorized as follows:

- Bravo-16—10,400 acres located north and southeast of the range would be withdrawn. Of these, 640 acres east of B-16 would be managed as Category A land under Navy control. All The remaining withdrawn land around B-16 would be managed under land use Category B. These lands provide a safety buffer and integrated air and ground training areas.

- Bravo-17—33,400 acres located primarily south of the range are proposed for withdrawal. These lands would be managed under Category A. These lands provide a safety buffer and integrated air and ground training areas and allow for placement of EW, TACTS, and visual cueing sites. Individual EW, TACTS, and visual cueing sites would be located in Fairview Valley.

- Bravo-19—12,200 acres surrounding the range are proposed for withdrawal. Of these, approximately 6,240 acres located north and east of the range would be managed by the Navy under land use Category A, and the remainder would be managed as Category B land. These lands provide a safety buffer and integrated air and ground training areas. EW and visual cueing sites would be placed on the withdrawn lands east of B-19.

- Shoal Site—2,765 acres of the DOE shoal site would be withdrawn. The entire area would be designated as Category B. The site would be used for integrated air and ground training activities.

- Dixie Valley area—68,600 acres located north of Bravo-17 are proposed for withdrawal. The entire area would be managed under Category B status. Individual EW, TACTS, and visual cueing device sites would be developed in this area. The Dixie Valley area also provides area for integrated air and ground training.

2.3.3.3 *Alternative III*

Under this alternative, approximately 152,765 acres would be withdrawn (Figure 2-9). More land would be withdrawn in the Dixie Valley area than under Alternative II. This additional land, along with the panhandle of land connecting the Dixie Valley area with Navy-owned Dixie Valley land, would provide range support by encompassing all existing EW sites in the Dixie Valley area, allowing for visual cueing device sites to be placed on the Dixie Valley area, and providing enough space for combat search and rescue operations.

Alternative III differs from Alternative I in that approximately 21,000 acres north of B-16, the land west of B-16, a portion of the shoal site, the land west of Highway 95 near B-19, and the land west of Scheelite Mine Road would not be withdrawn. Table 2-5 details the reasons for withdrawing each area.

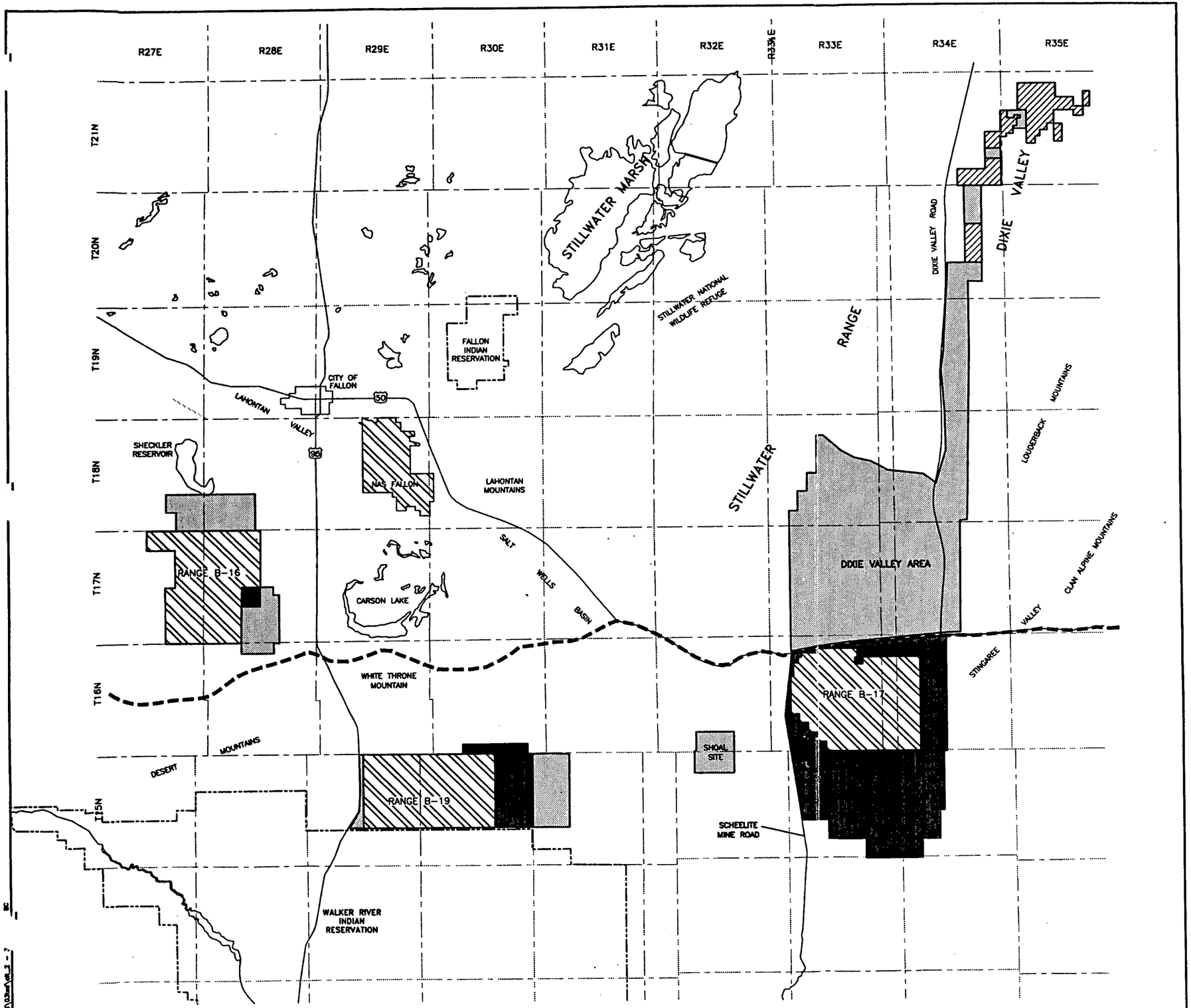
Uses of the withdrawn lands would be the same as discussed for Alternative II. The withdrawn lands would be categorized as follows:

- Bravo-16—10,400 acres located north and southeast of the range would be withdrawn. Of these 640 acres east of B-16 would be managed under land use Category A. All of the remaining withdrawn land around B-16 would be managed under land use Category B.

- Bravo-17—33,400 acres located primarily south of the range would be withdrawn. These lands would be managed under land use Category A.

- Bravo-19—12,200 acres surrounding the range are proposed for withdrawal. Of these, approximately 6,240 acres would be managed as Category A land, and the remainder would be managed as land use Category B.

- Shoal Site—2,765 acres containing the DOE shoal site are proposed for withdrawal. The entire area would be designated Category B.



LEGEND:

- Category A Land (Restricted Use)
- Category B land (Regulated Development)
- Navy–owned Land in Dixie Valley
- NAS Fallon and Ranges
- Boundary of Indian Reservation
- Pony Express National Historic Trail/ American Discovery Trail

N

0 2.5 5

1"=5MI. (APPROXIMATE)

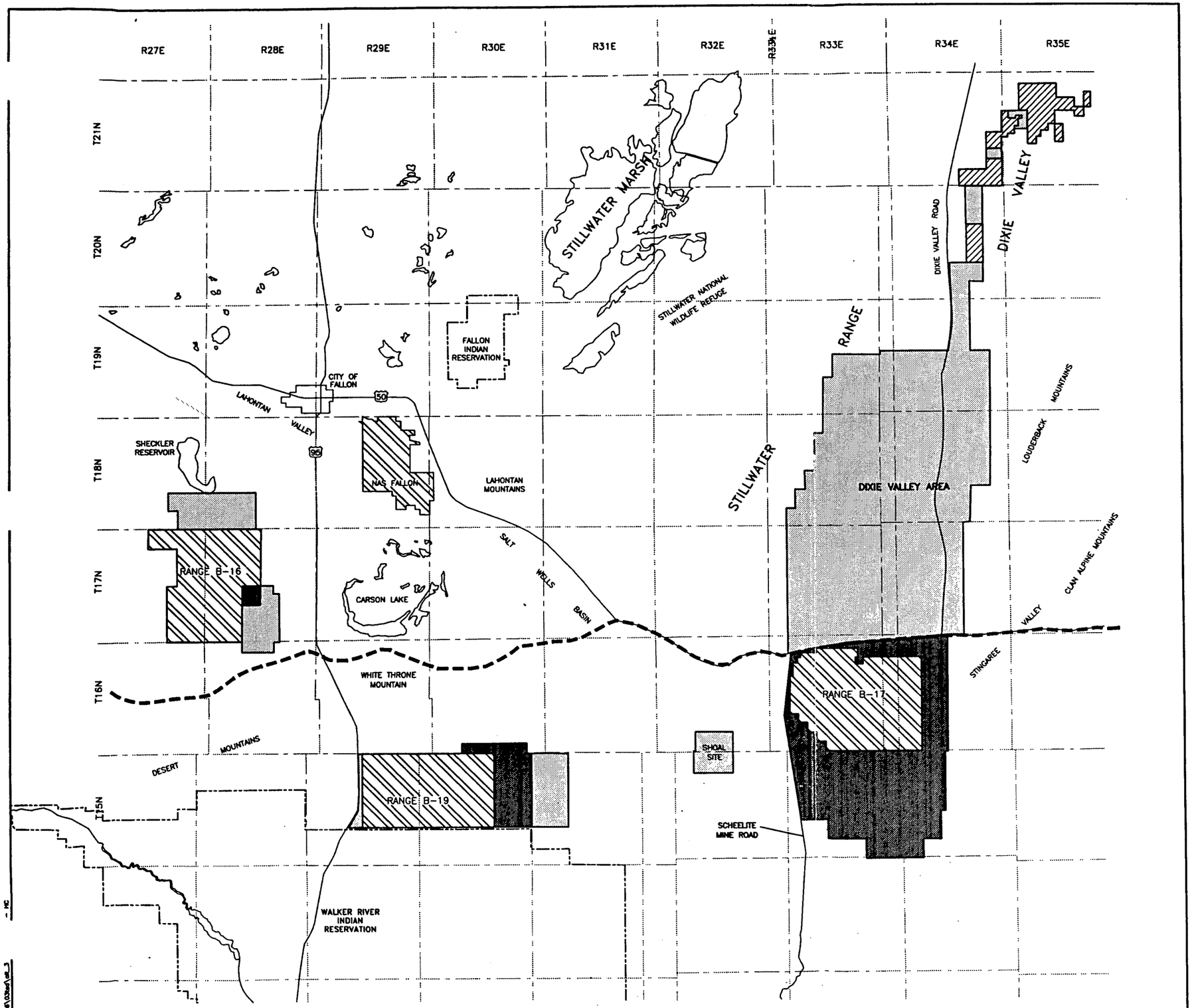
This alternative would withdraw 127,365 acres of land for Navy use. The panhandle connecting the Dixie Valley area and the Navy–owned Dixie valley lands would provide a necessary corridor for integrated air and ground training and EW, TACTS, and visual cueing.

Alternative II

NAS Fallon, Nevada

Figure 2-8

Source: Tetra Tech



LEGEND:

- Category A Land (Restricted Use)
- Category B land (Regulated Development)
- Navy–owned Land in Dixie Valley
- NAS Fallon and Ranges
- Boundary of Indian Reservation
- Pony Express National Historic Trail/ American Discovery Trail

N

0 2.5 5

1"=5MI. (APPROXIMATE)

This withdrawal would include 152,765 acres and includes a larger Dixie Valley area to allow for maximum training flexibility.

Alternative III

NAS Fallon, Nevada

Figure 2-9

Source: Tetra Tech

- Dixie Valley area—94,000 acres located north of Bravo-17 are proposed for withdrawal. The entire area would be managed under Category B status. Individual EW, TACTS, and visual cueing device sites would be developed in this area. This area also would provide land for integrated air and ground training activities.

2.3.3.4 No Action Alternative

Under the No Action Alternative, the Navy would not withdraw any federally administered public lands around the FRTC training ranges (Figure 2-10). Navy operations would continue on existing ranges, in accordance with existing rights and regulations. Public lands, including those identified as containing off-range ordnance, would remain under the authority of the current controlling agencies.

2.4 SUMMARY OF ENVIRONMENTAL IMPACTS

This section provides an overview of the Chapter 4 environmental impact analysis and mitigation measures. Table 2-6 summarizes the impacts along with proposed mitigation measures. Chapter 4 provides details of the rational and reasoning for the impacts and mitigation measures.

As detailed in Chapter 4 and summarized in Table 2-6, the primary impact of the proposed land withdrawal would be the denial of public access on Category A lands. Loss of opportunities on these lands is unmitigable. The Navy will explore means to compensate holders of patented and valid unpatented mining claims, water rights, and grazing permits, subject to Congressional authorization and appropriation.

Adverse impacts to visual resources and recreation could occur on Category B lands from the development of EW, TACTS, and visual cueing device sites and from integrated air and ground training. Additional adverse impacts could occur from helicopter-related noise, height restrictions on structures, and restrictions on patenting mining claims.

The proposed land withdrawal would not result in significant geotechnical, biological, air quality, land use, environmental justice, public health and safety, or airspace impacts.

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R27E R28E R29E R30E R31E R32E R33E R34E R35E

T21N T20N T19N T18N T17N T16N T15N

FALLON INDIAN RESERVATION

CITY OF FALLON

LAHONTAN VALLEY

50 95

NAS FALLON

LAHONTAN MOUNTAINS

SALT WELLS BASIN

LOUDERBACK MOUNTAINS

CLAN ALPINE MOUNTAINS

RANGE B-16

CARSON LAKE

WHITE THRONE MOUNTAIN

STINGAREE VALLEY

RANGE B-17

DESERT MOUNTAINS

RANGE B-19

WALKER INDIAN RESERVATION

LEGEND:

NAS Fallon and Ranges

Boundary of Indian Reservation

Pony Express National Historic Trail/ American Discovery Trail

N

0 2.5 5

1"=5MI. (APPROXIMATE)

Under the No Action Alternative, no lands would be withdrawn.

No Action Alternative

NAS Fallon, Nevada

Figure 2-10

Source: USFWS 1995

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 1 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Geotechnical/ Soils	No significant impacts. Potential minor impacts from Navy development of EW and TACTS sites and development of roads or utility corridors if needed. Impacts will be minimized by standard engineering controls and natural resource management techniques.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.
Water Resources	No significant impacts. No new development of water resources or access to existing water developments on Category A lands except for BLM. No impacts to water quality from continued use of chaff.	Navy will explore means of compensation for loss of existing water rights, subject to Congressional approval and appropriation.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Impacts to water developments on off-range ordnance lands would continue to be handled through Navy and BLM administrative processes.	No mitigation required.
Biological Resources	No significant impacts to endangered and threatened species. No impacts from continued use of chaff. EW/TACTS/visual cueing device sites and ground training will avoid sensitive habitats where possible. If not possible, direct mitigation will be undertaken. Site specific surveys conducted as necessary. NAS Fallon will comply with the requirements of federal and state regulations regarding biological resources. Navy will work with BLM to provide access to Category A lands for wildlife programs. Integrated air and ground training would increase ground disturbance, potentially harming vegetation and promoting the spread of noxious weeds.	The Navy will apply the Natural Resource Management Plan to withdrawn lands to control the spread of noxious weeds. To avoid impacts to migrating tarantulas, the Navy will not conduct ground training along Scheelite Mine Road during the migration periods. To reduce startle effects, no ground or low-level helicopter training below 500 feet above ground level (AGL) will take place within a half-mile radius of springs and water troughs.	Similar to Alternative I, with less area affected north of B-16.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 2 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Air Quality	No significant impacts. Minimal impact from construction and operation of EW and TACTS sites. Standard dust control measures would be applied during construction. Integrated air and ground training would generate localized dust. Continued dispersion of chaff would not affect air quality.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.
Noise	Action would not increase number of jet aircraft. Short-term effects during construction of EW/TACTS sites. Helicopters used for integrated air and ground training could affect land users if within close range of operations, though it is standard operating procedure to avoid training near other land users.	Noise studies will be conducted to verify the Navy's position that there are no significant noise impacts resulting from existing operations at B-17 and B-19.	Similar to Alternative I, with less potential effects north of B-16 from a smaller withdrawal area.	Similar to Alternative I.	Similar to Alternative II.	Similar to Alternative I.	No impact.	No mitigation required.
Visual Resources	EW/TACTS sites and integrated air and ground training could result in potential adverse impacts by altering the visual character of the area. Impacts at sites would be reduced by using colors that blend with the background and by avoiding sensitive areas. Training visible from sensitive viewpoints would have impacts; most training likely would remain unnoticeable. Long-term chaff use could result in visible aluminum litter.	The visual impacts from chaff, though not significant, may be reduced if biodegradable chaff becomes viable.	Similar to Alternative I, although the affected area would increase in the panhandle area and decrease near the Job Peak WSA and north of B-16.	Similar to Alternative I.	Similar to Alternative I for Dixie Valley area and similar to Alternative II for area north of B-16.	Similar to Alternative I.	No impact.	No mitigation required.

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 3 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Cultural Resources	No significant impacts. Navy will avoid siting EW/TACTS facilities on culturally significant sites. Predictive model and site surveys conducted as needed. Potential impacts from integrated training if conducted on surface resources. NAS Fallon will comply with federal regulations and with procedures set forth in CRMP and PA.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.
Land Use *Closed Use of Category A Land*	Public access prohibited to protect public from off-range ordnance.	Not mitigable.	Similar to Alternative I.	Not mitigable.	Similar to Alternative I.	Not mitigable.	Navy would not withdraw any land. Off-range ordnance lands would remain closed.	No mitigation required.
Land Use *Development of Structures*	Structures would be limited by 50-foot height restrictions.	Development of structures over 50 feet could sometimes be allowed under Navy waiver.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Navy would not withdraw lands, which could result in safety impacts from development of structures.	Close coordination with BLM to control developments.
Land Use *Geothermal Production*	No impact to current geothermal production or exploration. Modification of transmission lines would require Navy review and approval.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.
Land Use *Constraints to County/City Development*	No additional constraints over current BLM/ BUREC/DOE procedures would be placed on development west of the City of Fallon.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impact.	No mitigation required.

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 4 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Land Use *Job Peak WSA*	No impact. Although the area is managed as a Wilderness Area, Congressional designation has not occurred. Should the area be designated a Wilderness Area, it would be removed from the withdrawal footprint.	No mitigation required.	WSA not included in withdrawal footprint and would not be affected by withdrawal or training.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No impacts.	No mitigation required.
Socioeconomics *Environmental Justice*	No significant impacts. No minority or low-income group would be disproportionately and adversely affected.	Noise studies will be conducted to verify the Navy's position that there are no significant noise impacts resulting from existing operations at B-17 and B-19.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	No impact.	No mitigation required.
Socioeconomics	No significant impacts to employment, residential development, or residential real estate values. Regional recreation income could decrease from the inclusion of Sheckler reservoir in the withdrawal area. No mining or grazing would be allowed on Category A lands. This could result in impacts from loss of revenue.	Loss of revenue unmitigable. The Navy will explore means to compensate holders of grazing permits and patented and valid unpatented mining claims, subject to congressional authorization and appropriation.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	No impact.	No mitigation required.
Mineral Resources	Category A lands would prohibit exploring, locating, developing, or patenting of claims, resulting in a significant impact. Category B lands would prohibit patenting of unpatented claims. No impact to existing claims because military sites will be located to avoid mining claims. Structure height generally would be limited to 50 feet on Category B lands.	The Navy will explore means of compensating holders of valid claims on Category A lands, subject to congressional approval and appropriation. The Navy will attempt to accommodate tall structures for short periods or in locales where they would not pose a safety hazard.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	No impact. Effects from emergency closure would continue to be handled through BLM and Navy administrative process.	No mitigation required.

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 5 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Livestock and Wild Horse Management	Category A lands would prohibit grazing activities . No impacts to grazing or wild horse management from integrated air and ground training or EW/TACTS sites due to temporary and dispersed nature of activities. No impacts from continued use of chaff.	The Navy will explore means of compensating affected grazing permit holders on Category A lands, subject to congressional approval and appropriation. To minimize startling cattle and wild horses, the Navy will not conduct ground training or low-level flights under 500 feet AGL within a one-half mile radius of all springs and water troughs.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	No impact. Effects from emergency closure would continue to be handled through BLM and Navy administrative process.	No mitigation required.
Recreation and Public Access	Category A lands would prohibit public use. Public access would not be restricted on other withdrawn lands except at fenced EW and TACTS sites. Development of EW/TACTS sites and integrated air and ground training activities could adversely affect the quality of recreational experiences in the Dixie Valley area and north of B-16. No impact to the Pony Express National Historic Trail would occur.	Access and recreational impacts from closure of Category A lands not mitigable. Because these lands are or have the potential to be ordnance-contaminated, it is not possible to allow recreation and public access while preserving public safety. The Navy will provide education program materials on Navy training activities on Category B lands to the BLM, NDOW, and BUREC for public distribution. The Navy will make every effort to avoid the public during ground training activities. If there is an organized annual re-enactment of the Pony Express Trail ride, the Navy will work with trail personnel to alter flight activities during the event if compatible with training needs at the given time.	Similar to Alternative I, with less effects to recreation north of B-16.	Similar to Alternative I.	Similar to Alternative II.	Similar to Alternative I.	No impact. Effects from emergency closure would continue to be handled through BLM and Navy administrative process.	No mitigation required.

TABLE 2-6
OVERVIEW OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES
(Page 6 of 6)

RESOURCE AREAS	ALTERNATIVE I		ALTERNATIVE II		ALTERNATIVE III		NO ACTION ALTERNATIVE	
	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation	Impacts	Mitigation
Public Health and Safety	No impacts. Beneficial effects from reduced public exposure to off-range ordnance. No impact from EW/TACTS sites or integrated air and ground training. No impacts from continued use of chaff except for chaff-related nuisance effects from degradation of radar or other electronic signals. Adverse chaff effects mitigated by continuing to clear major operations with the appropriate FAA facilities.	No mitigation required.	Similar to Alternative I.	No mitigation required.	Similar to Alternative I.	No mitigation required.	No lands would be withdrawn. Off-range ordnance lands would still be closed to the public, but BLM does not have the same resources available as the Navy to patrol lands and to ensure they are not accessed. Safety conditions identified in HAZARD studies would not be rectified.	Public safety impacts from off-range ordnance are not mitigable. The Navy would request that the BLM restrict development in potentially hazardous areas.
Transportation	No significant impacts. No impact to major highways. Roads on Category A land would continue to be closed. No increase in traffic expected from the withdrawal.	Closure of existing roads unmitigable. Alternate transportation routes may be identified for closed roads.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	Similar to Alternative I.	The closure of roads on off-range ordnance lands would continue to be addressed through Navy and BLM administrative processes.	No mitigation required.
Airspace Designation and Use	No impacts.	No mitigation required.	No impacts.	No mitigation required.	No impacts.	No mitigation required.	No impacts.	No mitigation required.

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3.0 EXISTING ENVIRONMENT

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3. EXISTING ENVIRONMENT

The following analysis focuses on those resources potentially affected by the proposed land withdrawal and on topics that have received the most public concern. As a result, some areas or issues are addressed in greater detail than others. This has been done to assure that adequate attention will be focused on the most relevant issues. According to the CEQ regulations:

"The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues (40 CFR 1502.15)."

As described in Chapter 2, the land withdrawal is essentially a joint change in land jurisdiction and management. It is not anticipated that the withdrawal would directly cause an increase in air operations or in the size of the actual impact areas within the ranges. The proposal would impose some new land use controls that would have an effect on land use and public access for the withdrawn lands, particularly Category A lands. A resource management plan was developed in consultation with BLM, BUREC, and DOE subsequent to the withdrawal and would be submitted to the BLM for approval. The management and adjudication procedures for the withdrawn land would be defined by agreement among the Navy, BLM, BUREC, and DOE.

In addition, some resources on the ground could experience impacts as a result of the development of visual cueing device sites, TACTS sites, and EW sites. Integrated air and ground training operations also could result in impacts to resources on the ground.

Impacts are discussed in Chapter 4. Mitigation measures proposed as part of this proposed action or in response to potential impacts identified also are described in Chapter 4. Environmental conditions resulting from actions in the area that are not part of the current proposal are considered part of the existing environment. Of particular interest are noise conditions and uses of private lands that have been affected by military operations. Cumulative effects are described in Chapter 5.

Unless otherwise noted, all figures in this chapter illustrate a withdrawal area that is a composite of all of the alternative footprints. This withdrawal

area is not representative of a specific alternative and covers more area than is proposed by any of the individual alternatives. Figure 2-1 shows the spatial relationship of the three action alternatives. This presentation shows the reader where existing environmental resources are located in relation to lands potentially affected by the proposed withdrawal.

3.1 GEOLOGY AND SOILS

The study area for this FEIS is within the Great Basin section of the Basin and Range province. The topography of the Great Basin is characterized by linear, roughly north-south trending mountain ranges that are separated by valleys, many of which are closed basins (Hunt 1974). NAS Fallon, B-16, the City of Fallon, and most of the populated and built-up portions of Churchill County are in a large depression known as the Lahontan Valley. The Dixie Valley area and B-17 are in a long north-south trending valley system known as Dixie Valley and Fairview Valley (refer to Figure 1-1 for locations of these areas). B-19 is in the Blow Sand Mountains and Rawhide Flats.

The rocks exposed in the mountain ranges are predominantly Tertiary sedimentary and volcaniclastic volcanic rocks (Stewart and Carlson 1977). These are underlain by Mesozoic and Paleozoic marine sedimentary, volcanic, and intrusive rocks that are exposed locally in the western, central, and northeastern portions. Mineralization appears to be associated primarily with Tertiary and Mesozoic rocks near igneous intrusions (SAIC 1991). The valleys between the mountain ranges are underlain by unconsolidated alluvial and playa (lake) deposits.

The rocks forming the linear, north-south trending mountain ranges are complexly deformed. The mountain ranges and their intervening valleys have been produced by Tertiary block faulting, tilting, and uplifting of the deformed bedrock (Hunt 1974; Stewart 1971). For example, Dixie and Fairview Valleys resulted from uplifting and tilting of the Stillwater Range to the west and the Clan Alpine Mountains to the east along faults at the bases of the ranges.

Widespread faulting has occurred on many of the mountain front faults in geologically recent times, and several faults in the vicinity of the proposed land withdrawal have been active in historic time (Thenhaus and Wentworth 1982; Hunt 1974; Ryall et al. 1966). The region is one of high seismicity (Ryall et al. 1966). The area experienced at least seven moderate to large earthquakes between 1900 and 1961.

Soils at B-16 follow a characteristic progression from the steep hillslopes on the west to the playa deposits at the center of the basin in the eastern portion of the range. The soils on the hillslopes are typically thin rocky

soils derived from volcanic rocks. Further downslope, the soils near the base of the hillslopes consist of reworked alluvium, lakebed, and dune sands deposits. The presence of fine-grained materials in these deposits makes them relatively impermeable, although they tend to be friable and subject to wind erosion. Soils in the northeast and south portions of the range contain a higher proportion of dune sands; these soils are highly permeable. Toward the center of the basin the soils have formed on low lake terraces and are characterized by a thin impermeable subsurface layer at a depth of about six inches. In this layer, lacustine clays and precipitated salts cement the sand grains together when dry. Below this layer the soil consists of loose, highly permeable coarse sand. The deepest portions of the basin are underlain by playa deposits, which are fine-grained, poorly-drained, saline deposits that do not support vegetation. The susceptibility of soils to water erosion depends largely on slope and clay content. Clayey soils tend to resist erosion, while steep slopes increase erosion potential. Most of B-16 contains sandy soils on moderate to gradual slopes where erosion potential is slight. However, most of the soils in the area are moderately to highly susceptible to wind erosion (USDA 1991; SCS 1975). Rock fragments (desert pavement) on the surface and vegetation tend to stabilize the soil and reduce wind erosion.

The general characteristics of soils in the withdrawal areas associated with B-17, B-19, and the Dixie Valley area are similar to those in B-16. The soil characteristics vary according to where the areas are located—on steeply sloping upland, on alluvial fans and fan piedmonts, or on the valley floor. The Dixie Valley Wash is an area undergoing accelerated erosion and subsequent deposition of sediments. Detailed descriptions of numerous soil series identified in these areas are available in the soil survey documents prepared by the US Department of Agriculture (USDA) National Resources Conservation Service (NRCS).

3.2 WATER RESOURCES

The proposed land withdrawal areas are within four closed hydrographic basins. NAS Fallon and B-16 are within the Carson Desert Basin, B-17 and a portion of the Dixie Valley area are within the Fairview Valley Basin, most of the Dixie Valley area is within the Dixie Valley Basin, and B-19 is in the Rawhide Flats Basin. Potential evapotranspiration in the area greatly exceeds precipitation, but substantial runoff can occur during major storms. The Carson Desert Basin receives substantial quantities of irrigation water and return flows.

Regional surface water features include the Lahontan, Sheckler, and Stillwater Point Reservoirs, Carson Lake and various playa lakes, irrigation canals, natural (mostly ephemeral) streams, and springs.

Important water resources in the withdrawal area are developed springs, existing wells, storage tanks for livestock grazing, and guzzlers for wildlife use. There are three springs, three guzzlers, and 11 water storage tanks on lands that may be withdrawn (see Figure 3-10).

The principal water body associated with B-16 is Sheckler Reservoir, which is near the northern boundary of B-16 and contains water only periodically during the year. Several major ephemeral stream channels converge to the northwest of B-16, cross it, and then discharge into Carson Lake. The area also includes segments of three main irrigation canals but no perennial springs, streams, or drilled wells. The water table beneath the central portion of the basin is expected to be very shallow.

A topographic divide separates Dixie Valley from Fairview Valley within the southern portion of the Dixie Valley area. Dixie Valley receives surface water from ephemeral streams to the north and south and as ground water underflow from the Fairview Valley. Fairview Valley is topographically closed. Dixie Valley contains one perennial stream, Horse Creek, and numerous springs, including several thermal springs. The ground water table in the Dixie Valley is fairly high, and several free-flowing wells are present. The wells are concentrated in the northern and central portion of the valley. The shoal site is near the summit of the Sand Springs Range. No permanent bodies of water, springs, or streams are found on this site, but a major ephemeral drainage crosses the eastern portion of the sites and drains into Fairview Valley.

B-19 straddles the Blow Sand Mountains, which form the topographic divide between the Rawhide Flats and the Carson Desert Basins. There is no perennial surface water flow into or out of Rawhide Flats. No streams and only one spring appear in B-19.

3.3 BIOLOGICAL RESOURCES

Biological resources discussed in this section include vegetation, wildlife, sensitive species, and sensitive habitats on the project site and surrounding area. The affected area for biological resources encompasses land currently owned or controlled by NAS Fallon and proposed withdrawal lands. Biological information for the Lahontan Valley is presented where site-specific data are not available. In 1996 and 1997 an ecological survey was conducted at NAS Fallon, the existing training ranges, and the Dixie Valley landholdings (US Navy 1997b). The survey recorded 458 plant species, 23 reptile and four amphibian species, 126 bird species, 11 mammal species, and nine species of bats.

3.3.1 Regulations

3.3.1.1 Federal Endangered Species Act

Federal law directs that all federal agencies and departments use their authority to preserve endangered and threatened species under the guidance of the Endangered Species Act (ESA). The ESA requires that the US Fish and Wildlife Service (USFWS) issue a permit prior to implementing actions that would result in the taking of a federally-listed endangered or threatened species or modification to their habitat. This permit process is directed under Section 7 of the ESA for actions in which a federal agency is involved. Federal agencies are required to consult with the USFWS prior to undertaking actions that may affect endangered species. A federal agency is required to obtain a biological opinion from the USFWS on whether its actions may jeopardize the continued existence of any threatened or endangered species. This biological opinion normally is issued after the USFWS reviews the draft environmental document. Federal agencies are prohibited from enacting activities that would jeopardize the continued existence of these species.

3.3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1972 prohibits the taking of individuals, nests, or eggs of a migratory bird species.

3.3.1.3 Clean Water Act

The Army Corps of Engineers (COE) regulates impacts to wetlands under Section 404 of the Clean Water Act (CWA). Wetlands are considered important to the public interest in that they perform significant biological functions, such as controlling sediment and pollution and providing nesting, breeding, foraging, and spawning habitat for a wide variety of resident and migratory animal species (Corps of Engineers Regulatory Program Regulations, §33 CFR 320.4). Projects that include potential dredge or fill impacts to wetlands must be reviewed by the COE and the US Environmental Protection Agency (EPA) under the CWA. NAS Fallon is delineating and mapping wetlands on all current land holdings and will use the same process on any new lands withdrawn. The Navy adheres to a "no net loss" policy, in which any action that affects a wetland will be mitigated according to Navy standards and as required under Section 404 permits.

3.3.2 Vegetation

Vegetation communities within the proposed land withdrawal areas are typical of the Great Basin region. Appendix F lists plant species commonly found in the region. Salt and alkali flats are found throughout the Lahontan Valley. Upland vegetation communities in the vicinity of the proposed

withdrawal areas are all desert shrub communities and include greasewood, greasewood-shadscale, saltgrass, rabbitbrush, sagebrush, and pinyon-juniper at higher elevations (BLM 1982a, USFWS 1995). Vegetation in the greasewood and greasewood-shadscale communities are the most dominant plants within the withdrawal areas. These general vegetation types are discussed below. Detailed descriptions of the diverse plant communities in this area are available as ecological site descriptions prepared by the BLM and NRCS. No active agricultural lands are within the proposed withdrawal areas. Several riparian corridors and other wetland communities are present on land owned or controlled by NAS Fallon. These are discussed in Section 3.3.5 as sensitive habitats.

Elevation, climate, soil properties, and disturbance factors influence vegetation within this region. Elevations range from 4,000 feet at Sheckler Reservoir to 8,300 feet near Fairview Peak. Average annual rainfall varies from four inches per year on the valley bottoms to over 14 inches in the higher elevations (BLM 1983). Soils in the region are discussed in Section 3.1. Much of the NAS Fallon region contains disturbed vegetation. Disturbances generally relate to military and nonmilitary human activities. Military disturbances have resulted from ordnance, road construction, utility lines, and the construction of military-related structures. Nonmilitary disturbances include those from mining, grazing, recreation, and public utilities (Navy 1995a).

3.3.2.1 Salt and Alkali Flats

Salt and alkali flats (playas) appear in the lowest elevations of the Great Basin valleys. Water rising to the surface brings up salts, and when the water evaporates it forms these salt flats. While these areas tend to be devoid of vegetation, iodinebush (*Allenrolfea occidentalis*) and inland saltgrass (*Distichlis spicata* var. *stricta*) may establish themselves in areas where alkalinity is lower and the soil is moist.

3.3.2.2 Greasewood

Black greasewood (*Sarcobatus vermiculatus*) is the dominant plant species for alkaline soils adjacent to the playa areas. This community also commonly supports shadscale (*Atriplex confertifolia*), alkali seepweed (*Suaeda* sp.), Bailey greasewood (*Sarcobatus vermiculatus baileyi*), rubber rabbitbrush (*Chrysothamnus nauseosus*), bud sagebrush (*Artemesia spinescens*), and winterfat (*Ceratoides lanata* var. *lanata*). Understory species may include grasses, such as squirreltail (*Elymus elymoides*), inland saltgrass, Great basin wild rye (*Elymus cinereus*), alkali sacaton (*Sporobolus airoides*), cheatgrass brome (*Bromus* tectorum), and forbs, including milkvetch (*Astragalus* sp.), wedgescale saltbush (*Atriplex truncata*), pepperweed (*Lepidium nitidum*), halogeton (*Halogeton glomeratus*), and Russian thistle (*Salsola kali tenifolia*).

3.3.2.3 *Greasewood-Shadscale*

Greasewood-shadscale communities generally are found on alluvial fans, fan remnants, old lake terraces, foothill slopes, and lower mountain slopes (BLM 1982a). This vegetation association ranges between 4,000 and 6,500 feet in elevation. Soils are generally high in alkalinity and have a high content of soluble salts (BLM 1982a). Soil textures vary from gravely loam with desert pavement appearance to large sheets of eolian or alluvial sands and vegetated sand dunes. In addition to Bailey greasewood, black greasewood and shadscale, other species found in this community include four-winged saltbush (*Atriplex canescens*), sagebrush, rabbitbrush, bud sage brush, and spiny hop-sage (*Grayia spinosa*). Species of the understory include desert needlegrass (*Achnatherum speciosa*), field mustard (*Brassica campestris*), milkvetch, globemallow (*Sphaeralcea* sp.), birdcage evening primrose (*Oenothera deltoides* var. *piperi*), squirrel tail, Indian ricegrass (*Oryzopsis hymenoides*), inland saltgrass, galleta grass (*Hilaria* sp.), and cheatgrass.

3.3.2.4 *Saltgrass*

Saltgrasses tend to grow near playas where alkalinity and soil moisture is present. These communities are dominated by inland saltgrass and include black greasewood and a variety of forbs. Although uncommon on lands owned or controlled by NAS Fallon, saltgrass may be found in the proposed withdrawal areas.

3.3.2.5 *Rabbitbrush*

Rabbitbrush communities have developed in disturbed areas where native species have been replaced by rubber rabbitbrush. Other shrub species that may be found in this community include green rabbitbrush (*Chrysothamnus viscidiflorus* ssp. *puberulus*), hopsage, shadscale, and winterfat. Common grass species include Indian ricegrass, inland saltgrass, and cheatgrass.

3.3.2.6 *Sagebrush*

Sagebrush communities are uncommon in the region of NAS Fallon and are found on upland terraces, alluvial and mountain valley fans, foothill slopes, and mountain slopes and ridges between 4,300 and 10,000 feet in elevation. Soil characteristics vary from dry, rocky, and shallow soils to sandy or loamy soils that are moderately deep to deep. Annual precipitation typically varies between six and 12 inches over much of this region. Sagebrush species include basin big sagebrush (*Artemisia tridentata tridentata*), Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), or mountain big sagebrush (*Artemisia vaseyana*), depending on location. Understory species associated with big sagebrush plant communities include Sandberg's bluegrass (*Poa sandbergii*), Indian ricegrass, basin wildrye, bottlebrush squirreltail, Thurber's needlegrass (*Achnatherum thurberianum*),

milkvetch, and lupine (*Lupinus* sp.). In addition, at the upper elevations of this community, where associations with pinyon-juniper communities are found, bluebunch wheatgrass (*Agropyron spicatum*), Idaho fescue (*Vulpia idahoensis*), and snowberry (*Symphoricarpos* sp.) may be present.

3.3.2.7 Pinyon-Juniper

Pinyon-juniper communities are found on upper foothill side slopes, ridges, and mountain slopes from 5,000 to 8,000 feet (BLM 1982a). Soil conditions are generally loamy and shallow. Annual precipitation typically varies between eight and 14 inches (BLM 1982a). Shrub species common in this community include big sagebrush, gooseberry (*Ribes* sp.), and rabbitbrush. Grass species, such as bluegrass (*Poa* sp.), needle grass (*Achnatherin* sp.), cheatgrass, and basin wild rye, are common within this vegetation type. Pinyon-juniper vegetation is present on Fairview Peak, west of B-17, and the Stillwater and Clan Alpine mountain ranges in the Dixie Valley area.

3.3.2.8 Disturbed Areas

Much of the land in the proposed withdrawal areas has been disturbed by human activities. These include areas of military disturbance in the range areas and the Dixie Valley area. Other human-related disturbances, such as ranch and mine areas, road corridors, and utility corridors, also occurred in these areas. Species composition in these areas is dominated by nonnative invasive species, such as Russian thistle, cheatgrass, halogeton, Russian knapwood (*Centaurea repens*), white-top (*Cardaria draba*), and other nonnative agricultural and landscape species. Natural disturbances, such as fire and flooding also occur periodically in the withdrawal areas and on lands owned or controlled by NAS Fallon.

The NRCS described range condition classes to evaluate the condition of vegetation on the NAS Fallon ranges. This inventory rated these areas as excellent, good, fair, or poor, based on the present state of vegetation versus the expected natural potential for each area. The ranges were described as follows and ranged from poor in areas of B-17 to excellent in parts of B-16 (SAIC 1991):

• B-16	1984	Excellent to good
• B-17	1985	Good, fair, and poor
• B-19	1984	Good
• Dixie Valley	1985	Good to fair

3.3.3 Wildlife

Appendix F lists wildlife species that inhabit the region, including invertebrates, fish, amphibians and reptiles, birds, and mammals. The

proposed withdrawal areas provide habitat for a number of game species, nongame wildlife species, and sensitive species.

3.3.3.1 Game Species

Game species in the region include fish, birds, and mammals. The BLM administers programs to promote habitat for game and nongame species.

Game fish species found in reservoirs and deeper wetlands in the area include white bass (*Morone chrysops*), channel catfish (*Ictalurus punctatus*), white catfish (*Ictalurus catus*), walleye (*Stizostedion vitreum*), white crappie (*Pomoxis annularis*), yellow perch (*Percan flavescens*), and largemouth blackbass (*Micropterus salmoides*).

Small game guzzlers have been installed for chukars (*Alectoris chukar*) and mourning doves (*Zenaidura macroura*) in the Sand Springs Range, Cocoon Mountains, Clan Alpine Mountains, and Lauderback Hills (Figure 3-10). Many waterfowl game species are found at Sheckler Reservoir north of B-16. These include such species as the mallard (*Anas platyrhynchos*), northern pintail (*Anas acuta*), and Canada goose (*Branta canadensis*).

Mule deer (*Odocoileus hemionus*) is the most important big game species in the region and tends to be concentrated in adjacent mountain ranges, such as the Stillwater, Clan Alpine, and Desatoya Ranges, although it is also found commonly in valleys (NDOW 1982). Bighorn sheep (*Ovis canadensis*)have been reintroduced in the Clan Alpine Range and are also found in the Sand Springs Range, Lauderback Range, Chalk Mountain, Fairview Peak/Slate Range, and the Stillwater Range. Other game mammals include the mountain lion (*Felis concolor*) and bobcat (*Lynx rufus*). Big game guzzlers are located in the Fairview Peak and Slate Mountain ranges.

3.3.3.2 Invertebrates

A wide variety of invertebrates were identified at NAS Fallon, the training ranges, and the Dixie Valley landholdings during the ecological surveys including annelids (one species), mollusks (two species), crustaceans (five species), arachnids (one species), and insects (21 species). Of the 21 insect species identified, five are special-status species and are discussed further in Section 3.3.4. The surrounding lands historically contained freshwater clams, mussels, shrimp, and snails in region wetlands. Most major orders of aquatic insects are found in the wetlands (USFWS 1995).

It is known that once a year tarantulas migrate along Scheelite Mine Road, just west of B-17. This migration generally occurs in September and generally lasts about four to six weeks.

3.3.3.3 Fish

Approximately 15 species of nongame fish exist in the reservoirs and deeper wetlands in the Lahontan Valley (USFWS 1995). Few surveys for fish species have been conducted in the proposed withdrawal areas. Common nongame fish species in the region include Asiatic carp (*Cyprinus carpio*), Sacramento blackfish (*Orthodon microlepidotus*), Lahontan tui chub (*Gila bicolor obesus*), Dixie Valley tui chub (*Gila bicolor* spp.), Lahontan red shiners (*Richardsonius egregius*), Lahontan speckled dace (*Rhinichtys osculus robustus*), Lahontan mountainsuckers (*Pantosteus lahontan*), Tahoe suckers (*Catostomas tahoensis*), fathead minnows (*Pimephales promelas*), and mosquito fish (*Gambusia affinis*). A survey completed in 1994 involved sampling Dixie Valley tui chub in Dixie Valley and characterized brook trout populations in Horse Creek.

3.3.3.4 Amphibians and Reptiles

The ecological survey of NAS Fallon, the training ranges, and Dixie Valley landholdings recorded 23 reptile and four amphibian species (US Navy 1997b). Amphibian and reptile species common in the region include the western fence lizard (*Sceloperus occidentalis*), side-blotched lizard (*Uta stansburiana*), gopher snake (*Pituophis melanoleucus*), and Great Basin rattlesnake (*Crotalus viridis*).

3.3.3.5 Birds

Bird species in the Lahontan Valley region include waterfowl, shorebirds, colony-nesting and other marsh birds, songbirds, and raptors. Game birds are discussed in Section 3.3.3.1. Changes in water management, including declining wetlands and increased development in the region, are believed to have adversely affected the abundance and diversity of birds in the area (USFWS 1995). The ecological survey of NAS Fallon, the training ranges, and the Dixie Valley landholdings recorded 126 bird species (US Navy 1997b).

The Lahontan Valley is a major stopover area for migrating waterfowl, with approximately 70 percent of the birds migrating through the state using the regional wetlands (USFWS 1995). Waterfowl species common in the region include the green-winged teal (*Anas crecca*), northern pintail (*Anas acuta*), northern shoveler (*Anas clypeata*), American widgeon (*Anas americana*), cinnamon teal (*Anas cyanoptera*), redhead (*Aythya americana*), gadwall (*Anas strepera*), Canada goose, snow goose (*Chen caerulescens*), and tundra swan (*Cygnus columbianus*).

The region's wetlands also provide critical habitat for migrating shorebirds. Wetlands at Stillwater National Wildlife Refuge and Carson Lake have been designated part of the Western Hemispheric Shorebird Reserve Network.

Shorebirds common in this region include the American avocet (*Recurvirostra americana*), black-necked stilt (*Himantopus mexicanus*), western snowy plover (*Charadrius alexandrinus*), killdeer (*Charadrius vociferus*), common snipe (*Gallinago gallinago*), long-billed curlew (*Numenius americanus*), and Wilson's phalarope (*Phalaropus tricolor*).

Colony-nesting and other marsh birds include those that migrate through the region and nest in the wetlands but that are not waterfowl or shorebirds. This category includes the California gull (*Larus californicus*), ring-billed gull (*Larus delawarensis*), black tern (*Chlidonias niger*), Forster's tern (*Sterna forsteri*), great egrets (*Casmerodius albus*), snowy egrets (*Egretta thula*), cattle egrets (*Bubulcus ibis*), great blue herons (*Ardea herodias*), black-crowned night herons (*Nycticorax nycticorax*), double crested cormorants (*Phalacrocorax auritus*), eared grebe (*Podiceps nigricollis*), western grebe (*Aechmophorus occidentalis*), Clark's grebe (*Aechmophorus clarkii*), American white pelicans (*Pelacanus erythrorhynchos*), white-faced ibis (*Plegadis chihi*), Virginia rails (*Rallus limicola*), soras (*Porzana carolina*), common moorhens (*Gallinula chloropus*), and American coots (*Fulica americana*).

Songbirds in the region can be divided into two groups, those dependent on riparian or wetlands habitats and those supported by upland habitats. The diversity in vegetation and presence of water within riparian habitats provides for a greater diversity of songbird species in these areas. Common songbirds in the riparian areas of the proposed withdrawal areas may include the western wood-pewee (*Contopus sordidulus*), house wren (*Troglodytes aedon*), yellow warbler (*Dendroica petechia*), MacGillivray's warbler (*Oporornis tolmiei*), Bewick's wren (*Thryomanes bewickii*), black-headed grosbeak (*Pheucticus melanocephalus*), northern oriole (*Icterus galbula*), and northern flicker (*Colaptes auratus*). Upland habitats support species such as the rock wren (*Salpinctes obsoletus*), sage thrasher (*Oreoscoptes montanus*), horned lark (*Eremophila alpestris*), savannah sparrow (*Passerculus sanwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*). There is little data about the status of songbird populations in this region (USFWS 1995).

Many raptor species are migrants through the Lahontan Valley and several nest in the region. Nesting species include the golden eagle (*Aquila chryaetos*), Swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), osprey (*Pandion haliaetus*), and prairie falcon (*Falco mexicanus*). Several owl species nest in the region, including the burrowing owl (*Athene cunicularia*), great horned owl (*Bubo virginianus*), short-eared owl (*Asio flammeus*), and western screech owl (*Otus kennicottii*). There is little quantitative data regarding raptor species populations in this region (USFWS 1995). Foraging and nesting habitat for raptors exists in the areas proposed for withdrawal. On March 4, 1996, a wildlife biologist from NAS

Fallon conducted a raptor survey on lands south of B-16. There is one hill that contains rock outcrops and cliff-like rim rocks that are suitable raptor nest sites (Section 12, T16N, R27E). No raptors or other birds were observed, and no residue from old bird nests was recorded (Rathbun 1996a).

Several bird species that are found in this region are not native to the Great Basin and are associated with developed areas. These species can displace native bird species and harm other native wildlife by monopolizing food sources or breeding sites. These include the house sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*).

3.3.3.6 Mammals

Nongame mammal species common in the region include bats, small mammals, and large mammals. The greatest diversity of mammal species are found in upland habitats in the region.

Surveys conducted during 1996 and 1997 at NAS Fallon, the training ranges, and the Dixie Valley landholdings observed the following bat species: pallid bat (*Antrozous pallidus*), small-footed myotis (*Myotis subulataus*), Townsends big eared bat (*Cory norhinus townsendii*), Mexican free-tailed bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), California myotis (*Myotis californicus*), long-eared myotis (*Myotis evotis*), hairy winged myotis (*Myotis volans*), and western pipistrelle (*Pipistrellus hesperus*). Other species possibly occurring in the region include little brown bat (*Myotis lucifugus*), Yuma myotis (*Myotis yumanensis*), spotted bat (*Euderma meculatum*), silver-haired bat (*Lasionycteris noctivagans*), red bat (*Lasiurtus blossevillii*), hoary bat (*Lasiurus cinereus*), and fringed myotis (*Myotis thysanodes*) (Navy 1997b).

Small mammals common to the region include the little pocket mouse (*Perognathus longimembris*), Great Basin kangaroo rat (*Dipodomys microps*), deer mouse (*Peromyscus maniculatus*), and desert woodrat (*Neotoma lepida*). Large mammals found in the region include bighorn sheep, blacktailed jackrabbit (*Lepus californicus*), striped skunk (*Mephitis mephitis*), badger (*Taxidea taxus*), coyote (*Canis latrans*), and desert kit fox (*Vulpes macrotis*). Habitat is present in the proposed withdrawal areas to support these species. The Chalk Mountains are known to be a bighorn sheep lambing area. The ecological survey of NAS Fallon, the training ranges, and the Dixie Valley land holdings trapped 11 mammal species, with the greatest abundance at B-17, B-19, and the Dixie Valley land holdings. Kangaroo rats were the most abundant.

3.3.4 Sensitive Species

Sensitive species are defined as those that are listed by the USFWS or by the Nevada Division of Wildlife (NDOW) as endangered, threatened, proposed for endangered or threatened status, candidate species, or species of concern. Also included as sensitive species are those listed by the Northern Nevada Native Plant Society (NNNPS). Table 3-1 lists sensitive species found in the area of NAS Fallon. The ecological inventory of NAS Fallon-administered lands recorded only one state special-status species, the sand cholla (*Opuntia pulchella).*

3.3.4.1 Plants

No endangered or threatened plants are found in the Lahontan Valley. Four state species of concern are found in the region that could exist on lands owned or controlled by NAS Fallon (Table 3-1). The sand cholla was observed at three locations in the northwestern portion of B-16 during the 1996/1997 ecological survey (US Navy 1997b). This species generally occurs in xeric Bailey's greasewood-shadescale habitats and is protected under the Nevada Cactus and Yucca Law.

3.3.4.2 Wildlife

Four species federally listed as endangered or threatened are found in the region, the cui-ui (*Chasmistes cujus*), Lahontan cutthroat trout (*Onchorhynchus clarki henshawi*), bald eagle (*Haliaeetus leucocephalus*), and American peregrine falcon (*Falco peregrinus anatum*). Of these, only the bald eagle and American peregrine falcon may inhabit the lands proposed for withdrawal. The two fish species (cui-ui and Lahontan cutthroat trout) are found in Pyramid Lake and associated drainages over five miles from lands proposed for withdrawal.

The bald eagle is a federally threatened species. This species is primarily a winter visitor in Nevada. Preferred wintering habitat frequently consists of lakes, reservoirs, wetlands, and rivers associated with regulating reservoirs (NDOW undated). Bald eagles are seen in the region each year between November and April. They are regularly found from December through February at the Stillwater Wildlife Management Area (USFWS 1982) and have been observed at Carson Lake (Saake 1987). The most recent observation was a nesting pair at the Lahontan Reservoir in 1997. The pair successfully incubated an egg, but the eaglet did not survive.

The regional bald eagle population is concentrated in the areas of Stillwater NWR, Carson Lake, and the Lahontan Reservoir. Timber Lake is the primary bald eagle winter roost site in the region and is located north of the

TABLE 3-1
SENSITIVE SPECIES POTENTIALLY INHABITING THE WITHDRAWAL AREAS

Common Name	Scientific Name	Federal/State or NNNPS Status[1]	Preferred Habitat[2]	Existence at NAS Fallon[3]	Existence in Proposed Withdrawal Lands[3]
Endangered and Threatened					
Fish					
Cui-ui	*Chasmistes cujus*	E/Y	L/S	U	U
Lahontan cutthroat trout	*Onchorhynchus clarki henshawi*	T/Y	S/L	U	U
Birds					
American peregrine falcon	*Falco peregrinus anatum*	E/Y	W/U/A	Q	O
Bald eagle	*Haliaeetus leucocephalus*	T/Y	W/R/U/A	Q	O
Other Sensitive Species					
Plants					
Altered andesite buckwheat	*Eriogonum robustum*	SC/W	U/A	P	P
Sand cholla	*Opuntia pulchella*	/CY	U	P	P
Nevada orycytes	*Oryctes nevadensis*	SC/W	U	P	P
Nevada dune beardtongue	*Penstemon arenarius*	SC/W	U	P	P
Invertebrates					
Nevada viceroy	*Limenitus archippus lahontani*	SC	R	P	P
California floater	*Anodonta californiensis*	SC	U	P	P
Hardy's aegialian scarab beetle	*Aegialia hardyi*	SC	U	P	P
Sand Mountain aphodius scarab beetle	*Aphodius psammobunus*	SC	U	P	P
Sand Mountain blue butterfly	*Euphilotes rita pallescens*	SC	U	P	P
Sand Mountain serican scarab beetle	*Serica psammobunus*				
Fish					
Dixie Valley tui chub	*Gila bicolor* ssp.	SC	L/S	U	P
Lahontan tui chub	*Gila bicolor obesus*	SC/Y	L/S	U	U
Amphibians and Reptiles					
Northwestern pond turtle	*Clemmys marmorata marmorata*	SC	R/W	U	U
Birds					
Northern goshawk	*Accipiter gentilis*	SC/Y	W/R	U	P
Western burrowing owl	*Athene cunicularia*	SC	U	P	P
Ferruginous hawk	*Buteo regalis*	SC/Y	W/R/U/A	Q	Q
Western snowy plover	*Charadrius alexandrinus*	SC	W	U	Q
Black tern	*Chlidonias niger*	SC/Y	W	U	Q
Western least bittern	*Ixobrychus exilis hesperis*	SC/Y	W	U	Q
Loggerhead shrike	*Lanius ludovicianus*	SC	U	P	P
Trumpeter swan	*Cygnus buccinator*	SC	W	U	Q
White-faced ibis	*Plegadis chihi*	SC/Y	W/A	U	Q
Mammals					
Townsends big eared bat	*Corynorhinus townsendii*	SC	U	P	P
Yuma myotis	*Myotis yumanensis*	SC	U	P	P
Spotted bat	*Euderma maculata*	SC/Y	U	P	P
Pygmy rabbit	*Sylvilagus idahoensis*	SC/Y	U	P	P
Small-footed myotis	*Myotis subulatus*	SC	U	P	P
Cave myotis	*Myotis velifer*	SC	U	P	P
Long-legged myotis	*Myotis volans*	SC	U	P	P

Sources: BLM 1983; NDOW 1995a; SAIC 1991; USFWS 1995, 1994a, 1994b; US Navy 1997b.

[1]Federal Status
E = endangered, T = threatened
SC = Species of Concern

NNNPS Status
W = watch - potentially vulnerable

Nevada State Status (NDOW)
CY = protected as a cactus or yucca under state law
Y = state protected

[2]Habitat
W = wetland/marsh
R = riparian
U = upland
A = agricultural
L = lake
S = stream

[3]Existence at NAS Fallon/Proposed Withdrawal Lands
C = confirmed nesting/breeding
O = confirmed occasional visitor
P = possible nesting/breeding
Q = possible occasional visitor
U = unlikely

City of Fallon. Other areas frequented by wintering bald eagles include Indian Lakes, S-Line Reservoir, Sheckler Reservoir, and Harmon Reservoir (USFWS 1995).

The peregrine falcon is a federally endangered species. This species has been recorded at Carson Lake and at the Stillwater NWR (BLM undated b; USFWS 1982; USFWS 1995). Individual peregrine falcons have been observed on at least 29 occasions during 1990 through 1997, with no sightings recorded for 1992.

Several species of concern inhabit the region and may be found on the withdrawal lands, including the western burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), ferruginous hawk (*Buteo regalis*), townsends big eared bat (*Corynorhinus townsendii*), Yuma myotis (Myotis yumanensis), and Dixie Valley tui chub (*Gila bicolor* ssp.). In addition, the Sand Mountain serican scarab (*Serica* sp.) is a beetle listed as a species of concern and is believed to be endemic to the Blow Sand Mountains east of B-19 (Phillips 1987). The Hardy's aegialian scarab beetle (*Aegialia hardyi*) also has been identified in the Blow Sand Mountains. The 1996/1997 ecological survey identified five special-status insects to have a high potential occurrence at the training ranges, although none were observed. These species are the Sand Mountain serican scarab, Sand Mountain aphodius scarab beetle, Hardy's aegialian scarab beetle, Sand Mountain blue butterfly, and Nevada viceroy (US Navy 1997b).

3.3.5 Sensitive Habitats

The Lahontan Valley supports unique wetlands that include perennial streams (Carson River), perennial freshwater lakes and reservoirs, irrigation canals, and brackish saltwater marshes. The Lahontan Valley thus provides some of the most biologically diverse habitats in the state (USFWS 1995). In the past 25 years, the acreage of wetlands in the Lahontan Valley has ranged from 40,300 in periods of several consecutive years of flooding to 2,400 after a six-year drought. It is estimated that approximately 16,600 acres is the average acreage of wetlands in the region (USFWS 1995). Diversity of vegetation has declined substantially in marshes in the Stillwater and Carson Lake areas within the past 20 years (USFWS 1995). Wetlands in the region, as delineated on National Wetlands Inventory (NWI) maps, are shown in Figure F-1 in Appendix F.

The USFWS defines wetlands in the Lahontan Valley as primary and secondary. Primary wetlands are the wetlands located within the Stillwater National Wildlife Refuge, Stillwater Wildlife Management Area, Carson Lake, and Fallon Indian Reservation. Secondary wetlands are administered or owned by another agency, organization, or individual. The term "secondary" is not an indication of quality or importance of wetland

habitat but indicates those that are not designated as Lahontan Valley wetlands under PL 101-618. Secondary wetlands in the region include those associated with the Fernley Wildlife Management Area, Massie and Mahala Sloughs, Soda Lakes, Old River Reservoir, Sheckler Reservoir, Sagoiuspe Dam, Harmon Reservoir, S-Line Reservoir, and Indian Lakes (USFWS 1995).

Although several intermittent creeks, springs, and seeps are found within the proposed withdrawal areas, there are only limited areas of riparian vegetation. Common species in the riparian areas of this region include shrub and tree species, such as willows (*Salix* sp.), salt cedar (*Tamarix* sp.), and Fremont cottonwoods (*Populus fremontii*); grass species, such as creeping wildrye (*Elymus triticoides*) and alkali sacaton (*Sporobolus airoides*); and a variety of wetland species, including sedges (*Carex* sp.), rushes (*Juncus* sp.), and cattails (*Typha* sp.).

Based on NWI maps, wetlands within the proposed withdrawal areas include lacustrine wetlands (playas that form shallow lakes), palustrine wetlands (small marshes and ponds), and riverine wetlands (rivers and streams) during saturated conditions (Appendix F). Sheckler Reservoir, located north of B-16, is classified as a secondary wetland. The reservoir stores only excess water during extremely high river flows, such as in 1995 and 1996. This area may support a variety of waterfowl, shorebirds, colony nesters and marsh species, and raptors. The bald eagle and American peregrine falcon could use this area for roosting and foraging. Although salt and alkali flats are unlikely to meet criteria for jurisdictional wetlands, these areas are included as wetlands on NWI maps and support a wide variety of wildlife during saturated conditions. Many other small springs, ponds, and streams are found within the proposed withdrawal lands during saturated conditions.

3.4 AIR QUALITY

3.4.1 Climate

NAS Fallon and the FRTC are located in an area of the intermountain west, which tends to be dominated meteorologically by recurring high and low pressure systems. Summer is often marked by stationary high pressure systems that develop over the region. These systems augment clear-sky conditions but also can result in large-scale stagnation of underlying air when light wind conditions persist. Winter weather conditions are influenced predominantly by transient storm systems. Precipitation in the vicinity of the proposed withdrawal is limited because the Sierra Nevada Mountain Range, located approximately 50 miles to the west, acts as a barrier. This barrier results in precipitation in the mountains rather than in the lowlands to the east. Precipitation in the region occurs mostly from

December through March. Winter precipitation is typically rain and snow from large-scale weather systems. Summer precipitation is rain, which is often the result of localized activity caused by solar heating, rising air, and associated thunderstorms.

3.4.2 Air Quality

The region of influence for air quality issues varies according to the type of air pollution being discussed. Primary pollutants, such as carbon monoxide and directly emitted particulate matter, have a localized region of influence generally restricted to the immediate vicinity of the source of emissions. Secondary pollutants, such as ozone, have a broader region of influence.

3.4.2.1 Ambient Air Quality Standards

Both Nevada and the federal government have established ambient air quality standards for several different pollutants, often referred to as criteria pollutants (Table 3-2). Nevada's standards are equal to or more stringent than the federal standards. As indicated in Table 3-2, ambient standards for some criteria pollutants have been set for both short and long exposure episodes. Most ambient standards have been set to protect public health, while some state ambient air quality standards may be based on other considerations, such as protecting crops and materials or avoiding nuisance conditions.

Nevada is mandated to identify geographic areas that do not meet federal and state air quality standards. The state uses air quality data gathered by monitoring networks to determine the areas within the state not attaining standards. Areas that violate federal or state standards are referred to as "nonattainment areas" for the relevant pollutants.

3.4.2.2 Existing Air Quality Conditions

In Nevada, the Lake Tahoe Nevada area, Las Vegas area, and Reno area are nonattainment for carbon monoxide; Washoe County (Reno) and Clark County (Las Vegas) are nonattainment for PM_{10}; and Washoe County is nonattainment for ozone (40 CFR Part 81). There are no nonattainment designations for the rest of the state, including Churchill County.

Particulate matter is the only monitored air pollutant in Churchill, Lander, Mineral, and Nye counties. Churchill County monitored total suspended particulates (an earlier standard for measuring particulate matter) from 1971 through 1987. The county started monitoring PM_{10} in 1993. Data from the Churchill County monitoring station indicate that PM_{10} levels are within 24-hour standards (Churchill County 1995).

TABLE 3-2
AMBIENT AIR QUALITY STANDARDS APPLICABLE IN NEVADA

Pollutant	Symbol	Averaging Time	Standard, as parts per million by volume		Standard, as micrograms per cubic meter		Violation Criteria	
			Nevada	National	Nevada	National	Nevada	National
Ozone	O_3	1 Hour	0.12	0.12	235	235	If exceeded	If exceeded on more than 3 days in 3 years
Carbon Monoxide	CO	8 Hours	9.0	9	10,000	10,000	If exceeded	If exceeded more than 1 day per year
		1 Hour	35	35	40,000	40,000	If exceeded	If exceeded more than 1 day per year
Inhalable Particulate Matter	PM_{10}	Annual Geometric Mean	—	—	50	50	If exceeded	If exceeded
		24 Hours	—	—	130	150	If exceeded	If exceeded more than 1 day per year
Nitrogen Dioxide	NO_2	Annual Average	0.05	0.053	100	100	—	If exceeded
Sulfur Dioxide	SO_2	Annual Average	0.03	0.03	80	80	If exceeded	If exceeded
		24 Hours	0.14	0.14	365	365	If exceeded	If exceeded more than 1 day per year
		3 Hour	0.50	—	1,300	—	If exceeded	If exceeded more than 1 day per year
Lead Particles	Pb	Calendar Quarter Average	—	—	1.5	1.5	—	If exceeded more than 1 day per year
Hydrogen Sulfide	H_2S	1 Hour	0.08	—	112	—	If exceeded	—
Visibility	To maintain the prevailing visibility of greater than 30 miles when humidity is less than 70% (state standard only)							

Source: Churchill County 1995

Notes: All standards are based on measurements at 25 degrees C and 1 atmosphere pressure.
Decimal places shown for standards reflect the rounding precision used for evaluating compliance.
National standards shown are the primary (health effects) standards.
Current air quality standards for particulate matter are based on the inhalable component of suspended particulate matter (PM_{10}).

3.4.2.3 Federal Clean Air Act Conformity Process

Section 176(c) of the Clean Air Act requires federal agencies to ensure that their proposed actions are consistent with the Clean Air Act and with federally enforceable air quality management plans. The EPA has promulgated separate rules that establish conformity analysis procedures for transportation-related actions and for other (general) federal agency actions. The conformity review process is intended to ensure that federal agency actions comply with the following:

- Will not cause or contribute to new violations of any federal ambient air quality standards,
- Will not increase the frequency or severity of any existing violations of federal ambient air quality standards, and

- Will not delay the timely attainment of federal ambient air quality standards.

A formal conformity determination is required for federal actions occurring in nonattainment areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. NAS Fallon is not located in a nonattainment area and is therefore not subject to conformity requirements.

3.4.2.4 Air Quality Planning

State of Nevada. Nevada's authority to implement its air quality program is contained in Nevada Revised Statutes (NRS) 445.401 to 445.601, which states the broad powers of the program as follows:

"It is the public policy of the State of Nevada to achieve and maintain levels of air quality that will protect human health and safety, prevent injury to plant and animal life, prevent damage to property, and preserve visibility and scenic, aesthetic and historic values of the State."

Churchill County. While Churchill County has not violated PM_{10} air quality standards, the Churchill County Master Plan stresses the importance of implementing programs to reduce suspended particulates. The plan suggests precautions that can be taken to prevent unnecessary or excessive generation of dust, including sprinkling construction sites; compacting, re-vegetating, and landscaping; chemical palliative or asphalt sealing; installing windscreens to break the wind to agricultural land; imposing reduced speed on dirt roads; limiting burning, tilling, and earth moving at high risk periods; using cargo covers on trucks hauling sand or dirt; and using phased grading and tilling operations (Churchill County 1995).

The Churchill County Master Plan also recommends that programs to reduce vehicular traffic miles must be evaluated to balance anticipated increases in traffic. These programs should include encouraging car-pooling by employers; reviewing potential public transportation, especially between the City of Fallon and NAS Fallon; and planning land uses to minimize divisions between residential areas and areas of services (Churchill County 1995).

3.5 NOISE

3.5.1 Noise Terminology

Sound level meters measure pressure fluctuations from sound waves, with separate measurements made for different sound frequency ranges. These

measurements are reported in a logarithmic decibel (dB) scale. Because the human ear is not equally sensitive to all frequencies, the "A-weighted" decibel scale (dBA) is used to weight the meter's response to approximate that of the human ear. As a point of reference, the following are typical decibel levels of common sounds—barren area with no wind, water, insects, or animals, 20 dB; bedroom at night, 30 dB; typical rural area background conditions, 45 dB; typical suburban background conditions, 50 dB; air conditioner at 100 feet, 60 dB; vacuum cleaner at 10 feet, 70 dB; garbage disposal, 80 dB; average crowd noise in an indoor sports arena, 90 dB; and chain saw at three feet, 105 dB. Using an A-weighted decibel scale, 90 dB is four times as loud as 70 dB while 50 dB is one-quarter as loud.

Equivalent noise levels (Leq) are used to develop single-value descriptions of average noise exposure over various periods. Average noise exposure over a 24-hour period often is presented as a community noise equivalent level (CNEL) or as a day-night average noise level (Ldn). CNEL values are calculated from hourly Leq values, with the Leq values for the evening period (7 PM to 10 PM) increased by five dB and Leq values for the nighttime period (10 PM to 7 AM) increased by 10 dB. Ldn values are very similar to CNEL values but do not include any weighting factor for evening period noise levels. The weighting of evening and nighttime noise levels reflects the greater disturbance potential from nighttime noises.

3.5.2 Existing Noise Conditions

Since noise levels decrease as the distance from the source increases, the affected region for noise issues is generally more limited than for other resources. The region of influence for noise issues in this FEIS is Churchill County, specifically the portions of the county surrounding the NAS Fallon training ranges.

The areas of Churchill County that fall within the airspace boundaries associated with NAS Fallon experience generally elevated Ldn noise levels. These levels range from 75 dB near the NAS Fallon station boundary to 65 dB in adjacent areas of Fallon and are primarily the result of aircraft overflights. Noise levels vary in and around the training ranges, from 60 dB outside the ranges to over 75 dB inside the ranges and along flight patterns (SAIC 1991).

Near the training ranges, noise from air-to-ground gunnery cannot be detected because of higher levels of noise from aircraft involved in gunnery activity. Within B-16, only practice/inert and training ordnance are used, producing little noise. Live ordnance dropped on B-17 and B-20 produces 65 dB noise contours at a distance of 6.7 miles from the impact area, while the delivery of explosive ordnance on B-19 produces a 65 dB contour 5.7 miles

from the impact area. These data indicate that areas outside the withdrawn ranges are experiencing noise from training activities (SAIC 1991).

3.5.3 Noise Studies

Under a federal program initiated in 1973, under DOD Instruction 4165.57, military air installations are required to analyze the effects of air activities and to provide recommendations for land use planning in adjacent areas that are compatible with air installation operation. In 1977, the Navy conducted an air installation compatible use zone (AICUZ) study to develop a map illustrating noise contours around the air station (US Navy 1977). The study was updated and contours were revised in 1992 (US Navy 1992).

As described in Chapter 1 and shown in Figure 1-6, a RAICUZ study was prepared for the NAS Fallon training ranges in 1982 (US Navy 1982b). The RAICUZ study identified areas contiguous to the established training ranges where noise levels and safety hazard levels exceeded Navy guidelines for the existing land uses. Table 3-3 presents individual land uses and their compatible noise levels. The acceptable noise levels are based on the US Department of Housing and Urban Development document *Aircraft Noise Impact, Planning Guidelines for Local Agencies*; the noise levels have been adjusted down five decibels to take into account the low background noise level in the area.

TABLE 3-3
LAND USE COMPATIBILITY WITH NOISE LEVELS

Land Use	Normally Acceptable Noise Levels
Residential (single family, duplex, mobile homes)	< 60 dB
Residential (multiple family)	< 60 dB
School classrooms, libraries, churches	< 60 dB
Playgrounds, neighborhood parks	< 75 dB
Livestock farming, animal breeding	< 75 dB
Agriculture (except livestock), mining, fishing	< 80 dB
Public rights-of-way	< 75 dB
Extensive natural recreation areas	< 75 dB

Source: US Navy 1982b

Because of changes in aircraft technology and training tactics and in response to public concern, the Navy conducted an aircraft noise study for the B-16 Range Complex (US Navy 1995f). The study calculated and plotted noise levels for average "busy day" operations at the range (Figure 1-4). A busy day is defined as any 24-hour period in which the day's total operations are at least 50 percent of the annual average daily operations. In 1994, B-16 experienced 151 busy days. The noise contours for B-16 are mapped in Figure 5-4 in Chapter 5.

Noise contours defined by these studies have been supported by noise complaints from residents north of B-16 and west of the City of Fallon. Noise complaints stem primarily from high-speed, long run-in overflights by military jets. These types of flights have increased in recent years in conjunction with technological and military training developments. Residential development, which has been extending northwest from the City of Fallon since the early 1950s, has brought an increasing number of people into zones where noise levels have concurrently been on the increase. Most noise complaints have come from owners of private lands adjacent to the proposed withdrawal area, primarily around B-16. NAS Fallon recently revised its training operations around the B-16 range by realigning 12 MTRs to terminate at B-20 instead of B-16, reducing noise levels in the area.

In response to noise complaints, Churchill County adopted a noise ordinance implementing a disclosure statement for existing residences and sound insulation standards for all new residential structures within the 70 dB noise contour of the latest AICUZ studies. Under this ordinance, prospective buyers and tenants within the 70 dB noise contour will receive a notice from the owner disclosing noise conditions at the property. This ordinance also reduces residential construction within the 70 dB noise contour because new construction must contain adequate noise insulation to meet strict county standards (Churchill County 1993; Sugg 1995).

3.5.4 Helicopter Noise

NAS Fallon uses helicopters in its integrated air and ground training mission. Average hourly noise levels above 70 dBA may begin to interfere with outdoor activities, speech, or communication. Peak flyover noise levels above 80 dBA or average flyover event noise levels above 75 dBA would generally be considered intrusive noise events for a normally quiet rural area. Noise levels over 70 dBA make speech communication difficult and speech communication is almost impossible at noise levels over 85 dBA. Intrusive noise events for helicopters may be indicated by peak flyover noise levels above 75 dBA or average flyover event noise levels above 70 dBA.

Table 3-4 illustrates expected noise levels at different distances from the ground track of low altitude (100 feet above ground level) helicopter flights. Noise level estimates in Table 3-4 are presented in several formats: single event levels (SEL), maximum dBA during the flyover event, average dBA during the flyover event, and average hourly dBA for 1 or 5 flights per hour.

TABLE 3-4
ESTIMATED NOISE LEVELS FOR HELICOPTERS[1]

Distance From Flight Track (feet)	Noise Level at Ground			Average Hourly Noise Level (dBA) for Multiple Overflights in One Hour	
	Flyover Event SEL (dBA)	Peak Noise Level (dBA)	Average Event Noise Level (dBA)	1 Flight per Hour	5 Flights per Hour
0	93.7	78.8	74.1	58.1	65.1
100	91.3	76.4	71.7	55.7	62.7
200	88.0	73.1	68.5	52.5	59.5
300	85.6	70.7	66.0	50.0	57.0
400	83.7	68.7	64.1	48.1	55.1
500	82.1	67.2	62.5	46.5	53.5
750	79.2	64.2	59.6	43.6	50.6
1,000	77.0	62.1	57.4	41.4	48.4
1,500	73.8	58.9	54.2	38.2	45.2

[1] Noise levels for a UH60A helicopter at 100 feet above ground level for a duration of 90 seconds.
SEL = single event level (the equivalent noise level if the total acoustical energy of the event is condensed into or spread over a fixed 1-second interval). SEL values for aircraft flyovers are based on Navy data.
Peak noise levels were derived by iteration while scaling the noise event profile to a reported SEL value. Average event noise levels were calculated from the simulated event history.
Average aircraft noise levels were estimated by converting flyover SEL data into a simulated time history profile equivalent to the reported SEL value. For analysis, the flyover event is assumed to include a 1 to 2 nautical mile approach path and a 1.5 to 2 nautical mile departure path during which noise levels will exceed a nominal 50 dBA background level.
Time history simulations assume a 3 nautical mile flight path for helicopters (1.4 nautical mile approach and 1.6 nautical mile departure).
The noise level rise to the peak was simulated as a sine wave curve and the noise level drop-off from the peak was simulated as a logarithmic curve.

3.6 VISUAL RESOURCES

Visual resources in an area are defined by many factors including scenic quality and viewer sensitivity. Scenic qualities provide a descriptive impression of a landscape and include natural features, such as topography, vegetation, water, and soils, and human modifications to an area, such as roads, buildings, and utility lines. Viewer sensitivity can be determined by the angle and frequency of the view and the viewer expectations of the landscape. Other sensitivity factors include the public interest, amount of use, and adjacent land use. Sensitivity levels are a measure of public concern for scenic quality.

As the current managing agency of the lands proposed for withdrawal, the BLM has adopted management guidelines for visual resources in the Lahontan Resource Management Plan. The plan has the objective of managing the lands to protect scenic values and ensuring that visual impacts of management practices and development activities are minimized.

Management actions of the Lahontan Resource Management Plan (RMP) include protecting areas having outstanding scenery as designated by the formal BLM Visual Resource Management (VRM) Program. This process uses assessment and classification procedures to manage visual resources and to reduce impacts of development projects. The Lahontan RMP does not provide a VRM classification of the lands proposed for withdrawal.

The BLM VRM program includes an inventory of BLM-administered lands to determine their visual value. The inventory is based on a scenic quality evaluation, sensitivity level analysis, and delineation of distance zones. Based on these factors, lands are placed in one of four visual resource inventory classes. Classes I and II are the most valued, Class III represents moderate value, and Class IV is least valued. Visual resource inventory classes are used as the basis for considering visual values in the resource management planning process (BLM 1986). While no official classes have been established for the proposed withdrawal area, a BLM visual resource specialist recommended that the lands generally be given an interim Class III rating. In the Job Peak wilderness study area, the lands should be afforded an interim Class II rating (Abbett 1997).

The scenic quality evaluation portion of the visual resource inventory measures the visual appeal of a tract of land. The evaluation includes seven key factors—landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Based on these factors, the lands are given an A, B, C, or D rating, with Class A lands having the highest scenic quality and Class D lands having the lowest scenic quality.

The scenic qualities of the lands near the training ranges are characteristic of the basin and range area of the western United States. Gold and brown hills diffuse into steep rugged mountains. Alkali flats and low desert brush dominate the valley lowlands, allowing expansive views from the valleys to the surrounding mountains. The higher elevations support sagebrush, juniper, and pinyon pine that provide visual diversity and contrasting darker color along ridgelines in the distant background. Vegetation grows low and evenly on the valley floor and primarily consists of monochromatic desert brush. Cultural modifications in the study area include existing roads, utility lines, radar equipment, including EW, TACTS, and visual cueing device sites, fences, and scattered residences.

Recreation sightseeing inventories completed for the Fort Churchill and Clan Alpine planning units identified the Desert Mountains, Dead Camel Mountains, Sand Springs, and Fairview Ranges as having above common (Class B) scenic values. The southern end of the Stillwater Range was identified as having outstanding (Class A) scenic sightseeing values.

Viewer sensitivity around the training ranges is related primarily to major roads and the Pony Express National Historic Trail through the area because public access to most landscapes within the area is limited. Landscapes with the foreground and middleground view to a distance of approximately five miles from Highway 50, Highway 95, and the Pony Express National Historic Trail generally have a high viewer sensitivity within the withdrawal area. Highway 50 is part of a National Parks Service—proposed National Trails System trail called the American Discovery Trail.

The following descriptions characterize the scenic quality and viewer sensitivity of the lands around the B-16, B-17, and B-19 training ranges as well as for the shoal site and the Dixie Valley area.

At the B-16 training range and proposed withdrawal land surrounding the range, the scenic qualities consist of a relatively flat area with sparse vegetation. Scenic qualities of these lands are overshadowed by the nearby Dead Camel Mountains that visually dominate the proposed withdrawal lands. Highway 95 constitutes the most viewer-sensitive viewpoint because of the number and frequency of viewers with access to this location.

For the proposed withdrawal land surrounding the B-17 training range, the scenic qualities are similar to the B-16 range. The landform includes the relatively flat valley basin surrounded by the nearby ranges. Viewer sensitivity is dominated by long distance views from Highway 50, particularly the eastbound view descending from Sand Spring Pass toward B-17.

At the B-19 training range and the proposed withdrawal land surrounding the range scenic qualities consist of the relatively flat landform with surrounding hills. Viewer sensitivity is relatively low, except for lands adjacent to Highway 95 with foreground views of the lands proposed for withdrawal.

Scenic qualities at the shoal site include the variable hillside landform characteristic of Nevada high desert topography. Viewer sensitivity is low because of the distance from Highway 50.

For the proposed withdrawal land surrounding the Dixie Valley area, the scenic qualities include monochromatic low-lying scrub vegetation on the relatively flat valley floor, surrounded by the extensive hills and mountains of the Stillwater and Clan Alpine mountain ranges. Cattle guards, fences, and EW and TACTS sites are visible in this area. The Job Peak Wilderness Study Area is within a portion of the withdrawal area proposed under Alternatives I and III but not in the area proposed for Alternative II

(Figure 3-1). Viewer sensitivity is dominated by views from Highway 50, particularly the eastbound view descending from Sand Spring Pass toward the Dixie Valley.

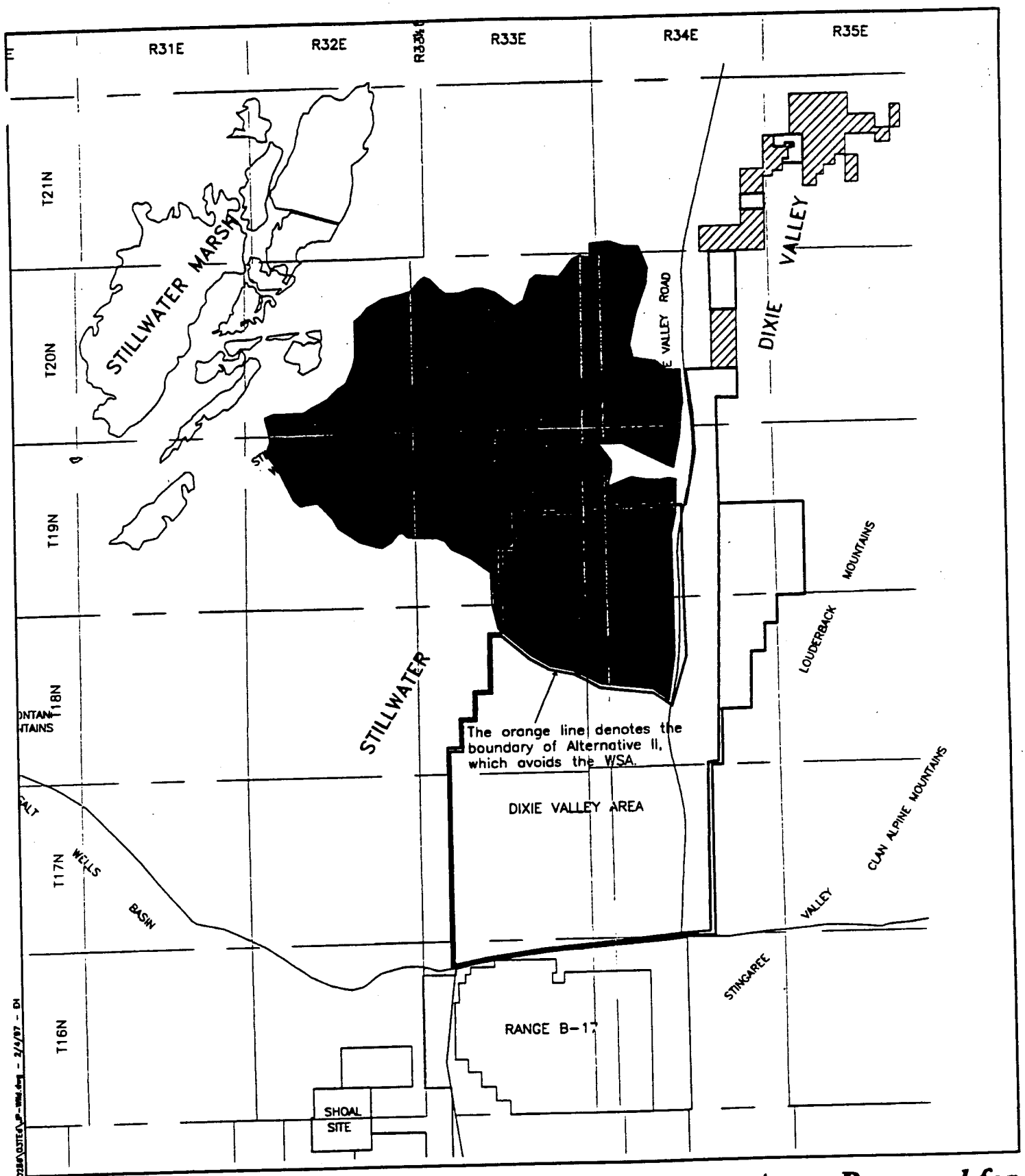
3.7 CULTURAL RESOURCES

Cultural resources is defined as including prehistoric and historic archeological sites and objects, structures, and sites of traditional cultural importance.

There is a long record of prehistoric use of the area. The general region is known to have been occupied since the Late Pleistocene, at least 11,000 to 10,000 years ago, when the Humboldt and Carson Sinks were part of the vast Lake Lahontan system. Sites with deep archeological deposits and long sequences of prehistoric occupation are found around the margins of those ancient lakes and in the then well-watered adjacent valleys and along the lower mountain slopes. Notable among the recorded prehistoric sites on the proposed withdrawal lands are Salt Cave and Eetza Cave. Other notable sites in the vicinity include the Grimes Point National Register Archeological District, which includes the Grimes Point Petroglyph site and the archeological sites at Picnic Cave, Hidden Cave, and Hanging Rock Cave. Recorded archeological sites within the proposed withdrawal lands, based on intensive survey of only a small percentage of the total surface area, number into the hundreds (Intermountain Research 1995). The area was inhabited by Northern Paiute Indians when the first Euroamericans arrived there in the mid-nineteenth century. Those Indians remain in the region, most of them on the Walker River, Fallon, and Pyramid Lake Reservations to the south and northwest of the proposed withdrawal lands. Some traditional cultural practices, such as sweat lodge ceremonies and plant gathering, continue.

Historically, the area has served as a transportation route. The Pony Express National Historic Trail crosses through the area (see Figure 3-12); the Sand Springs Station historic site lies just south of Sand Mountain; and the Wild Cat Freight Station is located approximately six miles northeast of the B-19 withdrawal lands. The project area also has been exploited for furs, minerals, rangeland, and some limited agriculture, and there are archaeological and architectural remnants of those uses scattered through the area.

Cultural resources on lands administered by federal agencies must be treated in a manner consistent with the requirements of the NHPA of 1966, as amended (16 U.S.C. 470), the Antiquities Act of 1906 (PL 59-209) 16 U.S.C. 431-33 (1970), the Archeological and Historic Preservation Act of 1974 (PL 93-291) 16 U.S.C. 469a, the Archeological Resources Protection Act of 1979



The Job Peak WSA is within a portion of Alternatives I and III but not in the area proposed for Alternative II.

LEGEND:

- Job Peak Wilderness Study Area (WSA)
- Extent of Electronic Warfare land areas considered for withdrawal.
- Alternative II (Preferred Alternative)

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1"=4MI.
(APPROXIMATE)

Areas Proposed for Land Withdrawal Near Job Peak Wilderness Study Area

NAS Fallon, Nevada

Figure 3-1

(PL 96-95) 16 U.S.C. 470aa, the American Indian Religious Freedom Act (42 U.S.C. 1996), and the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601). Under these laws, federal agencies are required to inventory, evaluate, and protect cultural resources of local, regional, or national significance. Native American graves and grave goods are afforded special protection. Section 106 of NHPA requires federal agencies to provide the ACHP the opportunity to comment on federal undertakings that will affect cultural resources eligible for or included in the National Register of Historic Places. Regulations implementing these requirements are set forth in Title 36, Part 800, of the Code of Federal Regulations.

A programmatic agreement among the Navy, the ACHP, and the SHPO has been completed. The agreement stipulates procedures necessary to satisfy NHPA Section 106 requirements on all of NAS Fallon's land holdings for future undertakings, thereby precluding the need for numerous individual requests for comments (pursuant to Section 106). All interested parties, including the Walker River Paiute and Fallon Pauite-Shoshone tribes, have had the opportunity to review the PA.

A CRMP has been prepared for NAS Fallon and the FRTC (US Navy 1993a). The CRMP serves as a database of known cultural resources at NAS Fallon training ranges and withdrawal areas, including a three-mile buffer around the 1982 withdrawal proposal boundaries. These sites are listed in Appendix G (Tables G-1 and G-3). Additionally, it provides the documentation and guidance necessary to ensure timely compliance with applicable laws and regulations assuring appropriate treatment of National Register-listed or eligible historic properties, including but not limited to historical and archeological sites and sites with Native American skeletal remains and associated grave goods. Local Native Americans have had the opportunity to review and comment on the CRMP and the associated PA.

An archeological site prediction model also has been developed for NAS Fallon that covers all of the Carson Desert (Intermountain Research 1995). A five percent sample survey of all existing and proposed withdrawal lands has been conducted to test the model. Table G-3 in Appendix G lists sites documented during the test on Navy lands. The model permits prediction of the archeological site potential of NAS Fallon's lands for planning purposes based on existing ecozone, landforms, or other factors. Descriptions of known and predicted cultural resources on Navy lands are contained within the above-referenced documents and are not reiterated in this section. The model will be used for siting training equipment on withdrawn lands and for establishing areas for ground training activities.

Implementing the CRMP and the PA will follow a general process of having professional archeologists survey the project area to identify cultural resources that might qualify for National Register. The cultural resources

identified through the survey would be evaluated, as would the potential impacts, and an appropriate preservation strategy would be developed in consultation with the SHPO.

3.8 LAND USE

NAS Fallon is in the west-central part of Nevada within Churchill County. The City of Fallon is the major community within the project area. The proposed withdrawal areas are associated with training ranges B-16, B-17, and B-19 and the Dixie Valley area and shoal site, which are all part of the FRTC. The major training activities in these areas include air-to-ground bombing, strafing, and rocket practice on fixed targets in withdrawn training ranges; air combat maneuvering practice within designated military airspace in the region; aerial maneuvering and electronic countermeasure training under simulated adversary tracking and defense scenarios; and ground activities on the shoal site landing zone. History and details of the FRTC development are discussed in Chapters 1 and 2.

3.8.1 Proposed Land Withdrawals

The Navy proposes to withdraw between 127,365 and approximately 189,080 acres of public lands for the FRTC as described below.

3.8.1.1 Training Range B-16

The B-16 training range consists of 17,280 acres of land that was withdrawn indefinitely by PLO 898 in 1953. Public access on B-16 is prohibited.

All of the lands proposed for withdrawal around B-16 are federally owned under BLM or BUREC jurisdiction (Figure 3-2), with some of the BUREC lands being administered by the Truckee-Carson Irrigation District (TCID). Under Alternative I, one section of land not proposed for withdrawal (Section 33, R27E, T19N) is privately owned. Some lands north of B-16 are licensed as a flight approach zone, as per a 1964 license executed by the BUREC, accepted by the Navy, and concurred with by TCID. This zone is one mile wide and approximately six miles long. The license requires Navy aircraft to fly at a minimum elevation of 100 feet and limits construction by BUREC and TCID to a maximum height of 25 feet.

All lands proposed for withdrawal would be placed in Category B status except for 640 acres east of the range, which would be placed in Category A status.

3.8.1.2 Training Range B-17

The B-17 training range consists of 21,400 acres of land that was withdrawn indefinitely by PLO 898 in 1953. Public access on the training range is prohibited. Future plans include increased tactical target density, EW site development, and modified target designs.

All of the lands proposed for withdrawal associated with B-17 are federally owned and administered by the BLM. There are existing EW sites on B-17 and lands surrounding the range (Figure 3-3). Some areas of private land east and south of B-17 are surrounded by proposed withdrawal lands. These private lands are associated with patented mining claims (BLM 1986).

All withdrawn lands would be managed under Category A status except for the 2,495 acres proposed only under Alternative I. These lands would be managed as Category B.

3.8.1.3 Training Range B-19

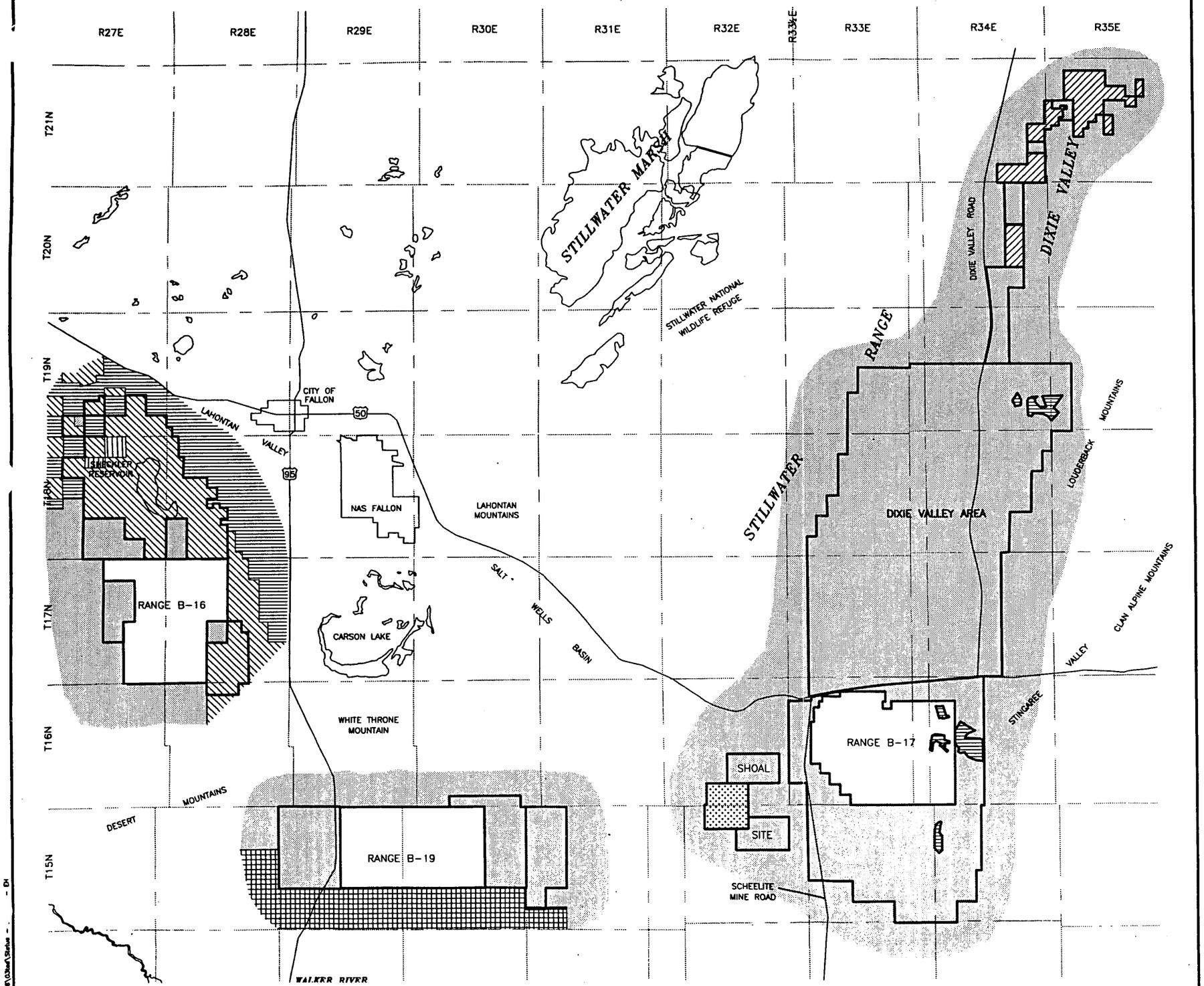
The B-19 training range contains about 17,339 acres of land that was indefinitely withdrawn under PLO 898 in 1953 Public access is prohibited on B-19.

All of the proposed withdrawal lands associated with B-19 are public lands administered by the BLM. Lands immediately south of B-19 are managed by the Walker River Paiute Tribe.

The proposed withdrawal lands containing off-range ordnance would be designated Category A; the remaining lands would be designated Category B.

3.8.1.4 The Shoal Site

No lands currently are withdrawn by the Navy at the shoal site. The proposed withdrawal lands associated with the shoal site are federally owned; approximately 4,640 acres are administered by the BLM, and 2,765 acres are administered by the DOE. The westernmost portion of these lands was the site of an early underground nuclear test explosion in 1963 and is known as the Atomic Energy Commission site. The site was deactivated from nuclear testing in 1964. A preliminary site assessment conducted in 1988 gave the site a Hazard Ranking System score of 3.52, below the minimum score required for listing on the National Priorities List under Superfund. The DOE is characterizing and remediating the surface areas for public use. The subsurface will remain excluded from access (DOE 1996). Prior to the enactment of FLMPA in 1976, the Navy used 4,800 acres of land north and south of the DOE shoal site under a BLM special land use permit. Navy use of the shoal site ended with the termination of the permit.



Legend

- Public land managed by Bureau of Land Management
- Public land withdrawn by Bureau of Reclamation
- Public land withdrawn by Department of Energy
- Walker River Indian Reservation
- Private land and non-federal public land
- Bureau of Reclamation acquired lands
- Navy-owned land in Dixie Valley

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1"=5MI.
(APPROXIMATE)

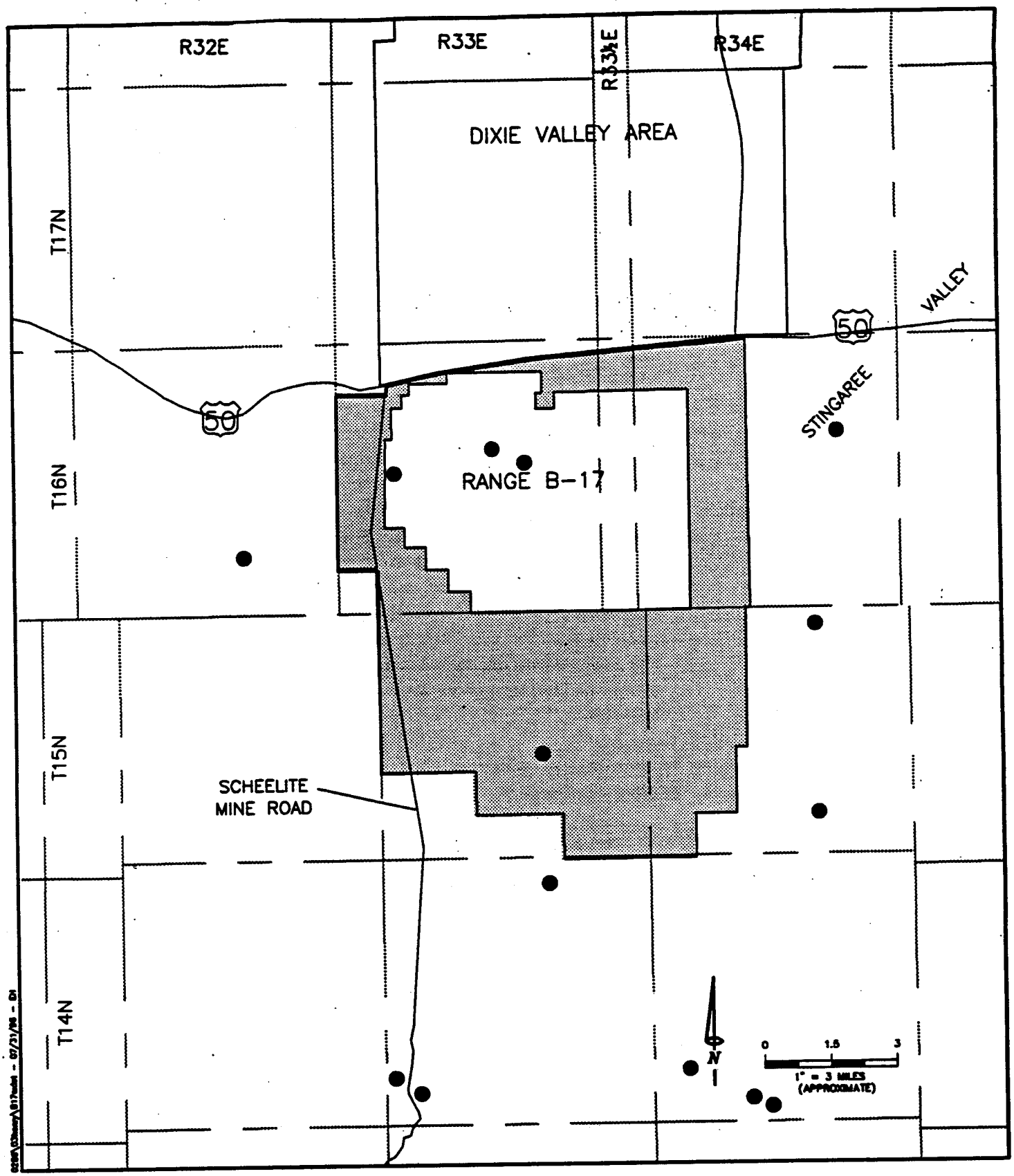
All of the proposed withdrawal lands are administered by the BLM, BUREC, or DOE.

Land Ownership Status Surrounding Proposed Withdrawal Areas

NAS Fallon, Nevada

Figure 3-2

Source: BLM 1978; U.S. Navy 1982b; SAIC 1991.



Existing sites in and around Range B-17 provide electronic warfare capability in this area.

LEGEND:

Existing EW Sites

Land surrounding B-17 and considered for withdrawal

Existing EW Sites (Range B-17)

NAS Fallon, Nevada

Source: NAS Fallon

Figure 3-3

Lands proposed for withdrawal at the shoal site would be designated Category B. This would be a withdrawal over a withdrawal.

3.8.1.5 The Dixie Valley Area

No lands currently are withdrawn by the Navy in the Dixie Valley area. The proposed withdrawal lands associated with the Dixie Valley area are federally owned and are administered by the BLM. There are existing EW sites within the proposed withdrawal area (Figure 3-4). Additionally, some acres of private land are surrounded by proposed withdrawal lands associated with the Dixie Valley area. These private lands are patented mining claims (BLM 1986).

Approximately 22,390 acres of the Job Peak WSA is included in the proposed Dixie Valley area under all of the alternatives except Alternative II (Figure 3-1). Wilderness study areas are those under consideration for a wilderness designation. Lands under wilderness review are managed according to the BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review (BLM 1979a), which is designed to protect wilderness values to the maximum extent possible while permitting other land uses, such as grazing and mineral and energy exploration and development, to continue as long as they do not impair those values. The BLM Carson City District Office has not recommended this WSA for wilderness designation, but the final decision on land status will be made by Congress. This area presently experiences Navy overflights as aircraft approach B-17.

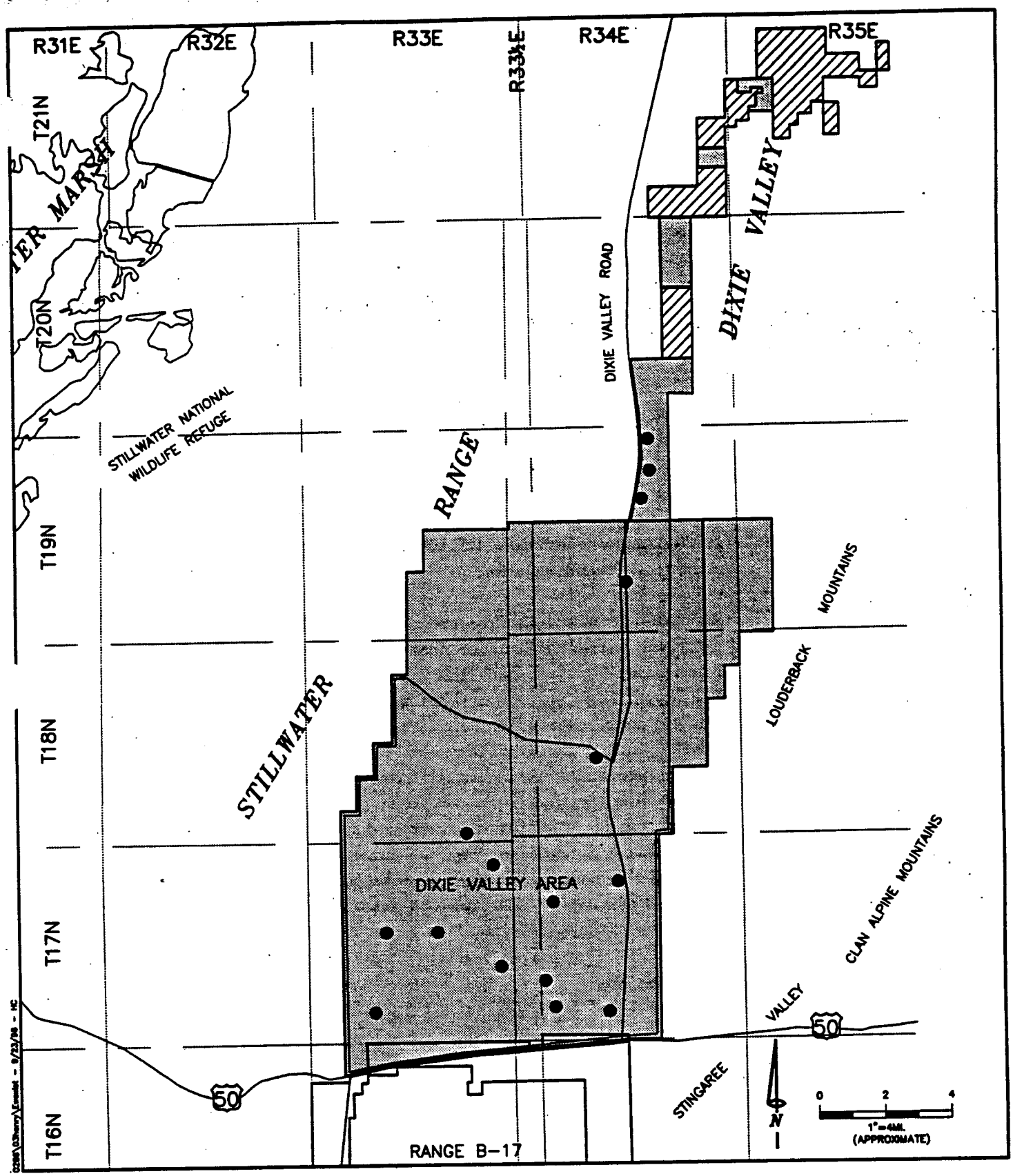
The proposed withdrawal lands in the Dixie Valley area would be designated Category B.

3.8.2 Lands Being Used but not Withdrawn

FAA surveillance radar exists at NAS Fallon and at Battle Mountain. Additional air traffic control gap filler radar installations have been developed near Gabbs, Dixie Valley, and on Vigus Butte near Austin, Nevada, to provide enhanced flight safety for both military and civilian users. These sites are comprised of three high-speed, short-range, terminal-type radars. Each site occupies less than one acre, not including access roads and utility corridors and they are not staffed.

3.8.3 Land Use Activities

There are four primary nonmilitary land use activities within the proposed withdrawal lands—mining, livestock grazing, recreation, and ROWs, easements, and leases.



EW sites currently extend north into Dixie Valley.

LEGEND:

- Existing EW Sites
- Navy-owned Land in Dixie Valley
- Dixie Valley Area Land Considered for Withdrawal

Source: NAS Fallon

Existing EW Sites (Dixie Valley Area)

NAS Fallon, Nevada

Figure 3-4

A number of mining claims are in the proposed withdrawal lands. Some claims are partially located in the withdrawal areas, but most of claims are east of B-17 in the Fairview Mining District. Section 3.10 provides a more detailed description of mining activities in the proposed withdrawal areas.

Livestock graze on all of the proposed withdrawal lands except those north and southeast of B-16 (Figure 3-10). Grazing on public lands is managed by the BLM and BUREC. Permits for grazing allotments specify the number of livestock that will be permitted to graze on the allotment. Section 3.11 provides a more detailed description of grazing activities in the proposed withdrawal areas.

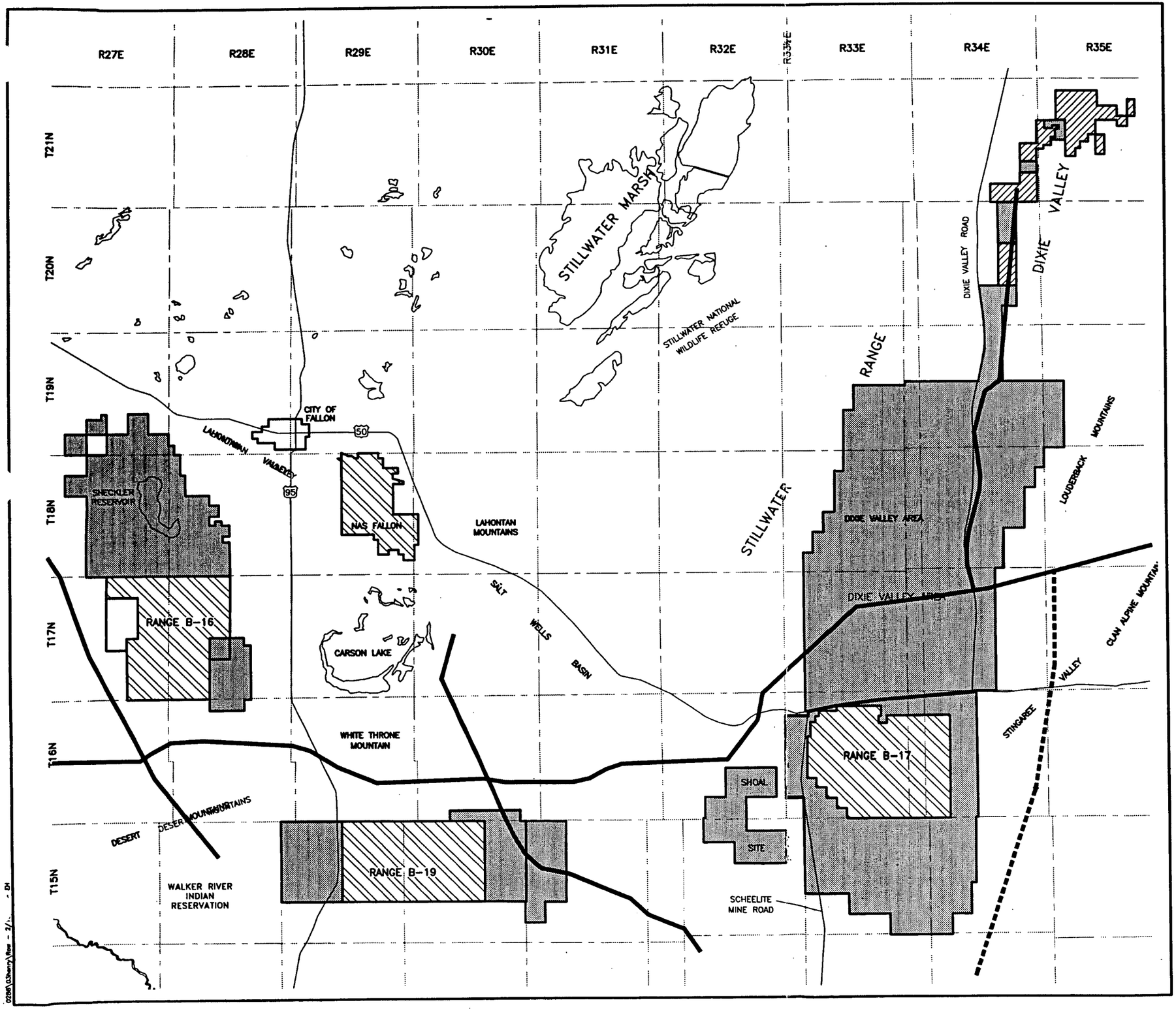
Recreation activities in the withdrawal area include hunting, camping, and off-road vehicle use (including organized off-road vehicle events). Sheckler Reservoir contains water periodically throughout the year and is located in the proposed withdrawal area north of B-16. The reservoir can be used intermittently for hunting, fishing, and other water-based recreation. Section 3.12 provides a more detailed description of recreation activities in the proposed withdrawal areas.

Rights-of-way within the proposed land withdrawal area have been designated for roads, transmission lines, pipeline corridors, and other land uses. Figure 3-5 presents BLM utility ROW corridors in the project area. The Nevada Department of Transportation (NDOT) has borrow sites for sand and gravel within the proposed withdrawal area along Sheelite Mine Road and Dixie Valley Road. The Sierra Pacific Power Company has a 230 Kv transmission line that runs east to west across the Dixie Valley. This line connects into the Utah Power and Light power grid. A portion of a transmission line that transports power from the Oxbow Geothermal Power Plant to a connection with the Southern California Edison grid in Bishop, California, is located in the proposed Dixie Valley area withdrawal, parallel to Dixie Valley Road. A power line running in a generally north and south direction is east of B-19.

3.8.4 Fallon Area Development Trends

3.8.4.1 City of Fallon

In recent years, most growth within the City of Fallon has been to the north, south, and west, close to existing city boundaries. There are approximately 300 acres of undeveloped land within Fallon city limits. Until 1988, there was a general moratorium that prohibited any future annexation of land to the city limits. Before this general moratorium on future annexations, there was a specific moratorium on annexation of land to the west of the present city boundaries. Growth north of Fallon's boundaries is generally constrained by the irrigation canal (White 1995).



LEGEND:

- Existing ROW Corridors
- Proposed ROW Corridors
- Extent of Lands Proposed for Withdrawal
- Navy–owned land in Dixie Valley
- NAS Fallon and Ranges

Note: The utility planning corridor through the Stillwater Range will be granted only if the Job Peak WSA is dropped from consideration as wilderness area.

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1"=5MI.
(APPROXIMATE)

Rights–of–way within the proposed land withdrawal area have been designated for roads, transmission lines, and pipeline corridors.

Existing and Planned Right-Of-Way Corridors

NAS Fallon, Nevada

Figure 3-5

Source: BLM, 1985b. Sierra Pacific Power, 1995.

Growth south and east of Fallon is generally constrained by the high water table, which can interfere with development of conventional septic tank systems (Hall 1987). Growth to the east also has been less desirable because of its distance from Reno and Carson City and because of noise levels from nearby NAS Fallon. Locating the city's sewage treatment plant approximately one mile southeast of the city boundaries has increased the development potential by removing the need for septic systems. Currently, the sewage treatment plant has a capacity of 1.2 million gallons per day and a usage level of one million gallons per day (White 1995).

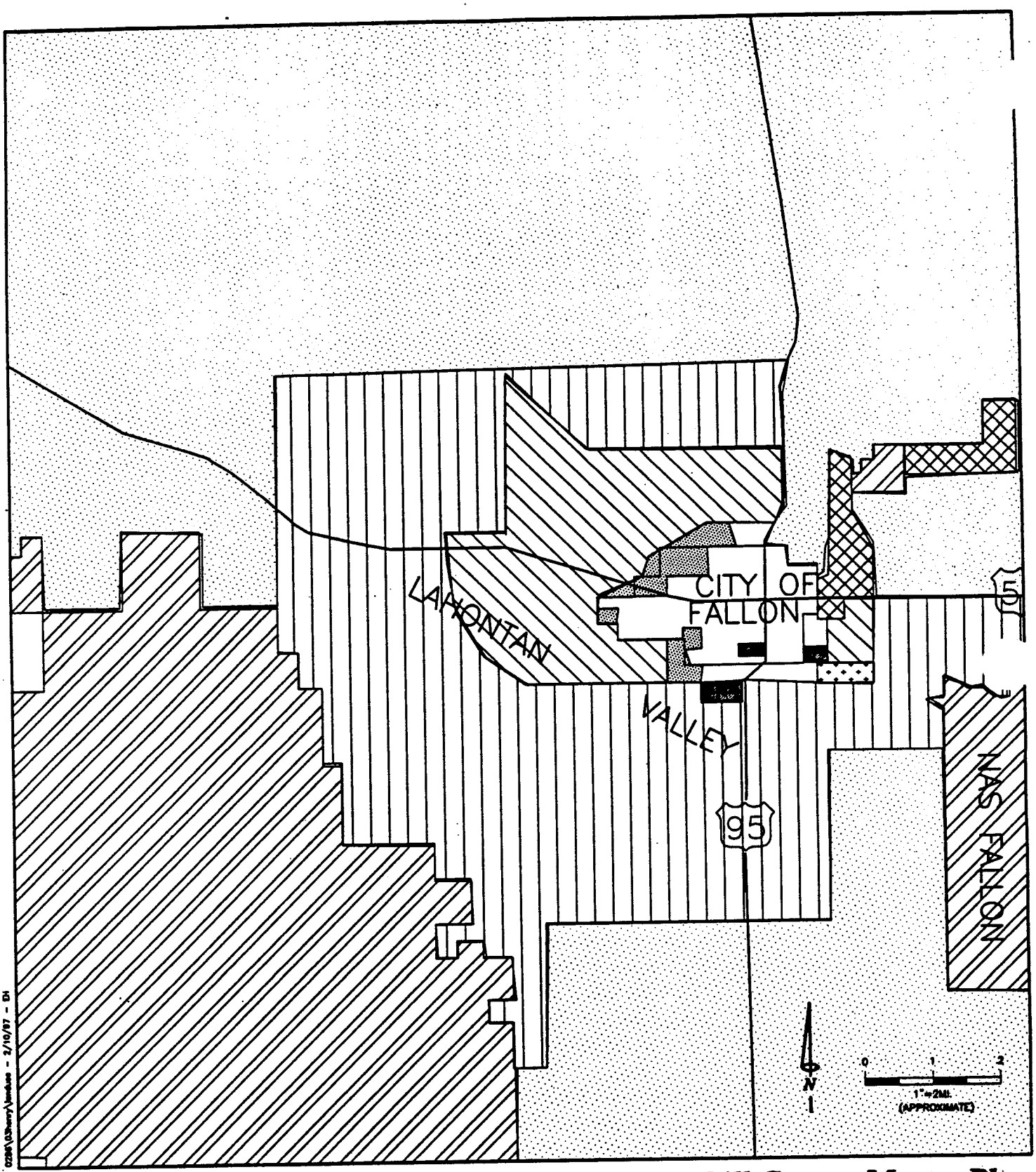
Under reasonably foreseeable economic conditions and growth pressures in Fallon (10 to 15 years), city limits are projected to expand to the Carson River on the north, the TCID canal on the south, the sewage treatment plant on the east, and Coleman Road and the TCID irrigation canal on the west. Once the area within those boundaries is fully developed and if economic and growth pressures increase, then it may become economically viable to annex additional county land into the city limits. Given the proximity of Reno and current county development to the west of Fallon, it is expected that long-term future annexations into the City of Fallon will occur on land west and north of the current city limits (Payne 1995; White 1995).

3.8.5 Churchill County

Growth within Churchill County near Fallon has been primarily west and northwest of the city, northeast of Sheckler Reservoir and along Highway 50 (Figure 3-6). One of the reasons for the growth west is its closer proximity to Reno and Carson City. In recent years, this land has undergone increased parcelization, subdividing, and rezoning from agricultural uses to residential uses (Sugg 1995). Residential growth pressures in this area are expected to remain high.

The area west of Fallon also has a lower water table and sandier soils, both of which are more conducive to the development of conventional septic systems. However, these conditions can vary greatly on a site-specific basis. In addition, the quality of the water in the shallow aquifer in this area is generally better than in other portions of the county surrounding Fallon (Hall 1987).

Growth west of Fallon borders up to public land that is not readily transferable to private ownership and development. The land that BUREC has withdrawn from BLM for the Newlands project (approximately 21,000 acres) cannot be sold or used for other purposes. BLM lands in the area are identified in the Lahontan RMP for retention in public ownership.



Churchill County expected land use patterns through 2010.

LEGEND:

- Medium Density Residential
- Public
- High Density Residential
- Industrial
- General Commercial
- Agricultural/Low Density Residential
- Mobile Home Overlay
- Agriculture

Source: Churchill County 1990

Churchill County Master Plan Land Use Designations

NAS Fallon, Nevada

Figure 3-6

Privately owned lands north of Sheckler Reservoir and adjacent to the proposed withdrawal lands at the north of B-16 face development constraints because of a lack of ROWs. TCID roads pass through much of this land but are privately maintained and not considered by the county as legal access for the public. Churchill County will not approve development applications for land owners without legal ROW access through BLM lands (Sugg 1995). This policy discourages private development north of B-16.

3.8.5.1 Land Use and Zoning

The Land Use Element of the Churchill County Master Plan identifies general land use areas indicating anticipated future development patterns. Most of the land surrounding Fallon is indicated for agriculture/low density residential and medium density residential. The land use map is very generalized, reflecting the speculative nature of predicting future growth (Churchill County 1990).

The general concept of the plan is to provide commercial, industrial, and residential expansion in a concentric pattern from Fallon. The element acknowledges that as growth occurs, it may be in the best interest of both the federal government and the county to exchange specific parcels of land to allow consolidation of development for the county and to provide a buffer for a federal agency activity.

The county master plan land use designations for the withdrawal areas associated with Range B-17, B-19, the Dixie Valley area, and shoal site are public and open. The public designation primarily is intended for facilities owned and operated by government agencies, while the open designation primarily is intended for outdoor recreation, agriculture, watershed protection, and sensitive environmental areas. As a secondary use, lands designated open may serve as a buffer between land use types. The public designation is consistent with all zones, and the open designation is consistent with zones A-1, A-1-E, A-2, A-3, and R-R.

The land use designations for the withdrawal areas associated with Range B-16 are public, agriculture/low density residential, open, and agricultural. The public and open land use designations are described above. The agricultural/low density residential (AG/LDR) and agricultural (AG) designations are primarily intended for agricultural uses and single-family dwellings at rural densities. The AG/LDR designation allows a net parcel size of five acres or greater and one single-family dwelling per parcel. The AG designation allows a net parcel size of 20 acres or greater and one single-family dwelling per parcel with additional housing for on-site employees. The secondary uses for AG/LDR lands include home occupations, outdoor recreation facilities, and public and quasi-public uses. Secondary uses for AG designated lands includes crops, animal husbandry, intense animal uses,

home occupations, mining, and group quarters. The AG/LDR designation is consistent with zone A-2, while the AG designation is consistent with zone A-3 (Churchill County 1990).

Most of the land between the western Fallon city limits and B-16 is zoned by the county as second agricultural (A-2), third agricultural (A-3), and rural resources (RR) (Figure 3-7). Land near the western edge of Fallon is zoned first estates (E-1), single-family residential (R-1), multiple residential (R-2), transitional residential-commercial (C-1), and general commercial (C-2). The land withdrawal area associated with Range B-17, B-19, the shoal site, and the Dixie Valley area is zoned R-R. The zoning classifications for the withdrawal areas are consistent with the master plan land use designations for these areas, described above (Churchill County 1995).

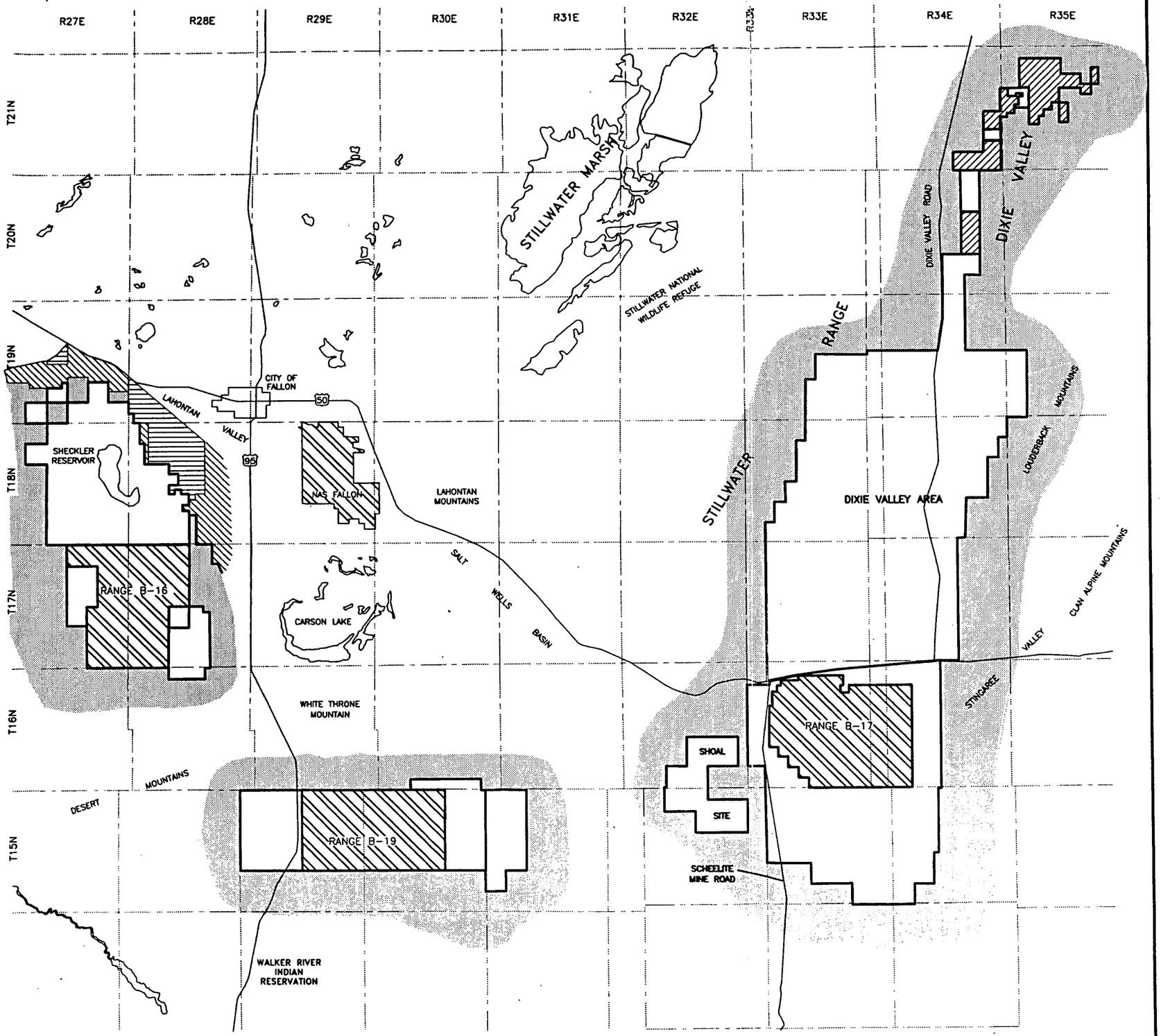
Parcels zoned A-2 must have a minimum area of five acres, and lands zoned A-3 must have a minimum area of ten acres. Permitted uses of A-2 and A-3 lands include single-family dwellings and farms for raising livestock and field crops. Specially permitted uses include education, recreation, rock and gravel mining, transmission lines, and game refuges (Churchill County 1984).

Land zoned R-R has a minimum area requirement of 20 acres. The R-R classification applies to all unincorporated county lands not otherwise classified and is intended to "protect and enhance all natural resources, including historical and archeological sites." Permitted uses are the same as those for lands zoned A-3 (Churchill County 1984; Sugg 1995). The county has identified military overflight and noise zones as land use constraints in determining residential land uses (Churchill County 1990). This consideration of public health and safety relative to the FRTC may discourage higher density development west of the bounds of the water-righted properties.

3.8.5.2 Land Development Process

In Churchill County, the division of land parcels for development can be accomplished by parceling into four or fewer pieces or by subdividing into five or more pieces. The subdivision process requires a review and approval by the State Health Division to ensure that adequate conditions exist for water supply and septic systems. While such a review is not required for the parceling process, the State Health Division does review applications forwarded by the county (Sugg 1995).

The county also requires that access to any parcel of ten acres or less be paved and connected to a county-maintained road. Previously,



LEGEND:

- Navy-owned land in Dixie Valley
- NAS Fallon and Ranges

Zoning Designations

- RR, Rural Resources
- A3, Third Agricultural
- A2, Second Agricultural

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1" = 5MI. (APPROXIMATE)

Most of the land around the proposed withdrawal area is zoned rural resources except as indicated north of B-16.

Churchill County Zoning for Land Surrounding Withdrawal Areas

NAS Fallon, Nevada

Figure 3-7

Source: Churchill County, 1990; U.S. Navy 1995b.

developments were not necessarily connected to county-maintained roads, and those developments would not be serviced by county school buses or the Postal Service (Sugg 1995).

As discussed in Section 3.5, Churchill County adopted a noise ordinance in 1993, requiring disclosure and noise insulating standards for property transactions and residential developments. This ordinance reduces development in areas affected by aircraft noise in excess of 70 Ldn (Sugg 1995).

3.9 ENVIRONMENTAL JUSTICE AND SOCIOECONOMICS

3.9.1 Population

The community nearest to NAS Fallon is the City of Fallon, which had a population of 6,438 inhabitants in 1990 (US Census 1990). Fallon is a service-oriented city for the surrounding ranching and farming interests and NAS Fallon. Employment in Fallon derives from government and support services, construction, manufacturing, retail trade, ranching, farming, mining, and tourism. The agricultural development is supported with water from the BUREC's Newland's Reclamation Project.

The City of Fallon is also the seat of Churchill County and defines the project region of influence (the proposed land withdrawal areas are entirely within Churchill County). The current county population is 17,938 inhabitants (US Census 1990), with about 95 percent of that population living in the City of Fallon or within a 10-mile radius of the city. The federal government administers 82 percent of the land in Churchill County (Churchill County 1994). Churchill County population increased from 13,917 in 1980 to 17,938 in 1990. As shown in Table 3-5, Churchill County population increases are projected to continue during the period from 1995 to 2000. Nevada has estimated that the 1995 population was approximately 21,000 and will rise to between 23,800 and 28,400 by 2000 (Nevada State Demographers Office 1993). These population increases are expected to continue the current growth trends in the Fallon area.

The Walker River Indian Reservation is adjacent to the southern boundary of the B-19 training range. The community of Schurz, approximately 17 miles south of B-19, is located on the reservation. Schurz has a population of approximately 800.

There are no residences within the HAZARD footprints of the ranges. As discussed in Section 1.4.3.2, there are 12 residences under the extreme northeast corner of the RAICUZ range safety zone C at B-16. It is estimated that 31 people reside in this area. Census data do not indicate their racial and income status.

TABLE 3-5
CHURCHILL COUNTY POPULATION ESTIMATES 1995-2000

Year	Population Estimates	
	Low	High
1996	21,630	22,270
1997	22,240	23,520
1998	22,800	24,720
1999	23,320	27,800
2000	23,830	28,410

Source: Nevada State Demographer's Office, Bureau of Business and Economic Research, College of Business Administration, University of Nevada, Reno

3.9.2 Environmental Justice

Pursuant to Executive Order 12898 ("Environmental Justice"), Chapter 4 of this document discusses possible adverse disproportionate effects on minority and low-income populations in the region of influence resulting from the project alternatives. Current background information on minority groups is provided below to assist in the Chapter 4 discussion. The 1980 and 1990 racial breakdown of Churchill County is detailed in Table 3-6 and shows that whites made up 90.9 percent of the population in 1980 and 89.4 percent of the population in 1990. These figures show increasing representation among minority groups between 1980, and 1990 and although this trend may have continued through 1995, whites continue to constitute the vast majority of Churchill County residents (US Census 1980; US Census 1990).

TABLE 3-6
RACIAL BREAKDOWN OF CHURCHILL COUNTY 1980 AND 1990

Race	1980 Census	Percentage of Total	1990 Census	Percentage of Total
Total	*13,917*	100.0	*17,938*	100.0
White	12,654	90.9	16,028	89.4
Black	95	0.7	203	1.1
Native American	666	4.8	895	5.0
Asian or Pacific Islander	304	2.2	466	2.6
Other race	198	1.4	346	1.9

Source: US Census 1990; US Census 1980

Located near Fallon is the Paiute-Shoshone Tribe of the Fallon Reservation and Colony. The colony consists of 60 acres, two miles northeast of Fallon, and the reservation consists of over 8,000 acres, twelve miles northeast of Fallon. Approximately 30 miles south of Fallon is the Walker River Indian Reservation, consisting of over 320,000 acres; 42,000 of these acres are within the socioeconomic region of influence.

3.9.3 Employment and Income

The largest sector of Churchill County's economy in terms of income and employment is the federal government, and most of that employment is attributable to NAS Fallon, which has been a mainstay of the county's economy since the late 1940s. In 1994, NAS Fallon directly accounted for 2,330 jobs, which is nearly 30 percent of the county's total employment. These jobs include 984 military positions, 603 civil service positions, and 743 contractors. In terms of total payroll in the county, the Navy and contractors at NAS Fallon accounted for approximately $84 million in 1994. Of this total, Navy salaries accounted for $59.5 million and contractors salaries for $24.6 million. An unknown but probably small portion of the contractor payrolls should be revised downward to account for workers completing assignments and then leaving Churchill County (US Navy 1995i).

Agriculture and mining are also important in the county's economy. Agriculture accounted for about four percent of Churchill County income and about seven percent of total employment (BEA 1991). The mining industry constitutes an important but relatively small part of Churchill County's economy. It accounts for approximately one percent of the economy by income and about two percent of the county employment (BEA 1991).

3.9.4 Local Government

As with other local governments in the area, Churchill County has had increasing financial problems in recent years because of reductions in the property tax level and less than projected sales tax revenues. Total county revenues for fiscal year ending June 30, 1990, were $7,446,273. Payment in lieu of taxes from the federal government to Churchill County for fiscal year 1990 amounted to $455,000, or approximately 6.1 percent of total county revenues. These payments to counties are determined by a formula, using data on public land acreage and county population. The payments to Churchill County are dependent primarily on county population.

Another income source to local governments are taxes assessed on commercial airlines that use the airspace within county boundaries. In fiscal

year 1995-1996, the assessed valuation of airspace in Churchill County was $3.3 million (Nevada 1996).

3.9.5 Mining Contribution to Local Economy

As noted in Section 3.10.2, mineral evaluations were conducted for potential mineral resources in the areas proposed for withdrawal. One of the evaluations, conducted by the US Bureau of Mines (BOM), contained a socioeconomic study of three mineral deposits in the original 181,323-acre study area (US BOM 1992). The study revealed that if the mines analyzed were to be developed, they could result in the total immigration of 2,530 people (operation workers and their families) to fill permanent jobs. The annual tax revenues could be approximately $60 million, which would be used to supply services to the immigrating workers. The sectors most affected indirectly would be recreation-gaming, agriculture-food, and small fuel distributorship industries. Costlier purchases, such as explosives, fuel, tires, parts, and plant supplies, likely would be made outside of Churchill County (US BOM 1990).

A second study of the mineral potential of 7,750 acres in the area of B-16, B-17, and B-19 was completed in 1992, but its authors were unable to analyze the socioeconomic value of these acres (US BOM 1992). This study is further discussed in Section 3.10.7.

3.10 MINERAL RESOURCES

This section discusses the mineral resources and mining activity within the withdrawal land area encompassing the project alternatives.

3.10.1 Mineral and Mining Studies

The Nevada Bureau of Mines and Geology (NBMG) prepared a Mineral Resource Inventory for the 181,323 acres identified for withdrawal under the RAICUZ study in January 1987, referred to in this document as the 1987 NBMG report. The Department of the Interior, Bureau of Mines, completed Mineral Resource Evaluations for the RAICUZ withdrawal land (US BOM 1990), for the 7,750 acres of off-range ordnance land added to the proposed withdrawal (US BOM 1992), and for the 7,584-acre panhandle area proposed for withdrawal in Alternatives II and III to connect the Dixie Valley area to the Dixie Valley land holdings (US BOM 1995). An additional survey was completed for the area south of B-16 proposed for withdrawal under Alternative II (Thompson 1996). The findings of these reports are detailed below.

3.10.2 Types of Mineral Commodities in the Withdrawal Area

Mineral commodities are grouped by law into locatable minerals, leasable minerals, and salable minerals. Examples of locatable minerals in the project area include gold, silver, tungsten, fluorite, copper, lead, zinc, and uncommon varieties of limestone and other minerals having unique and special values. Leasable minerals include oil and gas, geothermal resources, and solid leasable minerals. Salable minerals are common varieties of sand, stone, gravel, pumice, pumicite, cinders, and clay (US BOM 1990).

3.10.3 Mineral Districts

The following discussion of mineral districts was excerpted from the 1987 NBMG report. The proposed land withdrawal referred to is the 181,323 acres recommended for withdrawal under the RAICUZ study.

"Portions of seven mining districts or recognized mining areas are included within the boundaries of the proposed land. Districts that are most affected by the land action are the Fairview and Wonder districts on the east side of Fairview-Dixie Valley. At Fairview, the major mining area is outside of the withdrawal boundary but possible extensions of mineralized ground could be within the [proposed withdrawal] area. Most of the South Fairview district (a sub-district within Fairview) is included in the withdrawal. To the north, all of the western Wonder district (the Victor area) is included within the land withdrawal. Only a small portion of the Chalk Mountain district is affected and, on the west side of Fairview-Dixie Valley, extensions of both the La Plata and Sand Springs districts fall within the withdrawal boundary. To the west, two other mining areas fall within areas scheduled for [withdrawal]; the Cinnabar Hill portion of the Holy Cross district, Barnett Hills, and the Camp Gregory area on the northeast flanks of the Dead Camel Mountains. These two areas have not been important mineral producing areas in the past but both have been sites of recent mineral exploration."

Of the 7,750 acres of off-range ordnance land added to the withdrawal area in 1989, only the land east of range B-17 was in a mining district (northern Fairview District). The lands east and south of B-16 and north of B-19 were not in mineral districts (US BOM 1992; Thompson 1996). The panhandle area crosses the northern corner of the Wonder mining district. Figure 3-8 depicts the seven mining districts in the proposed land withdrawal area.

3.10.4 Appraisal of Mineral Resources

The discussion below is excerpted from the 1987 NBMG report. The project area referred to is the 181,323 acres recommended for withdrawal under the 1982 RAICUZ study.

"Identified mineral resources within the area include: a possible 1.8 million tons of open-pit gold ore at the Jet prospect, Fairview district; an unknown tonnage of open-pit silver ore on the Silver Center claims, Wonder district; and an unknown quantity of diatomite at the Wildhorse claims, Camp Gregory area. In the northern Fairview district, the tailings of the Nevada Hills Mine also constitute an identified mineral resource. These areas are shown on [Figure 3-9].

"Several areas within the proposed withdrawal area have moderate to high potential for the discovery of mineral deposits. These areas are generally adjacent to known mines and mineralized ground in the mining districts bordering the withdrawal. Areas of moderate precious metal potential occur in parts of the Fairview, La Plata, and Holy Cross districts, and in the Camp Gregory area; areas of high precious metal potential occur in the Fairview, Wonder, Sand Springs, and Holy Cross districts.

Areas in the Chalk Mountain, La Plata, and Sand Springs districts contain moderate potential for other elements including base metals, tungsten, and molybdenum. Two areas, one in the Wonder district and another in the La Plata district, have moderate potential for discovery of fluorite deposits. One area, south of Camp Gregory, may have moderate potential for diatomite."

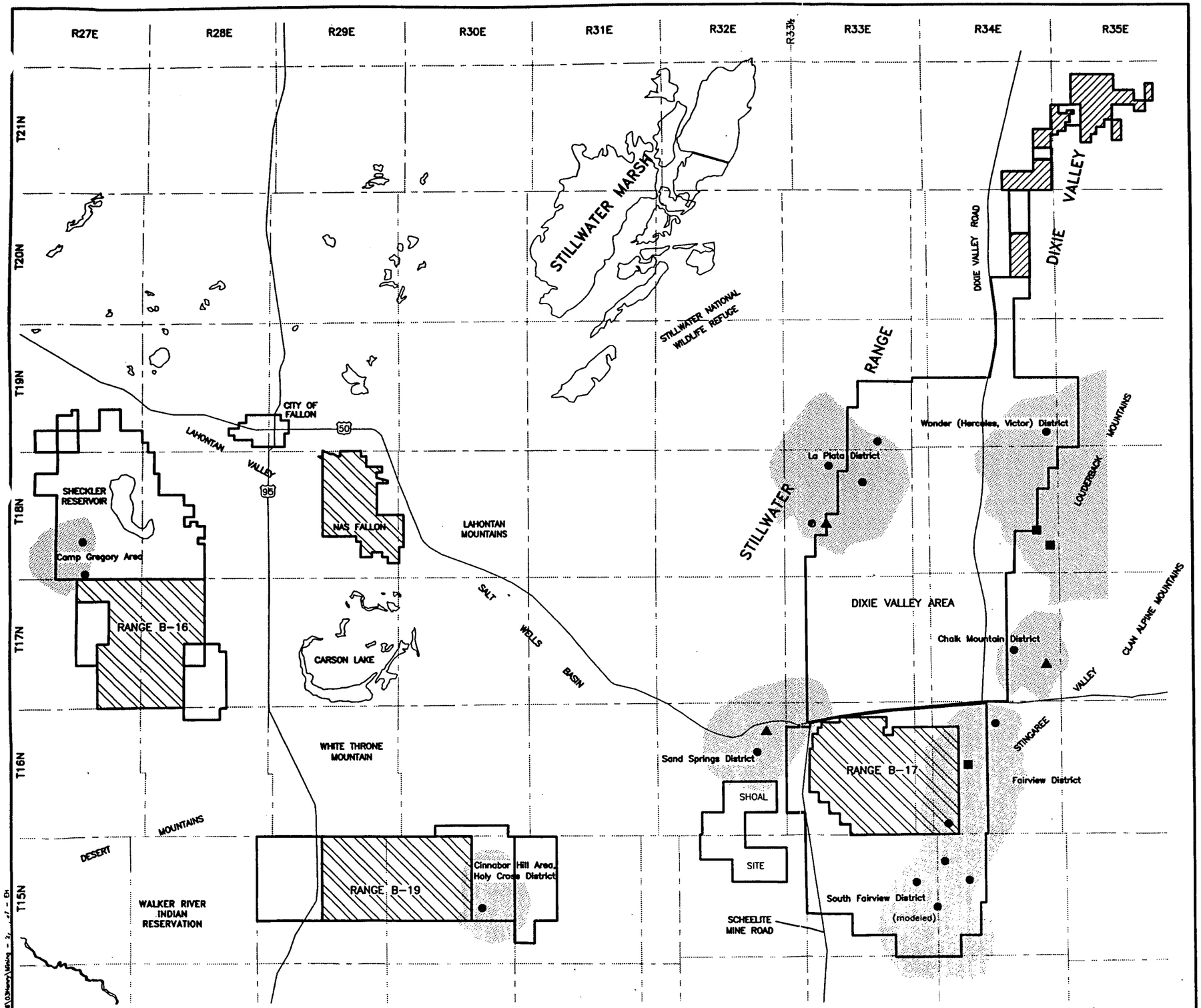
The 1990 BOM report referenced the same findings as the 1987 NBMG report. The 1992 BOM report supplemented information found in the 1990 BOM report and the 1987 NBMG report regarding diatomite resources south of the Camp Gregory mining district (west of B-16). This area was identified as having an unknown quantity of diatomite. The 1992 BOM report quantifies this resource, estimating a 20-year production capability at 40,000 tons per year, as discussed in Section 3.10.7 of this report.

The 1992 BOM report identified no areas of moderate to high mineral potential in the 7,750 additional acres proposed for withdrawal. The 1995 BOM report stated that the economic potential of the panhandle area is limited to sand and gravel and possibly clay deposits. The 1996 report identified no areas of moderate to high mineral potential in the proposed withdrawal lands south of B-16.

3.10.5 Geothermal and Petroleum Resources

The Mineral Resource Inventory Report also assessed geothermal and petroleum potential.

"Data from thermal springs, water wells, and geothermal exploration wells have been used to define areas of the state that have potential for



LEGEND:

- Mining Districts/Areas
- Navy-owned land in Dixie Valley
- NAS Fallon and Ranges
- ■ Identified Resource
- ▲ Indicated Resource
- ● Inferred Resource

N

0 2.5 5

1"=5MI.
(APPROXIMATE)

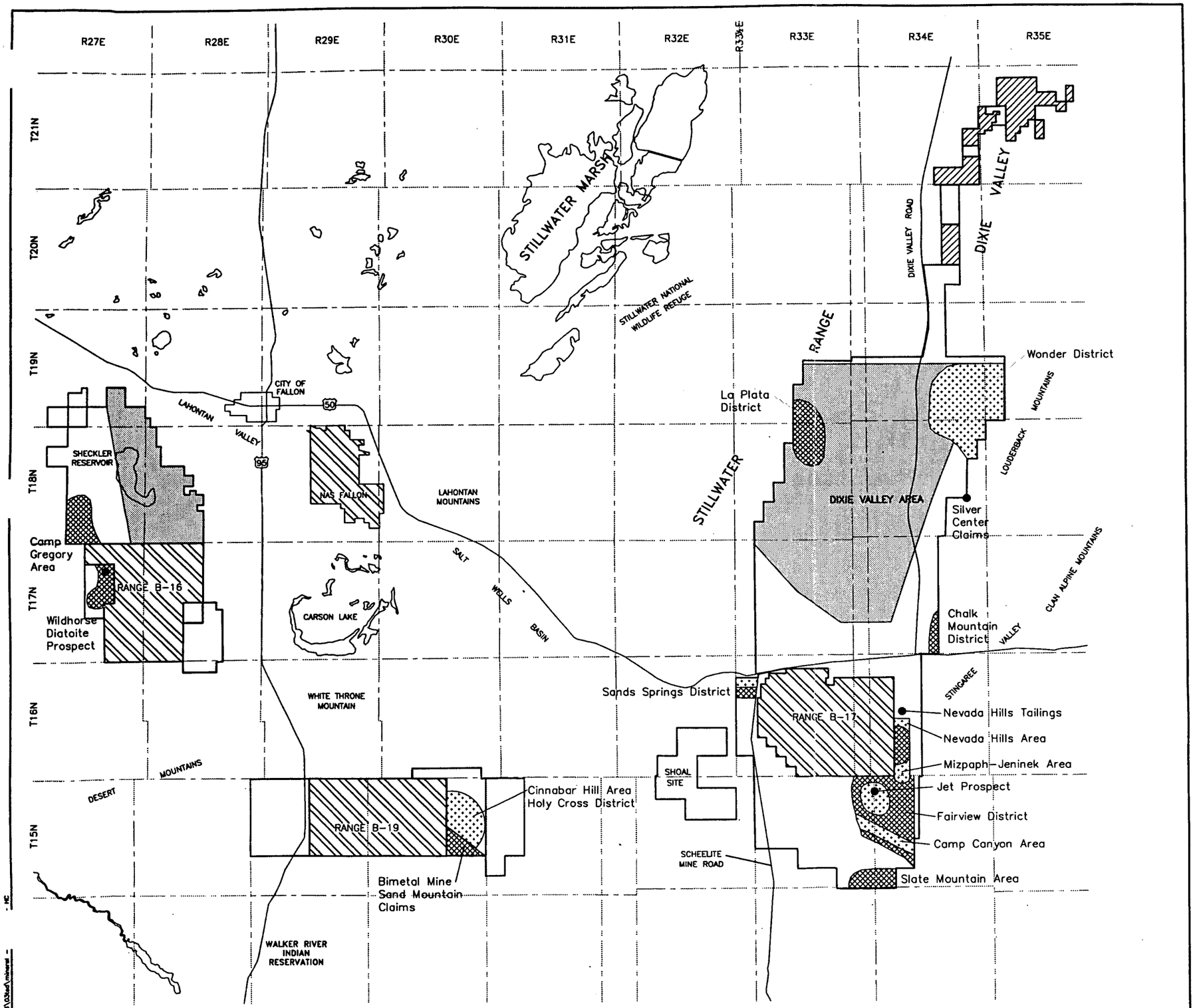
Mineral evaluations have occurred at most of the seven mining districts located within the withdrawal boundaries.

Mining Districts

NAS Fallon, Nevada

Figure 3-8

Source: Nevada Bureau of Mines and Geology, 1987



LEGEND:

NAS Fallon and Ranges

Mineral Potential

- Identified Mineral Resource
- Area of Moderate Mineral Potential
- Area of High Mineral Potential
- Navy-owned land in Dixie Valley

Petroleum Potential

- Low Petroleum Potential

Geothermal Potential

Geothermal potential for the entire area of withdrawal is only speculative.

N

0 2.5 5

1"=5MI. (APPROXIMATE)

The study area was evaluated for mineral, petroleum, and geothermal potential.

Mineral Resources

NAS Fallon, Nevada

Figure 3-9

Source: Nevada Bureau of Mines and Geology, 1987; U.S. Bureau of Mines, 1990 and 1992

geothermal resources (Garside and Schilling 1979; Trexler et al. 1983). In the areas considered for [withdrawal] in Churchill County, only two have potential, based on presently available data. The southern part of Dixie Valley has been explored for geothermal resources. No more exploration has been attempted in the area, and it is doubtful if any is planned. Oxbow Geothermal Corp. has developed a major geothermal resource in northern Dixie Valley, 30 miles to the north, but has no plans to do more work in the southern-most part of the valley.

"A second proposed [withdrawal] area that is near a geothermal resource is located adjacent to US Highway 95, about 20 miles south of Fallon and 1 mile southwest of Lee Hot Springs. There is no known subsurface information in this area that would suggest that the proposed [withdrawal] has anything other than a speculative geothermal potential.

"Most of the areas in Churchill County considered for [withdrawal] are believed to have very low potential [for petroleum resources], except for the area of southern Dixie Valley. Southern Dixie Valley is believed to have a low but significant petroleum potential because the area is underlain by the adjacent rocks that may be potential sources of petroleum. Oil and gas leases [have been] staked in southern Dixie Valley. There have been no petroleum exploration wells drilled in southern Dixie Valley and none are known to be planned in the near future."

The 1987 NBMG report and the 1990 BOM report identified seven active oil and gas leases within the proposed withdrawal area. These leases have since been terminated, five in 1988 and two in 1989. No oil and gas leases were reported in the study of the 7,750 acres added to the withdrawal footprint.

The 1995 BOM report identified some past activity but only one current oil and gas lease in the panhandle area. No oil and gas leases were reported in the area south of B-16 evaluated in the 1996 report.

3.10.6 Other Nonmetallic Mineral Resources

The discussion below is excerpted from the 1987 NBMG report.

3.10.6.1 Sand and Gravel

"Much of the alluvial-covered areas along the lower flanks of the proposed withdrawal area contain potential sand and gravel reserves. This material, however, does not have any unique value over similar material occurring in other areas throughout western Nevada, and its potential cannot be rated. As in the past, sand and gravel operations in Nevada will continue to be developed as close to consuming areas as possible."

3.10.6.2 Sodium and Potassium Compounds

"Sodium compounds have been produced from Fourmile Flat, west of the Sand Springs Range, and from Soda Lake, west of Fallon. Borates have been mined from Eightmile Flat west of the salt mine area. The lands within the proposed withdrawal area, however, do not contain closed basins that might have potential for any saline minerals, carbonates, or borates."

3.10.7 Potential Mineral Developments

The 1990 BOM report, like the 1987 NBMG report, addressed significant mineral commodities known to be within or adjacent to lands potentially affected by the withdrawal. The BOM report differed from the NBMG report in that it provided an economic assessment of the five major nonproducing deposits in the proposed withdrawal area. The report's authors developed capital and operating cost estimates and socioeconomic effects (employment, taxes, and cash flow) associated with economic ore deposits. They developed a mine/mill model based on mining and milling operations currently active in the region.

The modeled properties are the Elusive gold mine (La Plata District), the La Plata tungsten/molybdenum mine (La Plata District), and the Summitt King gold/silver/lead mine (Sand Springs District) (Figure 3-8).

The models assumed the tonnage and grade of the deposits, the mining and processing methods, resulting products, production rates, and construction and operation costs (Table 3-7). The models estimated the change in final total demand (personal consumption, investment, government expenditures, and foreign exports). They estimated changes in population and employment (direct, indirect, and induced) in Churchill County associated with these potential mines (Table 3-8). The population growth describes the immigration of workers and their families to Churchill County; commuters are not included as population growth. The model also estimated capital investment costs, operating costs, and tax revenues that would be generated in the study area (Table 3-9). The tax revenue includes Nevada state proceeds from mine taxes, federal income taxes, property taxes, and sales and use taxes.

The 1992 BOM report of the mineral potential of the additional 7,750 acres added to the withdrawal identified a land area west of B-16 (land use Category B) with potential diatomite resources with at least a 20-year production capability at the rate of 40,000 tons per year. Based on prices obtained from area producers of diatomite, and depending on the final product, the resource would have an estimated value ranging from $100 to $350 per ton. The gross value of the annual production rate of 40,000 tons would range from $4 million to $14 million per year.

TABLE 3-7
ESTIMATED MINE DEVELOPMENT, CONSTRUCTION, AND OPERATING COSTS
($ MILLION IN 1990 DOLLARS)

Deposit	Construction Costs[1]	Operation		Land Use Control
		Annual (for 1st Year)	Cumulative[2]	
Elusive	39.3	20.5	225.5	B
La Plata	23.7	9.6	153.6	Outside Withdrawal
Summit King	21.7	3.6	28.8	Outside Withdrawal

Source: US Bureau of Mines 1990
[1]Excludes working capital
[2]20 years or deposit life

TABLE 3-8
CHANGES IN POPULATION AND EMPLOYMENT IN CHURCHILL COUNTY AS THE RESULT OF MINE DEVELOPMENT

Deposit	New Employment[1]		Population Growth[2]	
	Construction	Operation	Construction	Operation
Elusive	66	240	523	1,924
La Plata	30	82	243	248
Summit King	69	36	240	358

Source: US Bureau of Mines 1990
[1]Includes direct, indirect, and induced jobs
[2]Includes workers and their families

TABLE 3-9
POTENTIAL TOTAL TAX REVENUES[1]
($ MILLIONS IN 1990 DOLLARS)

Deposit	Nevada State Proceeds of Mine	Federal Income Tax	Property Tax	Sales & Use Tax	Total
Elusive	1.2	8.3	5.8	9.0	24.3
La Plata	1.1	7.3	4.2	4.8	17.4
Summit King	.9	6.5	1.3	1.5	19.2

Source: US Bureau of Mines 1990
[1]Based on price levels required for a 15 percent rate of return

The report's authors were unable to complete a socioeconomic assessment on the diatomite resource because they did not know what type or grade of diatomite products would be produced, and grade determines prices. The authors also did not know which market the owners would enter, and market determines production level and therefore equipment costs of both mining and processing (US BOM 1992).

The 1995 BOM report concluded that the potential to develop metallic or clay resources in the panhandle area was low and the potential to develop gravel resources was moderate to high. However, developing this resource currently would not be economically feasible because gravel is a low unit value/high volume commodity, sensitive to market location because of transportation costs. Small lots of gravel from this area are and will continue to be extracted and used by county and state highway maintenance crews.

3.10.8 Patented and Unpatented Mining Claims

The lands proposed for withdrawal are all federal public lands administered by the BLM. In 1982, the Navy submitted an application to withdraw 181,323 acres of these lands around training ranges B-16, B-17, and B-19. This application closed the originally proposed withdrawal land to mineral location for a maximum of two years, as specified in FLPMA. Public Law 98-473 continued the segregation indefinitely. Under FLPMA, claims made on these lands after September 20, 1982, such as the Cinnabar Hills mine area and Jet Claims group, would be considered null and void. An additional 7,750 acres were later added to the proposed land withdrawal area, and an application to withdraw these lands was submitted in 1992. The 7,750 acres is a part of the area formally closed by BLM on February 1, 1991, because of ordnance contamination. Claims made on the additional land after September 8, 1992, may be considered null and void (Loo 1995). These lands currently are closed to the public due to off-range ordnance.

3.10.8.1 Mining Laws

A variety of federal and state laws regulate mining activities in Nevada. These laws dictate how claims are to be located, registered, and maintained. The major federal law governing mining activities on the withdrawn lands is the Mining Law of 1872, as amended (30 U.S.C. 22-54). This law allows individuals and corporations to use and appropriate public lands and their mineral resources for mining exploration and production. The law also includes provisions for enacting state mining laws that are consistent with federal law.

Nevada state law describes the procedure for locating a claim, marking claim boundaries, and filing the claim with certain agencies. FLPMA

requires claimants to file a copy of the official record of the notice or certificate of location with the BLM state office, including any amendments to claim boundaries or changes in ownership.

3.10.8.2 Mining Claim Process

Unpatented Claims

Anyone who is a citizen of the United States or has declared an intention to become a citizen may locate a mining claim. The right to possess minerals is obtained by staking a claim on open or unreserved federal lands. Generally, staking a claim involves marking the claim boundaries with corner posts or monuments, posting a notice of location in a conspicuous place, and providing the location to the proper authorities, including the BLM state office and appropriate county or state agencies.

In Nevada, the process of locating an unpatented mining claim is as follows: on open or unreserved land, stake a claim by placing a location monument marking where the mineral was found and put a notice of discovery on the monument; within 60 days put up corner posts defining the boundaries of the claim; within 90 days file a certificate of location and a map of the claim site with the BLM state office and the county and pay an application fee.

To maintain an unpatented mining claim in Nevada, the claimant must fulfill certain annual requirements. Prior to 1993, claimants in Nevada had to file an affidavit by December 30 of each year to prove they had performed over $100 in improvements to their claim over the previous year or they lost the claim. The BLM Appropriations Act of 1994 (fiscal year) required mining claimants with 10 or more unpatented claims to submit a $100 per claim rental fee by August 31, 1993, to the BLM state office or they forfeited their claim. A similar requirement existed under the BLM Appropriations Act of 1995, except the fee was called a maintenance fee.

Claimants with fewer than 10 claims may file for a small miner certification by the August 31 deadline to avoid paying the rental or maintenance fee. A claimant choosing to do this still has to file an affidavit proving the expenditure of $100 or more to develop the claim.

Valid and Patented Claims

A discovery is defined as a mineral in place having sufficient value to pass the "prudent man rule"; that is, a person of ordinary prudence would be justified in the further expenditure of labor and means, with a reasonable prospect of success (BLM 1991b). Once a discovery is made, a claim is considered valid and can be patented under the 1872 mining law. Valid

mining claims are considered private property. Additional requirements to obtain a mineral patent include the following:

- Having the claim surveyed by a mineral surveyor;
- Posting a "notice of intent to patent" on the claim or site and publish the notice in a local newspaper for a 60-day period;
- Paying the BLM a nonrefundable application fee of $250 plus an additional $50 for each additional claim/site in the application;
- Showing the BLM evidence of right of title to the claim or site;
- Showing the BLM proof of mineral discovery of a valuable mineral deposit; and
- Showing the BLM that not less than $500 worth of development work or improvements have been made to each claim (BLM 1991b).

A federal mineral examiner evaluates the patent application and claim. If all the above requirements have been met, the claimant may purchase the claim or site at a cost of from $2.50 to $5 per acre (BLM 1991b). A mineral patent gives the holder clear and absolute title to the land, making it private property. Claimants with patented claims do not have annual reporting or fee requirements.

3.10.8.3 Mining Claim Inventory

The 1987 Mineral Resource Inventory Report found that in October 1986, the area of the proposed land withdrawal contained 38 patented mining claims either partially or totally within the project area. A 1997 BLM record search revealed no additional patented claims to those 38 identified in the prior report. There are 11 claims near B-17 on Category A land; the remaining 27 claims are located on Category B land in the Dixie Valley area.

A BLM record search showed that there are 16 active unpatented claims for which maintenance fees were received by BLM in 1997. All 16 of these claims exist on Category B lands in the Dixie Valley area. There are 19 claims near B-16 for which small miner certification status was filed in 1996. Seventeen of these 19 claims exist on Category B lands; the remaining two are on Category A lands.

There are an additional 50 claims around B-17 that are technically active but for which neither maintenance fees nor small miner certification requests have been submitted. Fifteen people requested a deferment in 1997 and three requested a deferment in 1996. If a miner can establish that he or she is unable to work a claim but would like to keep the claim active, he or she may request that the maintenance fee be deferred. All 18 of the claims filing deferrals exist on Category A lands.

The Navy contested the validity of the remaining claims, and hearings to decide their status were held. The BLM and a registered geologist performed the necessary field and lab work and prepared mineral studies. In that undertaking, they were unable to substantiate a marketable discovery of minerals. The claims were contested before the Department of Interior Bureau of Land Appeals; however, the Payne and Baughman claims were declared null and void.

A listing of all patented and unpatented claims is contained in Appendix H. Figure H-1 shows the general locations of the patented and unpatented mining claims.

3.11 LIVESTOCK AND WILD HORSE MANAGEMENT

This section addresses those wildlife and livestock management areas that are officially designated for management by a federal agency. These areas include livestock grazing allotments and wild horse herd management areas.

3.11.1 Livestock

The BLM manages livestock grazing within the proposed withdrawal land footprints. The BLM manages grazing under the authority of the Taylor Grazing Act of 1934, the Federal Land Policy Management Act of 1976, and the Public Rangelands Improvement Act of 1978. Under this management, ranchers may obtain permits for an allotment of public land on which a specified number of livestock may graze. The number of permitted livestock on a particular allotment is determined by how many animal unit months (AUMs) that land will produce. The BLM operates a program to stabilize or improve the ecological condition of the allotments. This program includes proper management of livestock grazing and such improvements as fences and water developments.

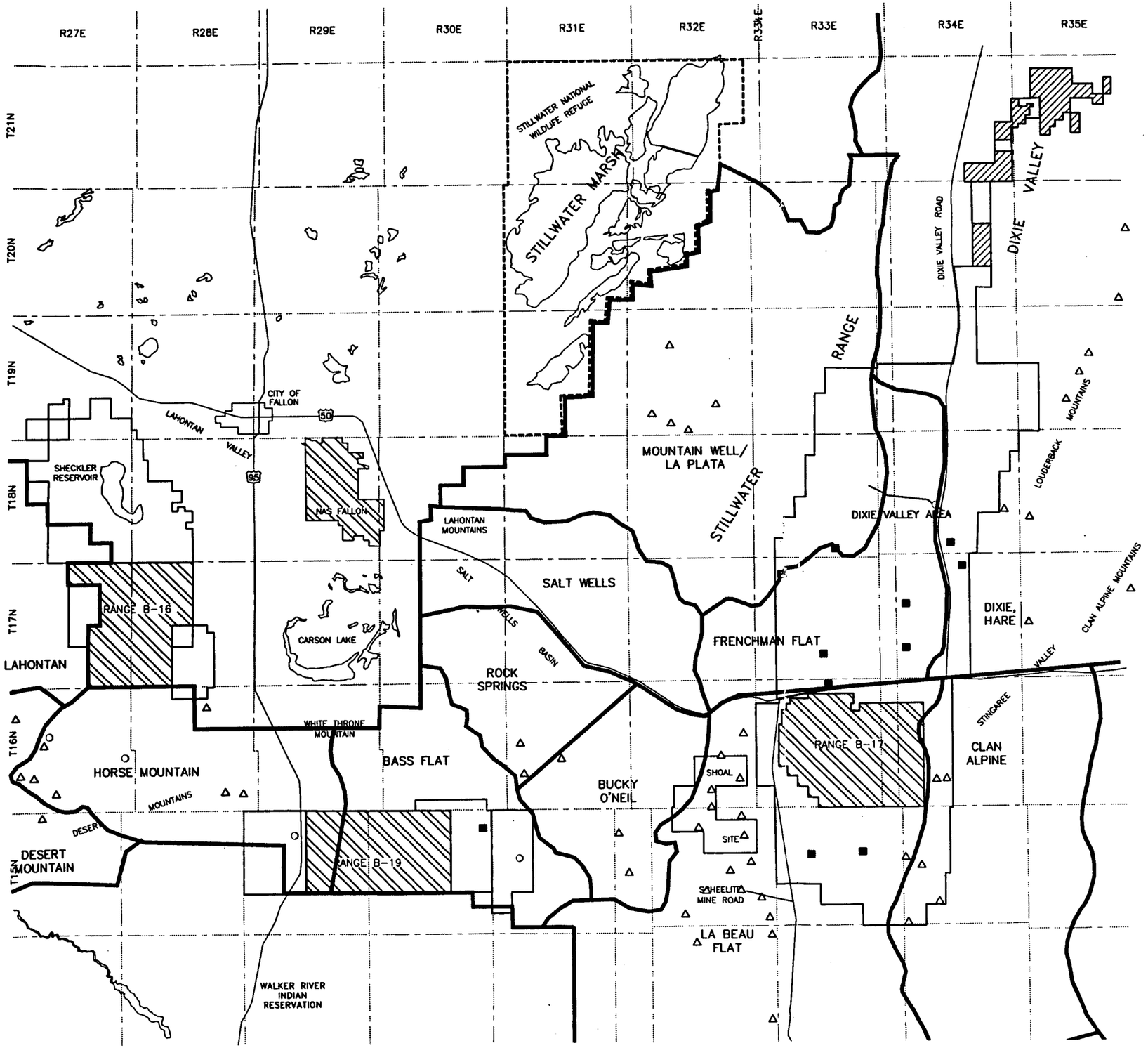
Within the Lahontan Resource Area of BLM's Carson City District, there are 30 grazing allotments ranging from approximately 7,600 acres to 305,000 acres and totaling 80,000 AUMs of grazing preference (BLM1985a). Of these allotments, nine partially overlap the potential withdrawal lands (Table 3-10 and Figure 3-10). These allotments contain 39,527 AUMs of grazing preference and 1,219,483 acres of public land. The potential withdrawal area contains approximately 5,386 AUMs of grazing preference. In addition, BUREC administers grazing north of B-16.

TABLE 3-10
GRAZING ALLOTMENT DATA FOR ALLOTMENTS
PARTIALLY WITHIN MAXIMUM WITHDRAWAL AREA

Allotment	Grazing Preference (AUMs)	Total Acreage	Approximate Acres of Grazing Allotment within Maximum Withdrawal Area	Approximate AUMs within Maximum Withdrawal Area
Bass Flat	1,587	41,255	12,160	468
Clan Alpine[1]	11,410	388,646	11,200	328
Bucky O'Neill	1,500	39,054	960	37
Dixie Valley	6,495	273,841	45,280	1,073
Frenchman Flat	1,750	67,126	43,120	1,123
Horse Mountain	3,000	63,043	10,960	521
La Beau Flat	3,930	155,923	31,040	782
Lahontan	1,155	52,910	6,560	143
Mtn. Well/La Plata	8,700	137,685	14,400	911
TOTAL	39,527	1,219,483	175,680	5,386

Source: Minor 1995
[1]Clan Alpine is composed of two allotments, one of which contains a portion of the potential withdrawal.

In 1991, after the Navy performed off-range ordnance sweeps around the FRTC training ranges, the BLM requested that the Navy post signs or fence the lands containing off-range ordnance. Some of these lands fall within existing grazing allotments. Once the lands are withdrawn, Category A lands will be excluded from further grazing.



LEGEND:

CLAN ALPINE — Grazing Allotment

Grazing Allotment Boundary

Areas of Grazing Allotments located within Withdrawal Area

Navy–owned land in Dixie Valley

Water Storage (Well, Spring Development)

Water Storage (Tank, Trough)

Guzzler

NAS Fallon and Ranges

Stillwater National Wildlife Refuge

N

0 2.5 5

1"=5MI. (APPROXIMATE)

Grazing allotments exist over most of the land proposed for withdrawal.

Grazing Allotments and Water Developments

NAS Fallon, Nevada

Figure 3-10

Source: BLM 1978; U.S. Navy 1982b; SAIC 1991.

grazing allotment. The HMA covers 9,940 acres of public and private land and can support a maximum of 16 horses (US Navy 1995).

The current horse populations for the HMAs are approximately 70 for Horse Mountain, over 1,000 for Clan Alpine, and 15 to 20 for South Stillwater.

3.12 RECREATION AND PUBLIC ACCESS

This section describes the recreational activities in the study area and the management of those activities. Although recreation occurs throughout the proposed withdrawal lands, most activities take place during wet years at locations such as Sheckler Reservoir. These areas are illustrated in Figure 3-12.

Common recreational activities in the study area include hunting and trapping of fur-bearing animals, camping, hiking, horseback riding, fishing, bird watching, and off-road vehicle (ORV) use (Knight 1995). Additional activities, although more limited, include motorcross, snow sports, boating, swimming, pine nut gathering, wood-cutting, visiting mines and ghost towns, and rock, fossil, flora, and insect collecting.

Areas that are used by recreationists and that are within or partially within the proposed withdrawal area include the Sheckler Reservoir (used during wet periods), Stillwater Range (including the Job Peak Wilderness Study Area), Sand Springs Range, Salt Cave, and the Fairview and Wonder mining districts. Of these sites, the Sheckler Reservoir and Stillwater Range have the highest levels of recreational activity The Stillwater Range, including the LaPlata and Elevenmile drainages, offers high quality, undeveloped, semiprimitive and primitive recreation opportunities. The Stillwater Range north of Elevenmile canyon has been identified through the BLM wilderness inventory process as having outstanding wilderness qualities.

The southern Clan Alpine Range and La Plata District are adjacent to the proposed withdrawal, with access through the withdrawal. The shoal site and Sheckler Reservoir are popular hunting and camping areas. Organized ORV events are held twice each year in areas to the west and east of B-19. Organized ORV events also occur near B-16 and B-17. The Pony Express National Historic Trail is parallel to Highway 50 through the proposed withdrawal areas and is visited by recreationists. An annual re-ride of the trail takes place in June. The trail is also part of the American Discovery Trail, a coast-to-coast hiking trail.

3.11.2 Wild Horses

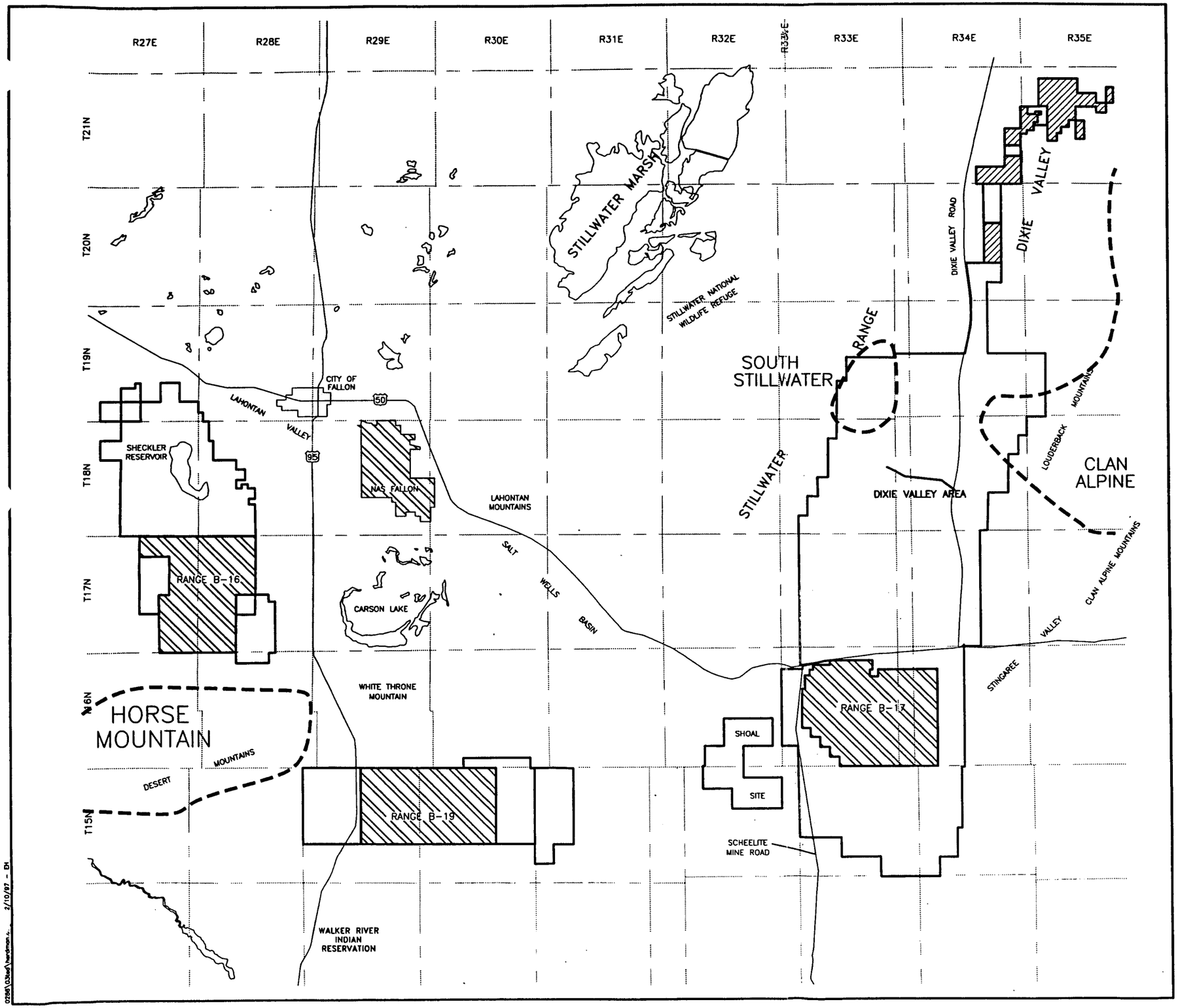
The three herd management areas (HMAs) within or adjacent to the potential withdrawal area are Horse Mountain, Clan Alpine, and South Stillwater. Figure 3-11 illustrates the locations of the HMAs. Under the Wild Horses and Burros Protection Act of 1972 (PL 92-195), the Secretary of the Interior is required to protect and preserve wild free-roaming horses and burros by managing land administered by the BLM. The BLM Carson City District is responsible for managing wild horse populations within the potential withdrawal areas.

The Lahontan Rangeland Program Summary of 1985 (BLM 1985c) set management objectives for each of the wild horse herd management areas. The management objectives include the maintenance and enhancement of habitat to provide forage for a specified number of horses. The summary also calls for a periodic census to be taken of the wild horse population and for additional monitoring to determine areas of use, seasonal movement patterns, sex ratios, and other facets of population dynamics so it may be determined if management objectives are being met. The plan for each of the HMAs calls for maintaining the wild horses in good or excellent physical condition; maintaining the free-roaming nature of the wild horses; maintaining the wild horses within the HMA; and minimizing adverse effects of gathers to both the individual wild horses and to the population. The Clan Alpine HMA Plan calls for providing an area to place unadoptable horses removed from HMAs; removing only adoptable animals; maintaining genetic diversity; and minimizing stress to released animals. The South Stillwater HMA Plan calls for removing only adoptable animals and maintaining genetic diversity.

The Horse Mountain HMA is approximately 1.5 miles south of B-16, within the Horse Mountain, Desert Mountain, and Cleaver Peak grazing allotments. The HMA covers 52,422 acres of public and private land and can support a maximum of 95 horses (BLM 1991c). Based on consultation with the BLM (Gianola 1996) and a survey of the area by a NAS Fallon biologist (Rathbun 1996b), the heaviest use of the HMA is near the TCID canal, east of B-16 near Highway 95.

The Clan Alpine HMA is at the northeast corner of the proposed Dixie Valley area withdrawal and within the Clan Alpine, Cow Canyon, and Dixie Valley grazing allotments. The HMA covers 314,986 acres of public and private land and can support a maximum of 979 horses (US Navy 1992).

The South Stillwater HMA is at the northwest corner of the proposed Dixie Valley area withdrawal and within the Mountain Well/La Plata



LEGEND:

CLAN ALPINE Herd Management Areas

Herd Management Area Boundary

Navy-owned land in Dixie Valley

NAS Fallon and Ranges

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1"=5MI. (APPROXIMATE)

The Wild Horses and Burros Protection Act of 1972 requires the Secretary of the Interior to protect and preserve wild and free-roaming horses and burros through management of land administered by the BLM.

Herd Management Areas

NAS Fallon, Nevada

Figure 3-11

Source: BLM 1978; U.S. Navy 1982b; SAIC 1991.

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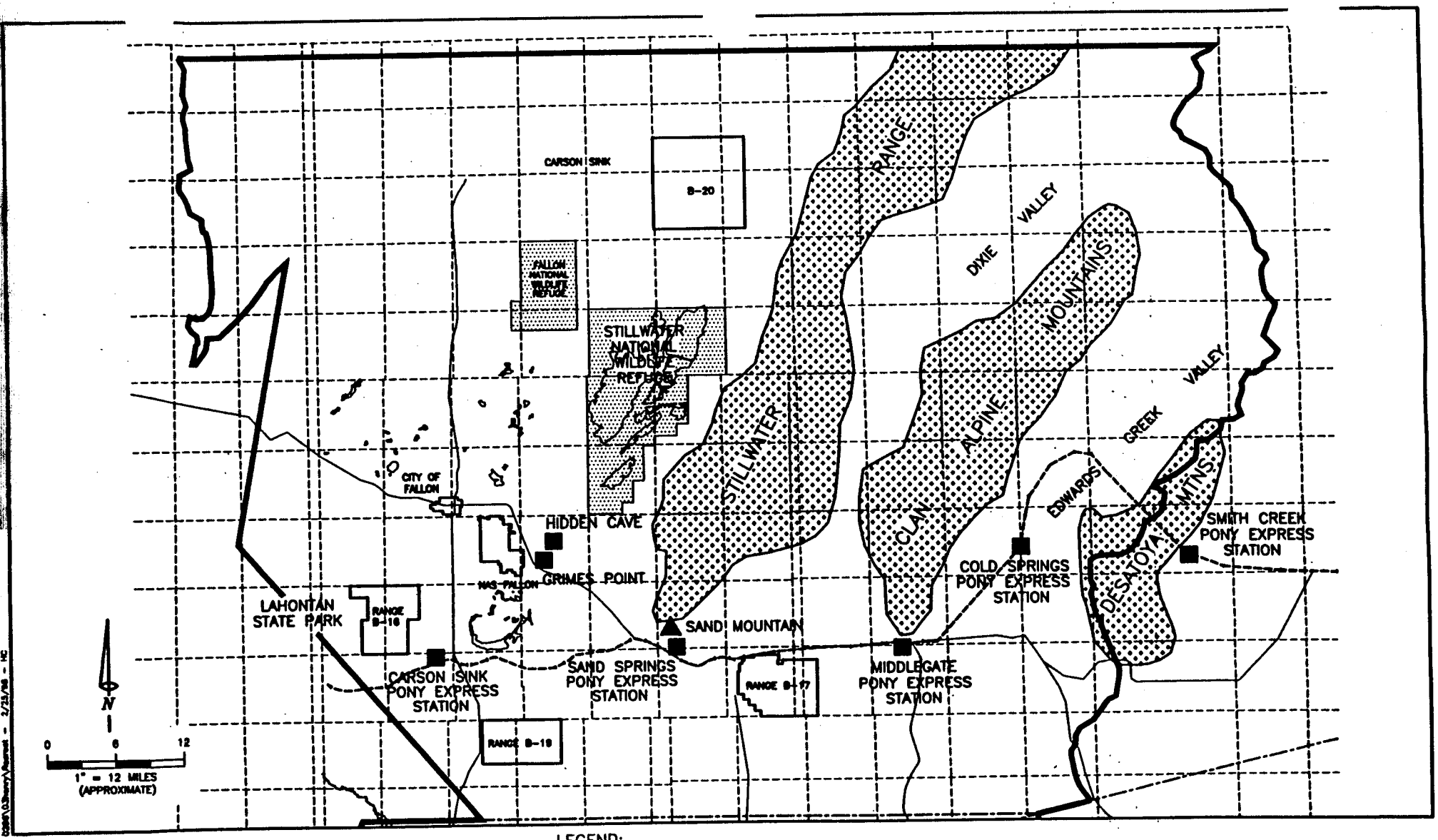


Expansive land areas contribute to the wide variety of recreational opportunities in the area.

LEGEND:

- Mountain Ranges used for outdoor recreation
- State Park/Wildlife Refuge
- Pony Express National Historic Trail/ American Discovery Trail
- Historic Sites
- ORV use area

Important Recreational Resources in the Study Area

NAS Fallon, Nevada

Figure 3-12

Source: Churchill County Master Plan 1990; BLM 1978

Recreational opportunities are accessed primarily from area roads, including Highway 50 and Dixie Valley Road. Dixie Valley Road, which runs north through the Dixie Valley, provides access to wilderness and backcountry areas and opportunities for sightseeing in relatively remote, undeveloped, and scenic settings.

No camping or ORV permits are required for casual use of the public land. If camping or ORV groups are organized for a large event, however, a permit is required by BLM. Hunting is regulated by the Nevada Division of Wildlife. Special recreation permits are required by the BLM for organized competitive or commercial recreational activities.

3.13 PUBLIC HEALTH AND SAFETY

The greatest threat to public health and safety resulting from NAS Fallon activities is live ordnance landing outside the training ranges. This public health and safety analysis incorporates data from the Hazard Analysis Mitigation Report (1995g), off-range ordnance sweeps, and the RAICUZ study (US Navy 1982b) (for Alternative I).

To a lesser extent, aircraft mishaps and objects and armaments inadvertently released from aircraft present hazards to public safety. Between 1964 and 1988, 75 aircraft mishaps occurred; of these, 20 impacted FRTC ranges, 30 impacted the station, and 25 affected public or private lands, for an average of one off-range mishap per year. One civilian fatality resulted from a mid-air collision, when the civilian aircraft entered active restricted airspace without authorization (SAIC 1991). Between 1989 and 1996, there were 18 mishaps. Nine occurred at the station and nine at the ranges or on public or private land. No civilians were involved.

On an average, 1.5 parts, such as screws or bolts, fall off aircraft for every 1,000 sorties. Given the number of sorties flown in a year at NAS Fallon, approximately 60 to 66 objects may be dropped by aircraft in a year. The land area where this is most likely to occur is between the station and the FRTC training ranges. Given this frequency and the area that a typical sortie covers, the likelihood of these objects striking people or structures is small (SAIC 1991).

3.13.1 Hazard Analysis Report

The Hazard Analysis Mitigation Report (US Navy 1995g) examined the effects of live and practice/inert ordnance drops. The HAZARD methodology developed safety footprints showing the total ground area needed to contain potential off-range ordnance for that range, based on operational requirements and parameters. A detailed discussion of this

report is located in Section 1.4.3.1 and the safety footprints are mapped in Figure 1-3.

3.13.2 Off-range Ordnance

The FRTC includes four remote training ranges that are used in support of the Navy mission. Military ordnance inadvertently has fallen outside the boundaries of these ranges onto land managed by the BLM and on the Walker River Indian Reservation. Beginning in early 1989, the Navy organized sweeps of areas adjacent to the training ranges to locate off-range ordnance. The perimeters of these sweeps were determined on the basis of helicopter, vehicle, and foot surveys that identified areas likely to contain off-range ordnance. These sweeps and reconnaissances are coordinated with the BLM and the Nevada State Division of Environmental Protection, as outlined in a March 1995 memorandum of agreement regarding off-range military ordnance.

3.13.2.1 Sweep Methodology

The personnel involved in the ordnance sweeps included a sweep team of 115 military personnel, a helicopter survey/debris removal team, consisting of eight personnel, and an explosive ordnance disposal (EOD) team. The survey area covered 226,592 acres. Surface ordnance, suspected ordnance, and scrap were located through systematic sweeps of the survey area. EOD teams followed the sweep to identify and later detonate any ordnance located.

The effectiveness of the search operations was calculated through a sweep effectiveness probability test. During this test, the area ahead of the sweep line was "salted" with several control ordnance items. The items were collected by the sweep team as it proceeded through the salted area. The sweep effectiveness is expressed as the percentage of the known salted items actually collected by the sweep team.

3.13.2.2 Results of Sweep

As a result of the sweeps, it was recommended by the BLM that 24,464 acres near B-16, B-17, and B-19 be withdrawn to protect the public from exposure to off-range ordnance (Figure 1-5).

Ground sweeps and aerial reconnaissance were conducted off-range of B-16 between November 27 and 30, 1989, and between June 11 and 15, 1990 (Figure 3-13). Data on the ordnance found in the area swept are provided in Table 3-11. Flares were the only type of new ordnance found off-range. Korean Conflict-era targets (three bull's-eyes and one strafe target) also were located. The sweep effectiveness was calculated at 91.7 percent in November 1989 and 97.0 percent in June 1990. No subsurface sweep was conducted

because effective subsurface sweep technology or methodology for large areas did not exist.

Ground sweeps and aerial reconnaissance were conducted off-range of B-17 during June and November of 1989 and from June 18 to 28, 1990 (Figure 3-13). Data on the ordnance found in the area swept are provided in Table 3-11. New off-range ordnance consisted primarily of flares and a few practice bombs. The surface sweep effectiveness was calculated at 92.7 percent in November 1989 and 95.0 percent in June 1990. No subsurface sweep was conducted because, as previously noted, effective subsurface sweep technology or methodology for large areas did not exist.

TABLE 3-11
RESULTS OF OFF-RANGE ORDNANCE SWEEPS

Range	Date	Ordnance Items			SEP[1] (%)	Related Scrap (lbs)
		Live	Practice	Total		
B-16	November 1989	0	103	103	91.7	3,500
B-16	June 1990		708[2]	726	97.0	24,700
B-17	June 1989	551	0	551	N/A	N/A
B-17	November 1989	793	1,905	2,698	92.7	80,800
B-17	June 1990	779	523	1,302	95.0	20,820
B-19	March 1989	1,570,358	532	1,570,890	N/A	128,000
B-19	December 1989	12,258	16,381	28,639	92.7	36,575
B-19	June 1990	707	6,666	7,373	91.5	16,410
TOTAL		1,585,575	26,707	1,612,283		310,805

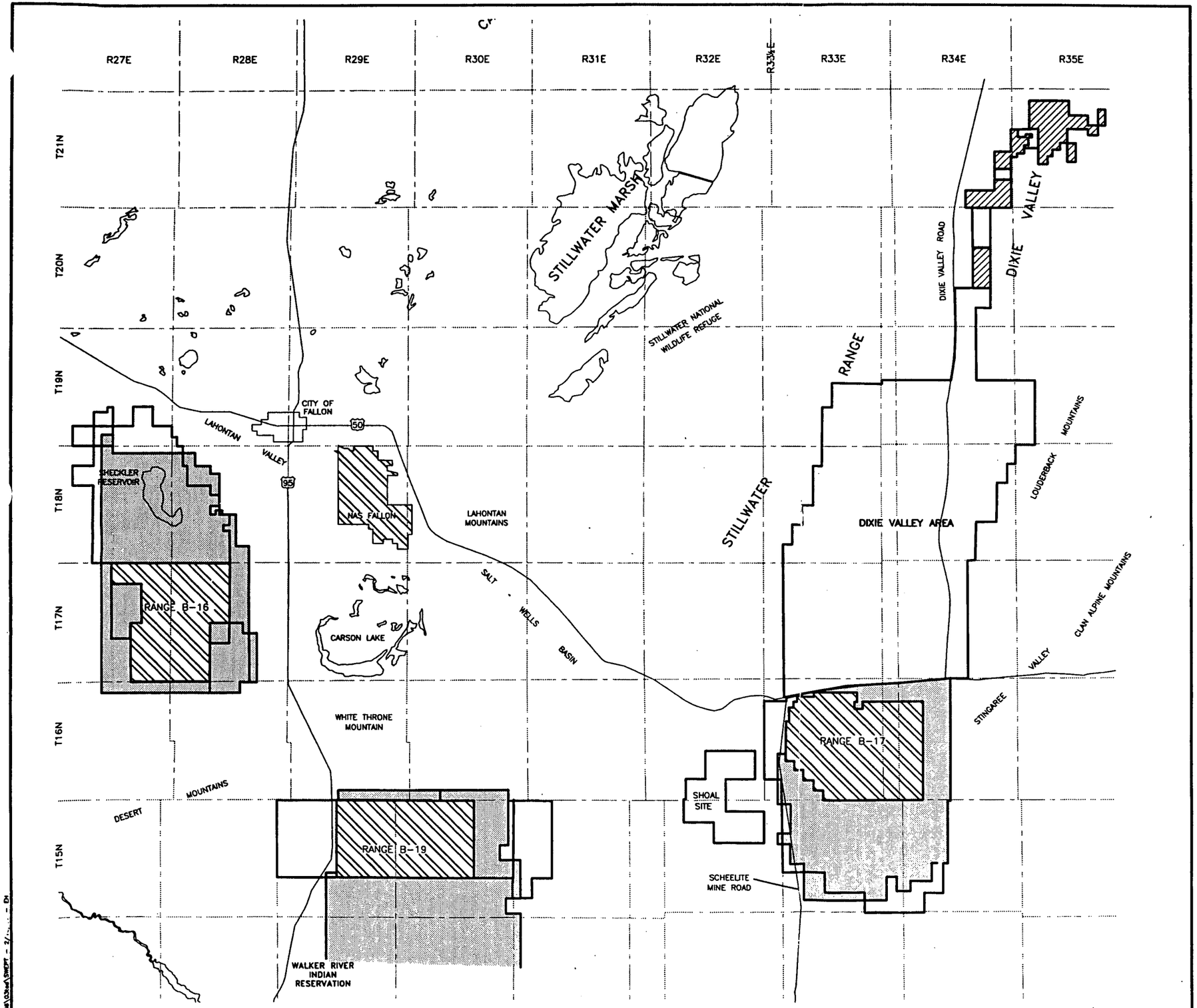
Note: 1,608,772 of the 1,612,283 total ordnance items (99.782 percent) were 20mm-40mm strafe/ammunition scrap, with 99.781 percent located off Bravo-19

[1]Sweep effectiveness probability

[2]Of the total number of items found, 129 may have had some small explosive components. The 129 items consisted of:

- 80 - Strafe/ammo pre-1968 rounds
- 9 - Unspent flares
- 1 - MK 4 cad - small explosive to push bomb off rack
- 37 - 4 lb. practice bombs - pre-1968 - age did not allow determination of status of spotting charge
- 1 - 2.25 inch pre-1968 rocket
- 1 - 2.75 inch rocket motor

Ground sweeps and aerial reconnaissance were conducted off-range of B-19 during March and December 1989 and June 1990 (Figure 3-13). Information on the ordnance found in the area swept is reported in Table 3-9. The vast majority of off-range ordnance was strafe gun ammunition scrap. The surface sweep effectiveness was calculated at 92.7 percent. No subsurface sweep was conducted. Aerial photos of B-19 showed that the strafing target, which is 3,000 feet north of the south fence line, was not in an east/west configuration. Targets were realigned in October 1990, drastically reducing off-range strafe gun scrap. The off-range ordnance south of B-19 is on the



LEGEND:

- Areas Swept for Ordnance
- Navy–owned Land in Dixie Valley
- NAS Fallon and Ranges

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1"=5MI.
(APPROXIMATE)

Ordnance sweeps covered 226,592 acres.

Areas Swept for Off-Range Ordnance in 1989 and 1990

NAS Fallon, Nevada

Figure 3-13

Source: U.S. Navy 1990a

Walker River Indian Reservation. The Navy will continue to consult with the Walker River Paiute Tribe to determine how off-range ordnance in this area is to be managed in the future.

The BLM requested that the Navy provide an analysis/feasibility report concerning what subsurface sweep technology currently exists, what would be required to completely sanitize the lands, and the specific location, type, and scope of subsurface contamination. In April 1990, the Department of the Navy provided the BLM with information concerning subsurface ordnance detection. The information stated that the only method available for subsurface detection was a hand-held magnetometer that searches a width of approximately one meter. This device is designed to locate large ferrous objects in a centralized area and is not suited for large-scale sweep operations. The Army procured a Stoles sub-surface search system to be used in base closures that is capable of searching 20 acres of flat terrain per day, to an average depth of 10 feet, with approximately 60 percent reliability. The Naval Research Laboratory has developed an ordnance remediation technology, the Multi-sensor Towed Array Detection System (MTADS), with an estimated efficiency of 96 percent. MTADS uses magnetometers and pulsed sensors mounted on platforms that are towed by all-terrain vehicles. The technology locates, identifies, and categorizes military ordnance at its probable maximum self-burial depth. MTADS was tested at the Badlands Bombing Range in South Dakota and demonstrated at test ranges around the country. NAS Fallon is working with the Walker River Paiute Tribe to investigate the potential use of the technology on off-range ordnance lands at NAS Fallon.

Regardless of the detection method, once any ordnance is located, it must be unearthed and rendered safe or detonated from the surface. The Navy believes that because of the limitations of available subsurface search technologies and the erosion and type of terrain at the FRTC subsurface, cleanup of contaminated off-range areas cannot sufficiently restore these areas for public use in the foreseeable future.

3.13.2.3 Changes in Operations

In response to discoveries of off-range ordnance, NAS Fallon operations have been changed to reduce the occurrence of off-range ordnance. In addition to realigning the strafing target at B-19, planes dropping live ordnance are accompanied by airborne, nonparticipating observation aircraft. If these aircraft see a plane drop ordnance outside the range, the pilots are to notify the NSAWC Range Department, which would have EOD personnel dispose of the ordnance. In addition, NAS Fallon has modified its operating rules for ordnance delivery and has expanded aircrew briefings to minimize the risk of ordnance being dropped off-range. In addition, a memorandum of agreement concerning off-range military

ordnance was developed among the Navy, the BLM, and the state of Nevada in December 1989 and updated in 1995. The purpose of the memorandum is to minimize the risk to public safety, to maximize the speed and efficiency of any future retrieval operations, and to establish a framework for mutual assistance and consultation in the future on lands adjacent to Navy training ranges within Nevada. The major sections of the memorandum include a description of a regular ordnance reconnaissance program and an emergency retrieval program. While these changes have reduced the occurrence of off-range ordnance, the potential for some safety concerns still exists in some areas (Figure 1-3).

3.13.3 RAICUZ Study

The NAS Fallon RAICUZ study identified areas contiguous to the FRTC training ranges where safety or noise considerations were found to exceed Navy guidelines for various land uses. Maps showing noise, safety, and incompatible use zones for each range were presented in the RAICUZ document and were updated for current and future aircraft types and aircraft operations in the Draft EIS for the supersonic operations (US Navy 1986). The RAICUZ safety and noise zones are mapped on Figure 1-6 in Chapter 1. The RAICUZ study, along with the off-range ordnance sweeps, was the basis for defining the land withdrawal boundaries designated for Alternative I.

To improve safety in the Fallon Special Use Airspace (SUA), a MOU among the Department of the Navy, the Department of the Interior, and the state of Nevada was completed in July 1987. The document outlined coordination procedures that were designed to facilitate scheduling air operations so that each agency involved could perform its objectives in compliance with maximum safety standards.

3.14 TRANSPORTATION

The Lahontan Valley is served by two primary highways, US Route 50 and Route 95. Route 50 is an east-west highway that passes through central Churchill County and links Fallon to Ely in the east and to the Reno-Sparks area to the west. Route 95 runs north-south through Fallon, linking it to Interstate 80 to the north and the town of Hawthorne to the south. State Route 361 serves the Gabbs Valley area and links the valley to both Route 50 and Route 95. State Route 839 (Scheelite Mine Road) links Route 50 with Hawthorne and provides access to the Fairview Valley. The Dixie Valley area is served by State Route 121, the Dixie Valley Road. Bell Canyon Road, which runs through the southern Fairview Mountains, and other local roads and trails also serve the region. Local roads primarily serve

mining areas and also are used for dispersed recreation and by BLM grazing permit holders.

The existing land withdrawals do not affect any major highways in the region; however, public use of some local roads that pass through lands controlled by NAS Fallon and the FRTC is not permitted. There is a gas line service road east of B-19 in an area closed because of off-range ordnance. The Navy has swept and cleared the road and maintains annual sweeps to continue to allow public access. The road would remain open for public access under the proposed land withdrawal. This is possible because soil-to-bedrock conditions are shallow, which doesn't permit ordnance to be buried under the surface. Off-range ordnance would remain on the surface and would be easily identified and collected by the explosive ordnance disposal team. In addition, training operations at B-19 have been altered to greatly reduce the potential for off-range ordnance to fall in this corridor.

3.15 AIRSPACE DESIGNATION AND USE

A discussion of all current military airspace designations associated with NAS Fallon and their use is provided in Chapter 5 as part of the cumulative effects analysis. Figure 5-2 depicts the existing NAS Fallon airspace.

Present Navy flight operations in the region include combinations of high-altitude training and low-altitude ordnance delivery practice. The latter is limited to the restricted areas above the training ranges. High-altitude training within the MOAs presently includes the following types of missions:

- Inflight rendezvous during training missions;
- Air-to-air combat maneuvering;
- En route transiting to training ranges; and
- Supersonic flight activity.

Navy aircraft are operated at high speeds and may abruptly change altitude, speed, and direction. The average number of operations per active day at the NAS Fallon ranges is approximately 368 operations (or 184 sorties) per day, with intermittent peaks of 480 operations (or 240 sorties) per day during a busy month. These include the Navy, Air Force, and Marine Corps operations.

Civilian aircraft are restricted from flying through restricted areas unless cleared by the using agency; however, NAS Fallon has a letter of agreement with the FAA that allows unrestricted access to restricted areas when the areas are not actively being used by military aircraft. Typically, restricted

areas are used by military aircraft from 7:15 AM to 11:30 PM (local time), Monday through Friday, and for a somewhat shorter period on Saturdays. Therefore, use of this airspace by nonmilitary aircraft is very limited. Civilian aircraft are free to use MOAs when military activity is occurring; however, in practice civil aircraft are often routed out of the MOAs (SAIC 1991).

Civil aviation in central Nevada includes recreation and business applications by mining companies, ranchers, medical professionals, and others. Extensive commercial aviation service is provided by the 15 airlines serving the Reno airport, and Sky West Airlines provides scheduled commercial passenger service to and from Elko and Ely. There are also several charter and air-taxi services in the Reno-Fallon area that provide aircraft for private hire.

There is a municipal airport at Fallon, with about 63 aircraft based at the airport and approximately 17,000 annual operations (White 1991). Other airports in and near the project areas are at Gabbs, Oxbow, Silver Springs, Austin, Lovelock, Yerington, and Schurz.

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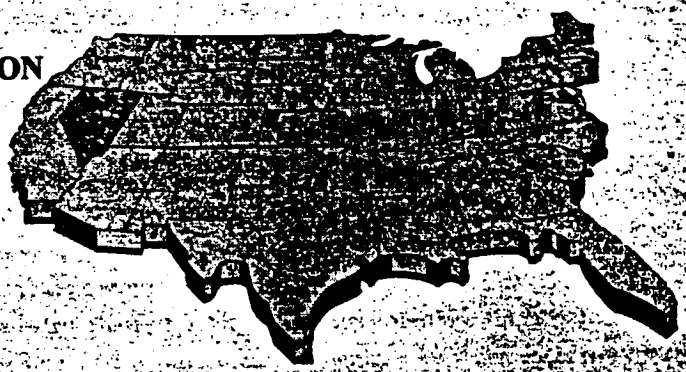

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION 4-1

4.2 ENVIRONMENTAL IMPACTS AND MITIGATION PROPOSALS 4-4

4.3 UNAVOIDABLE ADVERSE IMPACTS 4-41

4. ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental consequences of each alternative and the mitigation measures designed to minimize these impacts. The potential impacts are assessed in proportion to their significance, based on significance criteria. Measures to mitigate or reduce the level of significance of each impact are provided. The impact analysis is based on current training needs and scenarios. If changes in military technology and tactics require different scenarios, the Navy will comply with all appropriate regulations and environmental documentation.

4.1 INTRODUCTION

4.1.1 Focus of Analysis

This chapter evaluates the effects of the action and no action alternatives on the existing environment described in Chapter 3. To be consistent with Chapter 3, this chapter has been organized by resource area to provide a means to compare the impacts of the different alternatives on the individual resources. Analyzed are integrated air and ground training activities and the development of up to five EW and TACTS sites and approximately 50 visual cueing device sites. Most of these sites will be located on withdrawn public lands in the Dixie and Fairview Valley areas and east of B-19, away from sensitive resources to avoid adverse impacts. Where a site may have an impact, mitigation measures will be implemented. Such measures are discussed in this chapter under each resource category.

All withdrawn lands are categorized under one of two land use categories, as described in Chapter 2. The Navy has developed a resource management plan in consultation with the BLM, BUREC, and DOE prior to withdrawal (Appendix J). This plan will provide formal land use policies for the withdrawn lands, which will be placed in one of two land use categories. These categories provide a proxy guide for how the withdrawn land would be managed. Therefore, this chapter evaluates the potential environmental impacts that may result from implementing each alternative based on the land use categories.

Alternative II is the preferred alternative because it satisfies training and public safety requirements while minimizing the amount of land required for withdrawal.

4.1.2 Impact Significance Criteria

For the most part, the alternatives considered would not involve land-altering actions. The land proposed for withdrawal will continue to underlie the same flight areas. The proposed withdrawal would not cause an increase in flight operations or increase the size of the impact areas. Off-range ordnance lands currently under an emergency closure order and lands having the potential to be contaminated with off-range ordnance will be withdrawn.

The direct effects of military activities on the withdrawn lands (see Section 2.3) will be associated with access, development, and land use controls. The Navy intends to implement procedures to ensure that public access and development on withdrawn lands may continue, while providing for public safety and ensuring the continuing viability of the Navy mission at NAS Fallon and the FRTC.

Impacts from implementing any of the alternatives could be considered significant if they result in the following:

- Cause substantial deterioration, damage, or loss of cultural or natural resources, including threatened or endangered species or critical habitat;
- Exclude the public from unique scenic, natural, or wilderness resources or national trails;
- Substantially reduce or eliminate public access to public lands, including recreational resources, mineral resources, water resources, and grazing lands;
- Substantially reduce the quality of recreation opportunities;
- Substantially degrade the current visual quality of the area;
- Substantially restrict right-of-way or mining activities on public lands; and
- Jeopardize public health and safety.

Section 4.2 presents the results of the impact analysis for each resource category discussed in Chapter 3 and provides mitigation measures to reduce any impacts. Potential direct impacts by resource category and alternative are summarized in Table 2-6.

4.1.3 Chaff Studies

NAS Fallon has used chaff over B-17 and in the Dixie Valley area for over 30 years and will continue to do so under the proposed withdrawal. As discussed in Section 2.3.1, military aircraft use chaff as a defensive mechanism to avoid detection by enemy radar. In response to public comments during the scoping process, the effects of chaff use are discussed under each of the resource categories below. A general discussion of chaff is presented here to detail the existing body of knowledge available on chaff and chaff use.

Chaff is composed of glass fibers (silica), aluminum, and stearic acid. The glass fibers, called dipoles, are coated with aluminum of 99 percent or greater purity to reflect radar and then with stearic acid to prevent the fibers from sticking together. Chaff dipoles vary in length from 0.38 inches to two inches. A bundle of chaff contains approximately 2.1 million dipoles and weighs approximately 1.5 ounces. The silica in chaff contains no resin. Silica exists in nature as quartz in its pure state and is the main constituent of sand, sandstone, and diatomaceous earth. Aluminum, one of the most abundant elements in the earth's crust, is found in mica, kaolin, and feldspar. In its pure form, it is nontoxic, highly resistant to corrosion, and insoluble except in extremely acidic conditions (CRC Handbook of Chemistry and Physics, 1992-1993, p. 4-3). Varying amounts of aluminum are found in soil, air, water, and plant and animal tissue, including food products. The aluminum in chaff oxidizes to AL_2O_3, a compound found in nature from which aluminum is mined. The period of time over which aluminum oxidizes depends on environmental conditions and the size and shape of the original aluminum. Stearic acid is an environmentally benign organic compound that biodegrades after several days' exposure to light and air (US Air Force 1996).

Many studies on the effects of chaff have been undertaken over the past 40 years. Most of the studies have taken place at universities and government laboratories. Some of the most often cited include 1977 studies on the effects of chaff on Chesapeake Bay marine organisms, performed by the University of Delaware and the University of Maryland (University of Delaware 1977; Systems Consultants 1977), and a 1972 study of the effects of chaff on cattle, performed by the Canadian Department of Agriculture (as referenced in SEA 1989 and Naval Research Laboratory 1995).

In 1989, the Air Force Strategic Air Command released a study entitled, "Identifying and Evaluating the Effects of Dispensing Chaff from Military Aircraft" (SEA 1989). This study was conducted to document the environmental effects of chaff and was intended to be incorporated by reference in NEPA analyses to avoid repetitive discussions of issues related to chaff. The study reviewed and analyzed over 100 existing documents on the

impacts of chaff to humans, livestock, land, fish and wildlife, plants, and radio frequency interference.

The Army conducted a study in 1992, "Environmental and Health Effects Review for Obscurant Fibers/Filaments," to provide a technical basis to establish the health and environmental effects of fibers and to establish a basic resource for site-specific environmental assessments for training and test releases of fibers (US Army 1992a).

In 1995 the Naval Research Laboratory released a documented entitled, "Analysis of Electronic Warfare Digest, Volume 17 No. 4, April 1994, Exclusive Report: Chaff Potentially Harmful to the Environment, Studies Say" (Naval Research Laboratory 1995). This document was in response to an article published in the Electronic Warfare Digest, stating that studies show chaff is harmful to the environment. The Navy study compared the information contained in the Electronic Warfare Digest to the original sources of the information.

The Air Force, Headquarters Air Combat Command, completed a study in August 1997 that develops more comprehensive scientific data on the use of chaff in training and the associated environmental effects (US Air Force 1997). The information contained in this report addresses potential effects from chaff use on human health, safety, air quality, physical resources (soil and water), biological resources, land use and visual resources, and cultural resources. The general finding of the studies noted above, including the studies that reviewed and analyzed multiple sources of chaff data, is that chaff is not harmful to humans, livestock, fish and wildlife, or plants. The chaff information included in this EIS represents the available data on the effects of chaff use. The Navy is willing to participate in cooperative efforts with other branches of the military or state agencies to further answer concerns regarding the use of chaff, providing that such an effort would not duplicate valid existing studies. The General Accounting Office has been directed and is in the process of conducting a study on chaff.

4.2 ENVIRONMENTAL IMPACTS AND MITIGATION PROPOSALS

4.2.1 Geology and Soils

4.2.1.1 Alternative I

Impacts: Alternative I would result in few direct impacts on soils or geology. Navy integrated air and ground training activities would not result in significant impacts to soil conditions. All vehicle traffic from training activities would remain on existing roads and trails, although foot traffic could take place on undisturbed areas. Use of helicopters during integrated air

and ground training would increase wind erosion of site specific topsoil when hovering or landing. However, given the dispersed nature of the activities, impacts are not expected to be significant.

Potential indirect impacts on soils could accompany Navy development of individual EW, TACTS, and visual cueing device sites on Category A and B lands in the Dixie and Fairview Valley areas and east of B-19. A maximum of 75 acres would be affected. New site construction could require clearing and grading some sites or importing fill materials, which could result in slumping or increased landslide potential. These sites would be selected to avoid areas susceptible to high erosion rates. Impacts to soils that could occur from developing these sites, though not significant, will be avoided or mitigated through natural resource management techniques and standard geotechnical engineering and design. No significant impacts are expected.

Impacts to soils could result when existing roads or utility corridors were not available at Navy developed sites. These impacts, which could include erosion, soil compaction, and increased run-off, would not be significant because of the small area that would be affected. Impacts to soils that could occur from developing these roads or corridors, though not significant, will be avoided or mitigated through natural resource management techniques and standard geotechnical engineering and design.

The continued use of chaff would not impact soil quality. While detailed data on the effects of chaff on land are lacking, the quantity of aluminum leached out of chaff would have to be much higher than could result from the training use of chaff to have any detectable effect on soil quality. Laboratory tests of chaff conducted by the Air Force using a modified toxic characteristics leaching procedure indicated little or no potential for adverse effects on soil (US Air Force 1997). No known or documented adverse effects on soils have occurred at military facilities dispensing chaff. Based on existing data, no impacts to soil resources are expected to result from the continued use of chaff or the use of flares on low-level training missions (SEA 1989; Bohman 1991; Naval Research Laboratory 1995).

Mitigation: No mitigation required.

4.2.1.2 Alternative II (Preferred Alternative)

Impacts: Potential impacts on the existing environment from Alternative II would be similar to those described for Alternative I, including development of military sites.

Mitigation: No mitigation required.

4.2.1.3 Alternative III

Impacts: Impacts to soils would be similar to those described for Alternative I.

Mitigation: No mitigation required.

4.2.1.4 No Action Alternative

Impacts: The No Action Alternative would not withdraw public land. Development of EW and TACTS sites would not take place and no integrated air and ground training would occur except on existing lands administered by NAS Fallon. Therefore, soils would not be impacted.

Mitigation: No mitigation required.

4.2.2 Water Resources

4.2.2.1 Alternative I

Impacts: As discussed in Chapter 3, important water resources in the withdrawal area include developed springs, existing wells, storage tanks for livestock grazing, and guzzlers for wildlife use. Alternative I would not adversely impact existing water developments on Category B lands. Alternative I also would not affect new water developments on Category B lands, though water development would not be allowed at Navy military sites, such as EW or TACTS sites, during the time of their use. This would not be a significant impact because military developments would be located to avoid conflicts with future water improvements.

Alternative I would affect water developments on Category A lands. As described in Chapter 2, no new water developments would be permitted on Category A lands. In addition, access to existing water developments would be closed. There are currently four water developments on Category A land—one water storage trough east of B-19, two water storage troughs south of B-17, and one guzzler east of B-17. Given that grazing would not be allowed on Category A lands, the loss of water storage developments associated with livestock grazing would not be significant. The loss of access to water righted developments in and of itself, however, cannot be mitigated. The Navy and BLM signed a cooperative agreement in 1994 to allow the BLM access to the wildlife guzzler east of B-17.

The continued use of chaff is not expected to affect water quality. No large bodies of open water exist in the areas of chaff release, and chaff deposition is not condensed enough to present a potential leaching hazard to ground water. An Army toxicity and fate study submerged aluminum-coated chaff in salt water and in solutions of fresh water of varying hardness (US Army 1992b). The salt water had the highest amount of aluminum at approximately 2 mg/L

after 24 hours. The hard and very hard water remained at concentrations of 1 mg/L, and the soft and very soft water remained below detectable limits after 21 days. The chaff in this test remained on the surface in clumps and was difficult to sink until individual fibers were separated manually (US Army 1992b). Any chaff in a body of water would either be blown across the water surface by wind or could become submerged if wet. Chaff would be filtered out by screens and settling tanks prior to being introduced into a drinking water system and would not reach the consumer (SEA 1989; Naval Research Laboratory 1995).

In laboratory tests conducted by the US Air Force, the highest concentrations of aluminum occurred at pH 4 (170 ppm) and the lowest at pH 7 (0.3 ppm). The freshwater acute value for aluminum is 1.496 ppm, and the chronic value is reported as 0.742 ppm for a pH range of 6.9 to 8.2. The extracts from the pH 7 samples, which lie within the 6.9-8.2 range, were approximately one-sixth the freshwater acute value for aluminum. These extract values represent a very high chaff-to-water ratio (1:20) that could not occur in the environment. Therefore, aluminum toxicity due to chaff is not a concern in aquatic environments (US Air Force 1997).

The freshwater acute value for copper is 0.018 ppm. Although no copper was detected in the laboratory tests, which had a detection limit of 0.02 mg/l, it is possible that trace quantities of copper could occur in some lots and, if deposited on freshwater bodies, could leach out. The quantity of chaff that would have to be released over a given water body would have to be very large, however, to reach acute values (US Air Force 1997).

Neither chemical nor physical effects are expected to occur to drinking water sources exposed to chaff. The quantities of chemicals released are too small to be of concern, and filtering systems would remove any fibers (US Air Force 1997).

Impacts related to wildlife, including use of guzzlers, are discussed in Section 4.2.3. No impacts to water resources would occur from ground-based training activities.

Mitigation: The Navy will explore means to compensate holders of water rights on Category A lands, subject to congressional authorization and appropriation.

4.2.2.2 Alternative II (Preferred Alternative)

Impacts: Alternative II would have impacts to water resources similar to those discussed for Alternative I.

Mitigation: Mitigations will be the same as discussed for Alternative I.

4.2.2.3 Alternative III

Impacts: Alternative III would have impacts to water resources similar to those discussed for Alternative I.

Mitigation: Mitigations will be the same as discussed for Alternative I.

4.2.2.4 No Action Alternative

Impacts: The No Action Alternative would not withdraw public lands. There would be no impacts to water developments on off-range ordnance lands. The lands are closed under existing conditions and would continue to be handled through BLM and Navy administrative processes.

Mitigation: No mitigation required.

4.2.3 Biological Resources

This section discusses the biological effects anticipated for each alternative. One of the primary issues in evaluating effects on wildlife is noise. Before the discussion of each alternative, a review of the current understanding of noise impacts on wildlife is provided.

Many studies have been performed concerning the effects of noise on wildlife and domestic animals; several of these were summarized by Manci et al. (1987). This literature synthesis documented variation in response to noise between classes, genera, and species, in addition to variation among individuals of the same species. The primary focus of the review was on induced stress and its effects on reproduction, behavior, and physiological responses. The authors note that data gaps still exist in the overall understanding of the effects of noise on wildlife. Difficulties in analysis arise because the reaction of a species can be affected by the intensity, number, duration, frequency, time of day, and season of the auditory disturbances. Since noise (even loud and disturbing noise) is a natural part of the environment for wildlife, it is frequently difficult to isolate a stimulus and its effects. Also, not all noises are human-made, as evidenced by the problems encountered by Plotkin et al. (1992) in their sonic boom studies. Their automatic recording devices were frequently tripped by thunderstorms, which were later distinguished by wave form rather than decibel level.

For humans, the information carried by a sound wave may be more disturbing than the sound itself just as temporal difference can affect the "annoyance factor" (e.g., a lawnmower at 6 AM vs. 11 AM) (Harrison 1978). There is no method for determining how content affects wildlife other than by measuring responses such as heart rate or changes in behavior.

For years, most studies involving nonlaboratory animals focused on the effects of sonic booms (Ames 1978), while other studies involved increased background noise levels. The results of these studies may not provide useful information in the context of determining the effects of jet overflights. Manci et al. (1987) reviewed several studies concerning noise effects on wild rodents in the vicinity of airports. Mice exposed to noise were found to have significantly greater adrenal gland weights (an indication of stress) than a control group that was not exposed to noise. However, the experimental design of this study appears to limit its applicability for analysis of military overflights within the FRTC as it ignores the transitory nature of these operations. In addition, the airport mice were exposed to considerably louder noise than that recorded by Krausman et al. (1993b) for low-level flyovers by F-16s.

The advent of advanced radiotelemetry equipment now makes it possible to measure the degree and duration of response. Krausman et al. (1993a, b, and c) and Workman et al. (1992) measured the effects of jet overflights on ungulates (hoofed mammals) by monitoring heart rate. Workman et al. (1992) caution against equating elevated heart rate with distress, suffering, or stress. They note that insects, such as bees and flies, caused more distress than aircraft flyovers, based on heart rate.

Ungulates: In a study monitoring noise impacts to the biota of Nevada from NAS Fallon operations, Lamp (NDOW 1989) observed no reaction from 72 percent of mountain sheep exposed to aircraft disturbances and only minor reactions from 24 percent. Mule deer showed minor reactions or no reactions 98 percent of the time. These findings were based on observations of free-ranging wildlife during actual military overflights.

The Air Force commissioned a study to examine the physiological responses of pronghorn, bighorn sheep, and elk to a variety of visual and auditory stimuli at Hill Air Force Base in Utah (Workman et al. 1992). This study monitored heart rate and body temperature responses to human presence, vehicles, sonic booms, subsonic F-16 low-level flyovers, helicopters, and fixed-wing aircraft (Cessna 182).

Body temperature of pronghorns was not affected by the stimuli, but heart rate was altered to varying degrees depending on the stimulus. Persons walking or running past a pen containing pronghorn elicited less response than a person entering the pen for 10 seconds. A tank driving past while blowing its horn elicited a relatively high response, while passing trucks, motorcycles, and two consecutive sonic booms elicited responses that were of short duration. Decreased responses to subsequent sonic booms indicated rapid habituation to this disturbance. Low-level flyovers by a Cessna 182 resulted in elevated heart rates, with some animals displaying no habituation.

In these instances, the pronghorn associated the sound with the plane, as indicated by their looking toward the incoming flight. Heart rate response to subsonic F-16 flyovers was both minimal and of short duration.

Helicopter flyovers demonstrated that both auditory and visual stimuli caused pronghorns to bolt and seek an escape. There was no habituation documented. Pronghorns responded strongly to hovering and remained alarmed as long as the helicopter hovered. Flyovers that followed a hovering episode drew greater responses than first-time flyovers, but Workman et al. (1992) thought it likely that habituation would occur with subsequent flyovers.

The portions of the study involving bighorn sheep and elk yielded similar results. Bighorn sheep in a pen had a greater response to someone standing in the pen or running past it than to someone walking by the pen. Responses to aircraft were transient and of short duration. Elk also exhibited little heart rate response to subsonic flyovers.

Another study found that herd of pronghorn ran when an OH-58 helicopter approached at 150 feet altitude. Since overflights of the area where the study was conducted were rare, they concluded that there had been little opportunity for habituation (Luz and Smith 1976).

A third series of studies on the effect of noise on ungulates found that aircraft overflights did not have a detrimental influence on heart rate in mule deer and bighorn sheep. In the initial study, desert mule deer and bighorn sheep were exposed to simulated low-altitude jet aircraft noise. Heart rate, body temperature, and behavior were monitored and compared for periods before, during, and after simulated overflights. Heart rates increased during overflights, sometimes more than doubling, but returned to resting rates in two minutes or less. As the study progressed, all animals became habituated to the sounds and both the rate and degree of increase in heart rate decreased. At the end of the study, mean heart rate changes were within normal expectations for seasonal changes (Krausman et al. 1993a).

The same study organizers installed heart-rate monitors on bighorn sheep in a 320-hectare (791-acre) desert enclosure. Heart rates and behavior were monitored before, during, and after low-level overflights by F-16 aircraft. Again, heart rates returned to preexposure levels in less than two minutes and behavior alterations were not long-lasting. Although the sheep often ran during noise exposure, they typically resumed normal activities after traveling less than 10 meters (Krausman et al. 1993b and c).

These studies suggest that serious or lasting detrimental effects on ungulates from aircraft overflights are unlikely. This does not mean that aircraft

overflights do not cause stress in ungulates, but it suggests that such contact is unpleasant rather than harmful.

Birds: Research conducted in Arizona on eight raptor species that were subjected to low-level jet aircraft passes and simulated sonic booms showed no adverse effects on reproductive performance (Ellis et al. 1991). These experiments were conducted with habituated birds, but proximity to test stimuli varied from directly overhead to nests far from frequent military activity. Raptor responses to disturbances varied, including birds sometimes showing alarm, minimal response, ignoring the test stimuli, and occasionally flying from perches or nests. Adverse responses were never associated with reproductive failure.

Another study in Colorado found no difference in the reproductive success of habituated and nonhabituated red-tailed hawks to low-level helicopter flights or other air traffic (Anderson et al. 1989). Hawks not previously exposed to disturbances showed stronger avoidance behavior than habituated birds. Additional studies reviewed reported similar findings (Manci et al. 1987).

Studies of game birds found no effects on productivity estimates and hatching success of bobwhite quail and wild turkeys (Manci et al. 1987). Conclusions concerning the effects of noise on sage grouse brooding or nesting activities from NAS Fallon operations could not be drawn (NDOW 1989). Chukar (an introduced game bird) behavior was affected by low-level overflights, but chukar populations did not appear to be impacted significantly.

The National Biological Service, North Carolina Cooperative Fish and Wildlife Research Unit, conducted a quantitative study between 1990 and 1992 to assess impacts from military flight operations at the Mid-Atlantic Electronic Warfare Center on wintering and breeding waterfowl at nearby Piney Island, North Carolina. Based on survey results and an analysis of 30 years' worth of duck use data, the report found no evidence that waterfowl abundance and species diversity is negatively affected by aircraft activity (US Marine Corps 1996). However, studies of snow geese and waterfowl at Carson Lake observed responses to 54 percent of aircraft disturbances (NDOW 1987). The study also projected that there is a high potential for noise impacts to waterfowl at Sheckler Reservoir from military flights. No evidence in support of this projection has been gathered.

Other vertebrates: In general, the effects of noise on small mammals, reptiles, and amphibians are little known and poorly understood (Manci et al. 1987), and the specific effects of aircraft overflights on reptiles and amphibians have never been studied (US Forest Service 1992). There is no indication that there have been impacts from past or current military activities at NAS Fallon.

4.2.3.1 Alternative I

Impacts: No significant adverse impacts to endangered or threatened species are expected from implementing this alternative. Any potential roosting, foraging, or nesting habitat would not be altered or otherwise adversely affected.

Habitat for two endangered or threatened species, the bald eagle and American peregrine falcon, is found in the area proposed for withdrawal. Both of these species are migratory and reside in the Lahontan Valley during winter and spring. For feeding, bald eagles generally roost in tall cottonwood trees near large bodies of water, such as Carson Lake and the Stillwater NWR. The area north of B-16 proposed for withdrawal includes Sheckler Reservoir, which provides habitat for this species. American peregrine falcons have been observed at Carson Lake and Stillwater NWR but are not documented at the Sheckler Reservoir. No endangered or threatened species habitat is known to exist on Category A land.

The NAS Fallon Integrated Natural Resource Management Plan is being updated to include an inventory of potential sensitive habitats within the withdrawn lands. Biologists and natural resource experts with NAS Fallon will review all site plans in an effort to avoid any sensitive habitats. If sensitive habitats cannot be avoided, the Navy will coordinate with the Fish and Wildlife Service and will conduct any required biological evaluations and threatened and endangered species site surveys prior to EW or TACTS site development.

Noise impacts to wildlife species will not be significant under this alternative because the flight patterns would not be changed and the frequency of missions would not increase in response to the land withdrawal. Noise effects, however, are species-specific and dependent on the aircraft being used. The studies discussed above showed that most wildlife species that have been studied adapt to noise levels from military operations. Therefore, it is assumed that animals inhabiting the withdrawal footprint are habituated to overflights.

Noise generated from integrated air and ground training operations, such as helicopter operations and firing of Smokey SAMs, may startle wildlife. These effects would be of limited duration and would have only temporary effects on wildlife. The ground component of integrated air and ground training could have a more adverse effect on wildlife than air activity. A study found that human activity on the ground usually elicits a greater response in wildlife than do overflights or sonic booms (US EPA 1980).

Development and maintenance of water storage tanks and troughs, continued access for the study of reintroduced bighorn sheep, and other BLM wildlife management programs could be affected by the closure of Category A lands.

There are four water developments on Category A lands—one water storage trough east of B-19, two water storage troughs south of B-17, and one guzzler east of B-17. The Navy and BLM have a cooperative agreement that allows BLM access to the wildlife guzzler, which would continue under the withdrawal. To the extent allowable under safety constraints, the Navy will grant BLM access to Category A lands to study reintroduced bighorn sheep. The Category B designation would not affect maintenance of water developments.

Impacts from military activities, including integrated air and ground training activities on foot and in vehicles and the placement of EW, TACTS and visual cueing device sites, would not be significant. Constructing the developed sites would result in vegetation loss and some wildlife displacement. Approximately 75 acres could be affected. The affected area could increase if roads and utility corridors do not already exist. This represents a small percentage of the total withdrawal area. Natural resources, including soils, flora, and fauna on EW, TACTS, and visual cueing device sites would be subject to identification, analysis, and impact mitigation, as required by various federal environmental laws and regulations. Ground training would take place in the Dixie Valley area and on a more limited basis south of B-17. Training is not expected to take place along Scheelite Mine Road or where tarantulas migrate; therefore, they are not expected to be significantly impacted by the withdrawal.

Integrated air and ground training would increase ground disturbance, potentially harming vegetation and promoting the spread of noxious weeds. Vegetation likely to be affected would be species common to the region and would not be unique or sensitive species. The Navy currently has an Resource Management Plan for the control of noxious weeds on all Navy lands. These practices would be adopted to the withdrawn lands to minimize the spread of noxious weeds. The resource management plan for the withdrawn land (Appendix J) contains a noxious weed and weed management program.

Based on available data, aluminum-based chaff such as that used at NAS Fallon is not toxic to plants or wildlife (SEA 1989; Bohman 1991; Naval Research Laboratory 1995). A study conducted by the US Army Chemical Research, Development, and Engineering Center found that chaff is nontoxic to daphnia, mysid shrimp, and sheepshead minnows up to 1,000 mg/L. Using the chemical scoring system for hazard and exposure identification, the study concluded that the toxicity of chaff is ranked zero on a scale of zero to nine, with zero being nontoxic and nine being the most toxic (US Army 1992b). No studies on the long-term effects of chaff could be found.

In laboratory tests conducted by the US Air Force, the highest concentrations of aluminum occurred at pH 4 (170 ppm) and the lowest at pH 7 (0.3 ppm).

The freshwater acute value for aluminum is 1.496 ppm, and the chronic value is reported as 0.742 ppm for a pH range of 6.9 to 8.2. The extracts from the pH 7 samples, which lie within the 6.9-8.2 range, were approximately one-sixth freshwater acute value for aluminum. These extract values represent a very high chaff-to-water ratio (1:20), which could not occur in the environment. Therefore, aluminum toxicity due to chaff is not a concern in aquatic environments (US Air Force 1997).

Field observations conducted by the US Air Force at two military installations where chaff is frequently used and results of laboratory analyses of soil samples allow a number of conclusions to be drawn regarding the effects of chaff use on wildlife.

Based on the field survey results, chaff on land would generally be subject to disintegration due to abrasion from surface features in arid climates and chemical processes in wet, acidic environments.

The dispersal and decomposition of chaff fibers on land would limit the exposure of grazing animals to chaff, making it unlikely that ingestion of quantities large enough to have adverse physiological effects would occur. Plastic caps and cartridges are not likely to be eaten by wildlife and would have no effect on them.

Animals are unlikely to inhale chaff particles during chaff releases as the filaments drift to the ground due the size of the fibers and to the dispersal of the fibers in the air.

Due to the diameter and length of the filaments, chaff would not penetrate far into the respiratory system and would be easily cleared out. Relative to the background concentrations of dust in the air, the amount of additional particles contributed by chaff fibers would be negligible, and no adverse effects on wildlife would be expected from inhalation of the fibers.

The low visible accumulation of chaff fibers on the ground, even in arid environments, makes it unlikely that wildlife would have enough direct contact to cause any skin irritation.

Chaff fibers that land on standing water and float could potentially accumulate on the leeward side of the water body. It is likely that wildlife would avoid ingesting chaff, if possible, due to its unnatural appearance, but if a large quantity of chaff were mixed with plant material, it could be consumed by an animal while ingesting the vegetative matter.

The gizzards of surface-feeding ducks are not effective in dealing with such foreign materials. Ingested chaff would likely pass through the duck's digestive

system as does fibrous plant material and not be harmful to the duck. However, if compaction of the chaff occurred in the gizzard, blockage of the digestive system could occur. Although individual animals could be affected, the number of incidents would be too low to impact species population. Impacts would be insignificant unless a protected species were affected.

Any effects on bats would be short term because chaff dissipates in the air (i.e., is dispersed by winds and settles to the ground) and because the bats would recover quickly from the confusion. Bats would not likely misinterpret the chaff particles as insects and so would not be likely to consume them. Since there is no evidence of heavy accumulation of chaff on the ground or water, avoidance of foraging areas by wildlife due to chaff is unlikely.

Given the wide ground dispersion patterns of chaff and its nontoxic nature, impacts to vegetation as a result of continued chaff operations are unlikely. Potential routes of exposure to fish and wildlife from continued deployment of chaff include ingestion of chaff fibers. Studies on livestock extrapolated to wildlife suggest that the consumption and retention of chaff is not likely to be biologically significant. In addition, no effects from chaff on wildlife have been observed at NAS Fallon, where chaff has been used for many years, though no definitive study of chaff effects on these ranges has been performed.

No adverse impacts are expected to wetlands from this alternative. Ground operations would avoid wetlands, including salt and alkali flats and drainages, to the greatest extent possible. Any activities that could adversely affect wetlands would be subject to regulation under the Clean Water Act.

Mitigation: The Navy will apply the Natural Resource Management Plan to withdrawn lands to control the spread of noxious weeds. To avoid impacts to migrating tarantulas, the Navy will not conduct ground training along Scheelite Mine Road during the migration periods. To reduce startle effects, no ground or low-level helicopter training below 500 feet AGL will take place within a one-half mile radius of springs and water troughs.

4.2.3.2 Alternative II (Preferred Alternative)

Impacts: Impacts resulting from this alternative would be similar to those of Alternative I. Impacts from developing EW, TACTS, and visual cueing device sites would occur in small areas and would avoid significant biological resources. Impacts from integrated air and ground training would be similar to those discussed for Alternative I, though less training would occur north of B-16.

Mitigation: Mitigations will be the same as discussed for Alternative I.

4.2.3.3 Alternative III

Impacts: As discussed under Alternatives I and II, no endangered or threatened species or associated habitat would be affected by this action. Impacts resulting from this alternative would be similar to those of Alternative II. As with Alternative II, less training would occur north of B-16 than under Alternative I.

Mitigation: Mitigations will be the same as discussed for Alternative II.

4.2.3.4 No Action Alternative

Impacts: The No Action Alternative would not adversely affect biological resources.

Mitigation: No mitigation required.

4.2.4 Air Quality

4.2.4.1 Alternative I

Impacts: This alternative would not have a significant direct impact on air quality. A Clean Air Act conformity determination is not required because NAS Fallon and the training ranges are not in a nonattainment area. The development and use of up to 50 visual cueing device sites would result in minor impacts to air quality from site development and the occasional operation of small engines to recharge battery packs. Potentially greater impacts could accompany development of EW or TACTS sites, which require more extensive earth-moving activities. Most impacts would be short-term impacts related to construction activities.

It is expected that up to five EW or TACTS sites would be developed, with a maximum size of five acres per site. Using an emission factor of 1.2 tons of fugitive particulate matter per acre per month (US EPA 1985) and assuming two weeks time to grade all five sites, the total emissions would likely be on the order of 15 tons of fugitive dust. Inhalable particulate matter (PM_{10}) ranges from 20 percent to 45 percent of fugitive dust. This would bring the emissions of PM_{10} from all sites combined to three to seven tons, or 0.6 to 1.4 tons per site. Dust control measures, such as watering the site, would reduce PM_{10} emissions by as much as 50 percent, resulting in emissions of 0.3 to 0.7 tons per site. Emissions of this magnitude would have a localized effect but would be of short duration and would not be cumulative because of the distance between sites. This would not be a significant impact.

In addition to particulate emissions from earth moving, there would be emissions from fuel-burning construction equipment. Exhaust emissions include nitrogen oxides (NO_x), carbon monoxide (CO), PM_{10}, hydrocarbons

(HC), and sulfur oxide (SO_x) compounds. Exhaust emissions were calculated using EPA AP-42 emission factors for heavy-duty construction equipment and are listed in Table 4-1. It was assumed that four pieces of construction equipment (dozer, scraper, grader, and track-type tractor) would operate eight hours per day for two weeks. These emissions, totaling approximately three tons, are not significant.

Potential long-term sources of emissions associated with operating the EW and TACTS sites would result from diesel-powered generators and routine vehicle traffic for operations and maintenance at the sites. These emissions are not expected to be significant because generators would be used for backup power only and because vehicles would operate only during changes in personnel and maintenance activities.

TABLE 4-1
EQUIPMENT EMISSIONS

Equipment	Emissions (tons/year)[1]				
	NO_x	CO	PM_{10}	HC	SO_x
Dozer	0.17	0.07	0.007	0.008	0.014
Scraper	0.15	0.05	0.016	0.01	0.019
Grader	0.03	0.006	0.003	0.002	0.004
Track-type Tractor	0.05	0.01	0.005	0.005	0.006
TOTAL for Each Site	0.40	0.14	0.03	0.03	0.04
TOTAL for Five Sites	2.0	0.71	0.15	0.13	0.21

Source: Developed by Tetra Tech using US EPA AP-42 emissions factors (EPA 1985)
[1]Assumes equipment operates two days per site at five sites for eight hours per day for a total operating time of two weeks.

Because foot traffic would be minimal and vehicle movement would be restricted primarily to established roadways and trails, dust and emissions from integrated air and ground training activities are expected to be insignificant. The use of helicopters during such training would increase dust when hovering or landing. This would be a localized and temporary effect.

The continued use of chaff and flares is not anticipated to have any air quality impacts. Chaff quantities released at one time are not great and do not break down to concentrations small enough that would affect air quality. No evidence has been found that chaff breaks down small enough to affect human health. According to chaff testing conducted by the US Air Force, it is believed that most chaff fibers maintain their integrity after ejection. Although some fibers are likely to fracture during ejection, it appears that this does not result in the release of PM_{10}. Although not significant, the tests indicated that the explosive charge in the impulse cartridge results in minimal releases of PM_{10}. Therefore, it appears that chaff deployment would not result in an exceedances of the national ambient air quality standards (US Air Force 1997). Flares emit small amounts of hazardous air pollutants, such as

phosphorus. This would not be a significant impact because of the trace amount of hazardous air emissions, the short burn time (10 seconds), and because the flares are ignited primarily over the training ranges.

Mitigation: No mitigation required.

4.2.4.2 Alternative II (Preferred Alternative)

Impacts: Impacts from Alternative II would be similar to those of Alternative I.

Mitigation: No mitigation required.

4.2.4.3 Alternative III

Impacts: Impacts from Alternative III would be similar to those of Alternative I.

Mitigation: No mitigation required.

4.2.4.4 No Action Alternative

Impacts: No new development or integrated air and ground training would take place under the No Action Alternative except on existing lands administered by NAS Fallon. Future development could be constructed on public lands subject to BLM authorization. Air quality would not be impacted.

Mitigation: No mitigation required.

4.2.5 Noise

This section evaluates potential noise impacts resulting from each alternative. Noise effects on wildlife are discussed in Section 4.2.3.

4.2.5.1 Alternative I

Impacts: Alternative I would have no significant adverse noise impacts from jet aircraft operations because the land withdrawal would not result in an increase in aircraft operations and associated noise.

There would be no significant adverse impacts from construction or operation of the EW, TACTS, and visual cueing device sites. Construction could result in noise levels of up to 80 dB in the immediate vicinity of the site, however, noise levels would decrease with increasing distance from the site and would be temporary in nature.

Integrated air and ground training activities have the potential to disturb public land users in close proximity to operating helicopters. Since no integrated air and ground training operations would occur near residential areas, recreationists are most likely to be affected by noise. Those recreating north of B-16 or in the Dixie Valley area may be particularly affected. No specific information was available on the number of individuals using the proposed withdrawal area or the time of day, week, or year these individuals are present. Presumably, most land users are present during daytime hours on weekends. More than 90 percent of the integrated air and ground training would take place during the week, and approximately 50 percent of the training would occur at night.

Helicopter noise levels are discussed in Section 3.5.4. As discussed in this section, noise levels above 70 to 75 dBA could result in adverse effects to land users in the immediate area. Helicopters flying at altitudes of 100 feet above ground level would create adverse noise effects within about 100 feet on either side of the flight track (the distance on the ground from the receptor to the point under which the helicopter is flying). While it is standard operating procedure to avoid training near other land users, training activities would have the potential to significantly impact land users who were within this distance of the helicopter flight track.

There would be no noise impacts from the continued use of chaff and flares.

Mitigation: No mitigation required. However, the Navy will conduct noise studies to verify the Navy's position that there are no significant noise impacts associated with existing operations at B-17 and B-19.

4.2.5.2 Alternative II (Preferred Alternative)

Impacts: Impacts from construction of EW, TACTS, and visual cueing device sites, integrated air and ground training activities, and the continued use of chaff and flares would result in similar effects as those described for Alternative I. The smaller withdrawal area north of B-16 would result in less potential impacts from helicopter noise on recreationists. Noise impacts on specific resources are discussed in the appropriate resource section.

Mitigation: No mitigation required. However, the Navy will conduct noise studies to verify the Navy's position that there are no significant noise impacts associated with existing operations at B-17 and B-19.

4.2.5.3 Alternative III

Impacts: Impacts from Alternative III would be similar to Alternative II.

Mitigation: No mitigation required. However, the Navy will conduct noise studies to verify the Navy's position that there are no significant noise impacts associated with existing operations at B-17 and B-19.

4.2.5.4 No Action Alternative

Impacts: The No Action Alternative would not impact noise levels.

Mitigation: No mitigation required.

4.2.6 Visual Resources

4.2.6.1 Alternative I

Impacts: Potential impacts to visual resources could result from Navy activities, including EW, TACTS, and visual cueing device site development and air and ground training on the proposed withdrawal lands. Impacts can result from intrusion of new features whose outline, form, color, lighting, reflectivity, height, bulk, or shadow interfere with the perceived existing visual environment. The intensity of the impact would depend on the location of the activity, the visual characteristics in the area, and public accessibility of the area. Navy activities occurring in the foreground and middle ground would have a greater effect than activities located farther away. The areas of highest viewer sensitivity include the Highway 50 National Historic Corridor, Pony Express National Historic Trail, Dixie Valley Road, and Highway 95. The lands with the highest visual quality in the proposed withdrawal area include those lands in the wilderness study area and mountain ranges.

The Navy would develop up to five EW or TACTS sites and up to 50 visual cueing device sites in the Dixie and Fairview Valley areas and east of B-19. Typical developments for EW sites, TACTS sites, and visual cueing devices are shown in Figures 2-2 through 2-5. Most of these sites would be located in valley areas that have some existing development, including utility corridors, cow camp improvements, trails, and EW sites. The impact of individual future developments would vary at each location and would be reduced through standard operating procedures, including using colors that blend with the background and avoiding sensitive areas when siting the installations. Cumulative effects of past Navy actions on visual resources are discussed in Section 5.8.5.

The lands to be withdrawn are not to be used as impact areas. Some additional disturbance of Category A lands may occur from the use of live ordnance. These lands generally are not visible to the viewing public.

The development of fences designating Category A lands along existing roads could result in a visual effect to recreationists or travelers on nearby roadways, but this impact would not be significant because fencing is common throughout the region.

Integrated air and ground training would contrast against the rural visual character. The extent to which these activities were visible, particularly to sightseers and recreationists, would determine the significance of the impact. Activities clearly visible from sensitive viewpoints would result in potentially adverse impacts. Given that over 90 percent of the training is conducted during the week, that approximately 50 percent of the training is conducted at night, and that training is performed with the intent of remaining undetected, much of the training likely would remain unnoticeable. Training that was noticeable and that did affect the visual character of the setting would result in a potentially adverse impact.

Long-term chaff use could result in visible aluminum litter. However, because of its wide dispersion patterns, it is not expected that chaff or chaff debris would alter the regional viewshed. Long-term use of chaff and flares could result in an undesirable but insignificant accumulation of debris, particularly in the visually sensitive Job Peak WSA.

Overall, chaff debris has low visibility and little effect on the aesthetic quality of the environment. Chaff debris does not accumulate in quantities that make it objectionable, or even noticeable, to most persons in low-use areas. In addition, chaff debris is only visible in fairly open contexts where vegetation is sparse, along a road or pathway, or in cleared and maintained areas. Chaff fibers and debris may be noticed occasionally by outdoor recreationists but would not attract attention due to their small size or to their similarity to other familiar natural or manmade objects. In areas specifically protected to preserve naturalness and pristine qualities, such as the Job Peak WSA or other Wilderness Areas, users are more likely to perceive chaff debris as undesirable and unattractive since it conflicts with expectations of primitive character and management objectives to preserve naturalness (US Air Force 1997). However, because chaff would be disposed over a large area, any accumulation in this visually sensitive area would not cause a significant visual impact.

Mitigation: The visual impacts from chaff, though not significant, may be reduced if the Navy finds that the use of degradable chaff is viable and implements its use.

4.2.6.2 Alternative II (Preferred Alternative)

Impacts: Impacts to visual resources would be similar to those described for Alternative I, although the affected area would increase in the panhandle area and would decrease near the Job Peak WSA.

Mitigation: Mitigation will be as described for Alternative I.

4.2.6.3 Alternative III

Impacts: Impacts to visual resources would be similar to those described in Alternative I and II. This alternative would have the largest effect in the Dixie Valley area as the withdrawal boundary includes both a portion of the Job Peak WSA and the panhandle.

Mitigation: Mitigation will be as described for Alternative I.

4.2.6.4 No Action Alternative

Impacts: Development of EW sites and integrated air and ground training would not take place except on existing lands administered by NAS Fallon; therefore, no visual impacts would occur.

Mitigation: No mitigation required.

4.2.7 Cultural Resources

4.2.7.1 Alternative I

Impacts: No significant impacts to cultural resources as a result of this alternative are anticipated. All proposed site developments are subject to compliance with the National Historic Preservation Act (NHPA) and with the procedures set forth in the NAS Fallon CRMP and PA (US Navy 1993a). Prior to any undertaking, the Navy will examine the areas of potential effects for cultural resources. With regard to management policy, the Navy will be the lead agency in cultural resource site surveys done for its projects to avoid potential impacts to cultural resources on the proposed withdrawn land.

Integrated air and ground training activities would not have significant impacts to cultural resources from disturbing and degrading cultural resource sites near the ground surface. The Carson Desert predictive model would be one tool used to delineate areas potentially containing surface and subsurface resources. These areas would not be used for ground training until appropriate surveys were conducted. The Navy would attempt to avoid those areas potentially containing cultural resources when conducting air and ground training operations. Where areas cannot be avoided, appropriate consultation and mitigation will be undertaken. The ground training portion

of integrated air and ground training would be dispersed over a wide area and any vehicles would use existing roads and trails, reducing effects to cultural resources. Officers in charge of ground training operations will be provided information to assist them to avoid damage to culturally valuable areas.

The predictive model also will be used while siting EW, TACTS, and visual cueing device sites to aid in avoiding areas with a high probability of containing cultural resources. Project-specific cultural resource surveys will be conducted at each potential site to ensure that resources are avoided. If areas cannot be avoided, appropriate consultation and mitigation will be undertaken as outlined in the CRMP and PA.

Native American consultation and coordination with interested and affected Native American groups will be conducted to identify areas of traditional use or to identify specific concerns. The consultation process would involve the Nevada State Indian Commission, the Nevada SHPO, Bureau of Indian Affairs, and interested individuals and tribal entities identified during the project scoping process.

The only circumstance in which chaff debris has the potential to significantly affect the setting of a cultural property is if large quantities of chaff debris accumulate in a confined area, such as an architectural site or district or an archaeological site that attracts visitors. This situation is highly unlikely because these types of resources are not located beneath airspace where heavy chaff use would be concentrated (US Air Force 1997).

Mitigation: No mitigation required.

4.2.7.2 Alternative II (Preferred Alternative)

Impacts: Impacts resulting from Alternative II would be similar to those of Alternative I.

Mitigation: No mitigation required.

4.2.7.3 Alternative III

Impacts: Impacts resulting from Alternative III would be similar to those of Alternative I.

Mitigation: No mitigation required.

4.2.7.4 No Action Alternative

Impacts: The No Action Alternative would not result in direct impacts to cultural resources as no lands would be withdrawn.

Mitigation: No mitigation required.

4.2.8 Land Use

Potential adverse land use impacts from the alternatives include impacts to mining, livestock grazing, and recreation. Potential impacts to these uses are discussed in Sections 4.2.10, 4.2.11, and 4.2.12, respectively.

4.2.8.1 Alternative I

Impacts: This alternative withdraws approximately 189,080 acres, the largest amount of withdrawn lands among all of the alternatives. The following direct impacts could occur from the land withdrawal:

- *Closure of Category A Lands.* Under this alternative, a maximum of 40,280 acres would be identified as Category A lands. Public access would be prohibited, and no mining, grazing, building, or issuing of new leases, ROWs, or easements would be allowed under this classification. This would be an unmitigable impact. Restricted public access is not consistent with the BLM Lahontan Resource Management Plan, which promotes multiple public uses. However, these restrictions are necessary to assure public safety. The RMP developed for withdrawal lands will amend the BLM Lahontan Resource Management Plan and will reclassify these areas as closed to public use.

- *Development of Structures in Category B Lands.* Category B lands contain utility corridors or rights-of-way that currently provide for structures over 50 feet. Rights as established by existing corridors and rights-of-way will not change. However, future development of structures over 50 feet high could be prohibited. Grant or issuance of new rights-of-way by the BLM would be subject to Navy review and approval and could contain a general height limitation of 50 feet for structures including, but not limited to, transmission lines.

  The withdrawal would have a potentially adverse impact to future development in these corridors if structures over 50 feet were prohibited. The Navy will accommodate the height requirements of holders of utility corridors and rights-of-way, subject to existing rights. New construction, including extensions to existing structures, would be subject to policies presented in the resource management plan (Appendix J) and would require Navy approval.

  Navy integrated air and ground training would take place on proposed withdrawal lands using helicopters, vehicles on established roads and trails, and foot traffic elsewhere. The BLM Lahontan Resource Management Plan (RMP) does not include provisions for managing

military training activities; however, the withdrawal would be managed for such uses. Category B lands used for training purposes will remain open to the public.

The use of developed Navy sites for visual cueing devices will be short-term and will restrict only temporarily any public access. For more permanent Navy installations, such as EW and TACTS sites, restrictions to public access are unmitigable impacts. These should not be significant, however, since the amount of land that would be affected is relatively small.

- *Geothermal Production and Oil and Gas Leases.* Geothermal energy is produced 30 miles north of the proposed withdrawal area, and a transmission line has been constructed parallel to the Dixie Valley Road in that area. The ultimate load capacity of the transmission line is approximately 150 megawatts, with an initial capacity of 50 megawatts. The height of the transmission poles in the proposed withdrawal does not exceed 50 feet. If the transmission poles require further modification in the future, Navy approval would be required. Restrictions on future structures could result in adverse effects. The Navy would coordinate with other regulatory agencies, including the BLM and Federal Electric Regulatory Commission (FERC). The withdrawal action would not affect the development of this site or exploration of the area. No geothermal resources are known to exist on Category A lands; therefore no impacts are expected to geothermal production. No oil and gas leases exist within the Alternative I withdrawal footprint.

- *Constraints to Development of Churchill County and the City of Fallon.* Anticipated development patterns and development constraints are described in Section 3.8. Since the land proposed for withdrawal around B-16 is already managed by the federal government (BLM or BUREC), the land withdrawal is essentially a joint change in jurisdiction and land management from one federal agency to another. Therefore, the land withdrawal would place no additional jurisdictional constraints on development west of the City of Fallon.

- *Job Peak Wilderness Study Area.* A portion of the Job Peak WSA is in the northern portion of the Alternative I Dixie Valley area withdrawal footprint. While the final decision on land status will be made by Congress, the BLM has not recommended this WSA for wilderness designation. The Navy has no plans for new actions that would impair the wilderness characteristics of lands in the Job Peak WSA or that would restrict public access to the WSA. Should the WSA be designated a wilderness area, it would be removed from the land withdrawal.

Mitigation: The Navy will waive height limits in cases where exceeding 50 feet is necessary for a short-term development, such as for an oil well, and where such a waiver does not pose a safety hazard to aircrew. Permanent nonconforming structures also might be allowed in some areas if, in the judgment of the Navy, such structures were compatible with Navy training uses. Such areas will be defined in the resource management plan.

4.2.8.2 Alternative II (Preferred Alternative)

Impacts: The following land use impacts would be similar to those under Alternative I:

- The Category A lands closed because of existing and potential off-range ordnance would still be withdrawn under this alternative and the impacts to public use would be the same as described under Alternative I.

- The restrictions to structure height on Category B lands would be the same as under Alternative I. As under Alternative I, the use of Category B land for non-Navy development would require BLM, BUREC, or DOE approval and Navy review and approval.

The following impacts will differ from those under Alternative I:

- Reducing the Dixie Valley area to 68,600 acres would move it outside the boundary of the Job Peak WSA, thereby eliminating any potential effects to this area from land withdrawal activities.

- One oil and gas lease exists in the panhandle area under this alternative. Were restrictions imposed on operating this existing lease, a potentially adverse impact would occur.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.8.3 Alternative III

Impacts: Impacts under this alternative would be the same as described for Alternative I, including effects to the Job Peak WSA. Geothermal impacts would be the same as described under Alternative II.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.8.4 No Action Alternative

Impacts: Under this alternative, no lands would be withdrawn. Lands under emergency closure would remain closed to public use. Training capabilities at

NAS Fallon would be impacted because integrated air and ground training and EW site development would not be allowed except on existing lands administered by NAS Fallon.

The BLM Lahontan Resource Management Plan does not address public and aircrew safety concerns around training ranges and does not restrict potential incompatible uses, such as the development of tall structures within target ingress routes. The inability of the Navy to restrict such conflicting land uses would not be guaranteed under this alternative, resulting in a potentially adverse impact to the Navy training mission.

Mitigation: NAS Fallon will coordinate closely with the BLM to have incompatible uses and developments controlled.

4.2.9 Environmental Justice and Socioeconomics

This section evaluates the potential impacts to the regional socioeconomic environment and addresses environmental justice issues. Consistent with the SECNAV Notice 5090.6 of July 26, 1994, and Executive Order 12898 of February 11, 1994, it is the Navy's policy to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations. Table 4-2 outlines elements of the Navy policy and the actions taken to address these elements.

4.2.9.1 Alternative I

Impacts: The proposed land withdrawal will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations. Any effects resulting from implementation of the land withdrawal in this alternative would affect equally all segments of the population in and around NAS Fallon and the training ranges. Category A lands would be closed with no public access, and Category B lands would remain open to most public uses.

Impacts to members of the Walker River Paiute Tribe and the Paiute-Shoshone Tribe of the Fallon Reservation and Colony were examined, given the proximity of these lands to the project area. The land withdrawal would not disproportionately affect these groups under this alternative because the withdrawal does not involve Native American land and because Navy operations near the lands would not increase. In addition, Native American populations do not use the proposed withdrawal lands for grazing, mining, or recreation in a higher proportion than other segments of the population. The withdrawal would affect equally all members of the region of influence because any land management restrictions would be applied equally to all racial and income groups.

TABLE 4-2
ENVIRONMENTAL JUSTICE

SECNAV Notice 5090.6	Navy Action
Analyze the human health, economic, and social effects of Department of the Navy actions, including effects on minority communities and low-income communities.	Potential social and economic impacts have been assessed and are discussed in this section.
Ensure that whenever feasible, mitigation measures outlined or analyzed in the environmental impact statement, or record of decision, address significant and adverse environmental effects of proposed federal actions on minority communities and low-income communities.	It was determined that any beneficial or adverse impacts would affect all parts of the population equally for Alternatives I, II, III, and the No Action Alternative.
Ensure that opportunities for community input in the NEPA process are provided, including identifying potential effects and mitigation measures in consultation with affected communities and improve the accessibility of meetings, crucial documents, and notices.	Public scoping was conducted in 1982, 1987, and 1995. Scoping activities included publishing notices in local newspapers, meeting with government agencies and Native Americans, and holding public meetings. In addition, the BLM held an open house in 1996. Notices on scoping and public hearings on the Draft EIS were distributed to the Walker River Paiute Tribe. The Navy met with representatives of the Bureau of Indian Affairs and members of potentially affected Native American groups on November 7, 1995, to discuss the proposed action. These activities are detailed in Appendix A of this document.
Ensure that the public, including minority communities and low-income communities, has adequate access to public information relating to human health or environmental planning, regulation, and enforcement.	The Draft and Final EIS will be made available to the public at all affected community public libraries. A copy may also be obtained from the Navy upon request. The Navy point-of-contact is listed on the cover sheet at the beginning of this document. All supporting documents are available to the public by request.

For socioeconomics, the number of jobs at NAS Fallon would not change under Alternative I. Potential direct adverse socioeconomic impacts from Alternative I include impacts to mining, livestock grazing, and recreation; these impacts are discussed in Sections 4.2.10, 4.2.11, and 4.2.12, respectively. Generally, a reduction of employment or economic opportunities is seen as a negative socioeconomic impact. Payments in lieu of taxes would not decrease under any of the alternatives because in Churchill County these payments are determined by population rather than the number of acres held by the BLM.

Private residential development near the lands proposed for withdrawal around B-16 has been active in recent years. Development could slow down as a result of this alternative resulting from public perception that a significant change in land use management has occurred. However, the slowdown probably would be short-term and would not result in a reduction in local real estate values.

No socioeconomic impacts from activities such as integrated air and ground training, construction of EW sites, and the temporary placement of active or passive cueing devices would occur. These activities are expected to be

dispersed over a wide area. No impacts to socioeconomics would result from the construction of EW or TACT sites, as these sites would be located to avoid existing mining and grazing activities.

This alternative could result in socioeconomic impacts if valid mining claims located on proposed Category A lands were not developed. Prohibitions against grazing on Category A lands could also result in socioeconomic impacts. Total regional recreation income may decrease as Category A lands are closed to public access. This alternative could result in lost economic benefits in the community.

Mitigation: The loss of mining and grazing revenue is an unmitigable impact. The Navy will explore means to compensate holders of any valid mining claims or grazing permits on the withdrawn lands, subject to congressional authorization and appropriation. The Navy will conduct noise studies to verify the Navy's position that there are no significant noise impacts associated with existing operations at B-17 and B-19.

4.2.9.2 Alternative II (Preferred Alternative)

Impacts: Impacts described for Alternative II would be similar to those of Alternative I. Decreases in regional recreation income would be less substantial since Sheckler Reservoir would not be included in the withdrawal.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.9.3 Alternative III

Impacts: Impacts under Alternative III would be similar to Alternative II, with the addition of more extensive development restrictions near the Dixie Valley area.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.9.4 No Action Alternative

Impacts: No land would be withdrawn under this alternative. Integrated air and ground training, development of EW and TACTS sites, and use of visual cueing devices would not occur under this alternative except on existing lands administered by NAS Fallon. This alternative would not affect residential development.

Mitigation: No mitigation required.

4.2.10 Mineral Resources

Impacts to mineral resources would be influenced by the existence of minerals within the land withdrawal area, the availability of the lands to extract those minerals, and the land use controls applied to mining operations on the land. Potential direct impacts associated with the land use controls are described below.

4.2.10.1 Alternative I

Impacts: Under all withdrawal alternatives, Category A lands would be closed to any mining activity to protect the public from existing and potential off-range ordnance. Mining would be allowed on Category B lands subject to existing mining laws but the Navy will have final approval authority on permits for claim improvements and no claims may be patented after the lands are withdrawn.

The following discussion on locatable minerals applies to the entire withdrawal area except for the shoal site and those lands in the B-16 area withdrawn by BUREC. These areas were withdrawn from mineral entry prior to the Navy's application for land withdrawal.

- *Exploration*. Significant unmitigable impacts would occur on Category A lands because no exploration may take place. The greatest impact would occur on Category A lands with high mineral potential. Approximately 2,200 acres in the Fairview District south and east of B-17 and 2,300 acres in the Cinnabar Hill area east of B-19 would be affected.

  Casual exploration on Category B lands would be allowed except at military sites. This would not be a significant direct impact because these sites are small, are dispersed over a wide area, and are unlikely to affect exploration.

- *Mining Claim Location (Staking New Claims)*. Significant unmitigable impacts would occur on Category A lands because no claims may be located.

  No controls to locating mining claims on Category B lands would occur except at EW, TACTS, and visual cueing device sites during the time of their use. This would not be a significant direct impact because developed military sites would occupy a small percentage of the withdrawal area and would avoid areas with high mineral potential or existing claims.

- *Development*. Significant unmitigable impacts would occur on Category A lands because access to unpatented and patented claims would not be allowed, potentially resulting in a loss in revenue and, in the case of

patentees and holders of valid unpatented mining claims, a loss of private property or mineral rights.

Applications for BLM permits for mining on Category B lands would require Navy review and approval. Approval would be granted where development was compatible with Navy training operations. Development on fenced military sites would not be permitted. In the case of visual cueing device sites, this impact would be temporary, as the sites could be developed once the visual cueing device was moved. Five permanent EW and TACTS sites, comprising at most twenty-five acres, would be located to avoid existing developments. This would not be a significant direct impact.

- *Patenting.* Significant unmitigable impacts would occur on Category A lands because no claims may be patented.

  No new patents would be allowed on Category B lands after the withdrawal. While unpatented claims still guarantee the claimant exclusive rights to the minerals in the claim, restricting patenting would result in potentially adverse impacts. Maintaining claims in an unpatented status would continue to require paying an annual fee and obtaining permits for any improvements. Maintaining the claims in an unpatented status also would preclude a claimant from the land ownership that accompanies patenting a claim. These adverse effects would be limited in that there are no areas with high mineral potential within the Category B lands except in the Wonder District (Figure 3-9).

Impacts to leasable minerals could result from controls on access to Category B lands and on the height limitation of structures. The height limitation could affect oil, gas, and geothermal well drilling, as this equipment often exceeds 50 feet. In addition, no new leases could be issued on Category A lands. These impacts are not projected to be significant since the mineral inventory revealed no lands in the withdrawal area with high leasable mineral potential.

Potential impacts to salable minerals could result from restrictions to development on Category A lands. The current sites (managed by NDOT and located in the EW and B-17 proposed withdrawal areas along Highway 50, the Sheelite Mine Road, and the Dixie Valley Road) are considered valid existing rights. There are vast quantities of salable materials on the lands outside the proposed withdrawal area; therefore, no significant impacts to access of salable minerals are anticipated.

Mitigation: The Navy will explore means to compensate holders of impacted mining patents and valid unpatented mining claims on Category A lands.

Acquisition of these claims and patents will be subject to congressional authorization and appropriation.

With regard to height limitations on development structures in Category B lands, waivers could be issued by the Navy on a case-by-case basis, depending on the proposed location and duration of time the structure will be needed. The Navy will explore the possibility of accommodating equipment necessary for oil, gas, and geothermal drilling if it is to be installed for relatively short periods or in locales where it does not pose a safety hazard to military operations.

4.2.10.2 Alternative II (Preferred Alternative)

Impacts: The land use category designations for Alternative II are the same as those for Alternative I and impacts would be similar to those described for Alternative I. The primary exception would be for those lands not included in the Alternative II withdrawal area, including land in the Wonder District (including the Silver Center Claims) and Sand Springs District. The Wonder District and portions of the Sand Springs District have been identified as having high mineral potential, so removal of these areas from the withdrawal would lessen the impacts.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.10.3 Alternative III

Impacts: Impacts under Alternative III would be similar to those described under Alternative I.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.10.4 No Action Alternative

Impacts: The No Action Alternative would not withdraw any public lands. Impacts to mining on off-range ordnance lands would continue to be handled through BLM and Navy administrative processes.

Mitigation: No mitigation.

4.2.11 Livestock and Wild Horse Management

4.2.11.1 Alternative I

Impacts: Alternative I would not significantly affect livestock or wild horses on Category B lands. Grazing activities and wild horses would not be allowed

on fenced developed military sites but would be permitted on unfenced sites. The fenced lands would total a maximum of 75 acres within the proposed withdrawal lands. The Lahontan Resource Management Area lands average 30 acres per animal unit month (AUM), although the number of acres per AUM varies widely between grazing allotments. Based on the average, this means that approximately two AUMs of grazing preference could be lost from military developments under this alternative. This impact is not significant. Military sites would be located to avoid livestock grazing improvements, such as water troughs and water storage tanks, thereby reducing any effects.

No livestock grazing activities would be allowed on Category A lands. As many as 240 AUMs east of B-19 and 890 AUMs north, south, east, and west of B-17 could be affected. This loss represents 15 percent of the AUMs in the Bass Flat grazing allotment, 14 percent of the AUMs in the La Beau Flat grazing allotment, and three percent of the AUMs in the Clan Alpine grazing allotment, or 1.4 percent of the 80,000 AUMs in the Lahontan Resource Management Area. No wild horse herd management areas (HMAs) are located within proposed Category A lands.

The continued use of chaff would not adversely affect livestock. The materials in chaff are nontoxic and are not harmful to livestock (SEA 1989; Bohman 1991; Naval Research Laboratory 1995). As noted in the Naval Research Laboratory paper, tests of chaff by the Canadian Department of Agriculture for the Canadian Armed Forces found that chaff passes through the digestive system of cattle with only insignificant amounts retained in the body. University of Texas research drew similar conclusions on tests of goats and sheep. Communications between the Air Force Occupational and Environmental Health Laboratory and the Chairman of the Department of Dairy Husbandry, College of Agriculture, at the University of Wisconsin, indicated similar studies were completed on cattle and goats with the conclusion that chaff presents no health hazards to farm animals. In addition, the study performed by the Canadian Department of Agriculture found that calves rejected ingesting chaff in clumps 0.5 ounces in weight or when scattered among dry meal rations; they ingested the chaff only when it was scattered evenly in their hay (as referenced in Naval Research Laboratory 1995).

Previous studies have been conducted to address ingestion effects of chaff on animals. Cattle and goats apparently avoided eating clumps of chaff placed in their feed. Calves fed chaff in dry meal would consume the chaff only when it was coated with molasses and thoroughly mixed into the meal (as discussed in US Air Force 1997). A similar study using cattle and goats found that the animals avoided consuming intact chaff (as discussed in US Air Force 1997).

No evidence of digestive disturbance or other clinical symptoms were observed in calves fed chaff (as discussed in US Air Force 1997). The experimental and control groups gained weight at the same rate, and blood samples showed no deviation from normal. Postmortem examinations of the digestive system and major organs showed no lesions of pathological significance that could be attributed to chaff.

Inhalation of chaff fibers is not expected to have any adverse effects on terrestrial wildlife due to the sizes of the fibers. A study on the potential for inhalation by livestock and humans showed that the chaff fibers are too large to penetrate the larynx and would be expelled through the nose or swallowed (UKHSEMD 1988).

No significant impacts to livestock or wild horses are expected to result from integrated air and ground training or siting visual cueing devices, although the use of helicopters and vehicles may startle wild horses and cattle, causing stress. These activities would be temporary and dispersed over a large area. Noise studies evaluating the effects of military operations on ungulates show that any physiological effects tend to be short-term (approximately two minutes) and that the animals quickly habituate to noise disturbances (Workman et al. 1992; Krausman 1993a, b, and c; NDOW 1989). The activity areas would be sited to avoid water developments where livestock and wild horse tend to congregate. Cattle operations would not be disturbed.

Mitigation: The Navy will explore means to compensate holders of affected grazing permits, subject to congressional authorization and appropriation. To minimize startling cattle and wild horses, the Navy will not conduct ground training or low-level flights below 500 feet AGL within a one-half mile radius of all springs and water troughs.

4.2.11.2 Alternative II (Preferred Alternative)

Impacts: Alternative II would result in impacts similar to those of Alternative I. The same number of AUMs around B-17 and B-19 would be affected on Category A lands as described under Alternative I.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.11.3 Alternative III

Impacts: Alternative III would result in impacts similar to those under Alternative I. The same number of AUMs would be affected on Category A lands as described under Alternative I.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.11.4 No Action Alternative

Impacts: Impacts to grazing on off-range ordnance lands would continue to be handled through BLM and Navy administrative processes.

Mitigation: No mitigation.

4.2.12 Recreation and Public Access

4.2.12.1 Alternative I

Impacts: Impacts to recreation that could result under this alternative include limitations on recreational opportunity and decreased quality of recreational experience in the withdrawn areas.

The greatest direct recreation and access impacts would occur on Category A lands that would be closed to public access. While lost recreational opportunities on Category A lands is an unmitigable impact in and of itself, recreational opportunities exist in the area on lands with a higher recreational value. In addition, Alternative I would withdraw a portion of the Job Peak Wilderness Study Area.

Few restrictions to recreation or public access would occur on Category B lands. Access would be restricted only on the small percentage of land containing EW, TACTS, and visual cueing device sites and events needing BLM permits would require Navy review and approval to avoid conflicts between Navy and public users. Approval will be granted if the proposed recreational use is compatible with Navy training operations.

Proposed Navy actions on Category B lands, including site development, placement of visual cueing devices, and integrated air and ground training, could affect the recreational character of the area. The presence of these activities, particularly in the Dixie Valley area and near the Sheckler Reservoir, could alter the social character from relatively undeveloped and unrestricted to developed and restricted. A military presence on Category B lands, particularly if integrated air and ground training is evidenced, may discourage use of the lands for recreation even though recreation itself would not be restricted.

No data are available on the numbers of recreationists that use different parts of the proposed withdrawal area, though the number of people in general is not thought to be very high. Most integrated air and ground training would occur at the times when encounters with recreationists are least likely,

reducing the frequency of potential impacts. Impacts to a small number of individuals are still likely to exist, especially for recreationists seeking a backcountry setting if the nature of that setting is altered.

The proposed land withdrawal would not affect the Pony Express National Historic Trail. The trail itself is not on the withdrawal lands, and access along the trail would not be prevented at any time. EW, TACTS, or visual cueing device sites along the trail may affect the character of the land along the trail. Aircraft entering B-17 from the Dixie Valley overfly the Pony Express National Historic Trail, which could detract from the "historic period" character of the trail. This is discussed in Section 4.2.6, Visual Resources.

Potential adverse effects to recreational experiences could result from the continued use of chaff and flares. Recreationists could encounter residual debris, thereby reducing the perceived natural and remote character of the region. This impact is not expected to be significant because contact with chaff and flare debris would be infrequent and because of their small size or their similarity to other familiar natural or manmade objects (US Air Force 1997).

Mitigation: Access and recreational impacts resulting from the closure of Category A lands are not mitigable. Because these lands are ordnance-contaminated or have the potential to be contaminated, it is not possible to allow recreation and public access while preserving public safety. If the Job Peak Wilderness Study Area is afforded wilderness designation, the Navy would remove the WSA from its withdrawal footprint. The Navy will provide education program materials on Navy training activities on Category B lands to the BLM, NDOW, and BUREC for public distribution. The Navy will make every effort to avoid the public during ground training activities. If there is an organized annual re-enactment of the Pony Express Trail ride, the Navy will work with trail personnel to alter flight activities during the event if compatible with training needs at the given time.

4.2.12.2 Alternative II (Preferred Alternative)

Impacts: Impacts to recreational use and access under this alternative would be similar to those described under Alternative I. The Sheckler Reservoir and Job Peak WSA are not included in the withdrawal area under this alternative. Recreational uses at these areas would, therefore, not be affected. Access to and use of the historic trails, such as the Pony Express National Historic Trail, would not be affected by the action.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.12.3 Alternative III

Impacts: Alternative III would result in impacts and mitigations similar to those under Alternative II, with the addition of impacts from withdrawal of lands in the Job Peak WSA, as described for Alternative I.

Mitigation: Mitigation measures will be the same as described for Alternative I.

4.2.12.4 No Action Alternative

Impacts: The No Action Alternative would not withdraw any public lands. Impacts to recreation on emergency closure lands would continue to be handled through Navy and BLM administrative processes.

Mitigation: No mitigation required.

4.2.13 Public Health and Safety

4.2.13.1 Alternative I

Impacts: The proposed withdrawal was engendered in part by safety considerations, both for Navy aviators who train over existing ranges and for non-Navy users of the land proposed to be withdrawn. Under this alternative, the potential withdrawal lands would serve primarily as buffer zones around the NAS Fallon ranges, with the various concurrent controls on land use to prevent exposure of people and property to hazardous situations. Navy approval would be required for access to developed military sites. Public use would be excluded from Category A lands. This alternative would benefit public health and safety by improving public protection from existing and potential off-range ordnance.

No significant impacts to public health and safety would result from Navy ground activities, such as training, siting visual cueing devices, and constructing EW and TACTS sites. Localized electromagnetic radiation (EMR) at the EW sites presents no hazard to public health and safety. A study performed by the Naval Warfare Assessment Division in August 1995 at the existing NAS Fallon EW sites found that a standard cellular phone exposes a user to approximately 10 times more EMR than standing next to an active EW site. The sites would be fenced to prohibit unrestricted public and animal access, warning signs would be posted, and the sites would have lights to notify anyone if a unit is turned on or is about to be turned on.

There is no known documentation of the effects of human exposure to chaff, but none of the materials contained in chaff are known to pose a health hazard. Based on the data available, the materials (aluminum, stearic acid, and silica fiberglass) are irritants and thus pass easily through the systems of

animal species that ingest them (SEA 1989; Bohman 1991). Based on US Air Force reviews of numerous toxicological studies, these principle components of chaff are unlikely to have significant effects on humans and the environment, based upon the general toxicity of the components, the dispersion patterns, and the unlikelihood of the components to interact with other substances in nature to produce synergistic toxic effects (US Air Force 1997). Chaff does not break down into particles small enough to be an inhalation risk, nor does the type of chaff used at NAS Fallon cause allergic contact dermititis. Chaff manufacturers, when contacted, revealed no instances of allergies or irritation among their employees (Naval Research Laboratory 1995). There is a potential for chaff-related nuisance effects to the public from degradation of radio, radar, and other electronic signals. However, adverse effects are avoided by standard operating procedures, such as clearing major chaff releases with the appropriate FAA facilities. In addition, the new RR-188 chaff, which includes no dipoles cut to the RF bands used by FAA radars, is available for use in training by most aircraft. Aircraft that cannot use this model must obtain a frequency clearance prior to use.

The probability of debris from the chaff system hitting a person on the ground would be dependent on many variables (e.g., location of use, population density beneath airspace, frequency of use, etc.). Ejected debris consists of the chaff itself, possibly a cardboard box which contains the chaff, flat plastic package stiffeners, a small plastic piston, and a small plastic end cap. Under normal circumstances, all of those elements weigh so little, or create so much drag in comparison to their weight, no injury would be anticipated even if a person were impacted.

In 1997, the US Air Force reviewed all available literature dealing with safety issues involving chaff use and the operation of chaff dispensing systems, reviewed records of accidents and mishaps experienced with chaff use, and analyzed chaff safety issues using protocols established for Air Force System Safety evaluations. Based on this assessment of available data and analysis of possible events, the US Air Force calculated that there is little safety risk to aircrews, aircraft, or the public anticipated from the use of chaff (US Air Force 1997).

None of the land withdrawal alternatives would increase the potential for aircraft mishaps, as detailed in Section 3.13. The studies detailed in Chapter 1 take into account the potential for aircraft mishaps, and the footprints were drawn accordingly to protect the public from this hazard. Vehicle traffic on the Dixie Valley Road would increase with integrated air and ground training and moving visual cueing devices. Current road conditions are sufficient to handle increased traffic.

Mitigation: No mitigation required.

4.2.13.2 Alternative II (Preferred Alternative)

Impacts: Alternative II would have beneficial impacts similar to Alternative I, particularly in protecting the health and safety of persons using the proposed withdrawal lands.

Mitigation: No mitigation required.

4.2.13.3 Alternative III

Impacts: Alternative III would result in beneficial impacts similar to Alternative I.

Mitigation: No mitigation required.

4.2.13.4 No Action Alternative

Impacts: The No Action Alternative would not withdraw any public lands, including off-range ordnance lands. While the public still would be restricted from accessing these lands, the BLM does not have the same resources available as the Navy to patrol these lands and to ensure they are not being accessed. The safety conditions and land use compatibility problems identified in the RAICUZ and HAZARD studies would not be rectified. These problems could be mitigated only by curtailing Navy activities, which would not meet the requirements of the training mission.

Mitigation: Public safety impacts from off-range ordnance are not mitigable. The Navy would request that the BLM restrict development in potentially hazardous or incompatible use areas.

4.2.14 Transportation

4.2.14.1 Alternative I

Impacts: Alternative I would not affect the major highways in the region. The southern boundary of the Dixie Valley area and the northern boundary of the proposed withdrawal around B-17 do not include the right-of-way (ROW) for Highway 50. Southbound Route 95 from Fallon passes through the land proposed for withdrawal to the west of B-19. The highway and the associated ROWs would not be withdrawn. Therefore, the use of Highway 50 and Route 95 by the public would not be impacted. Public use would not be restricted along Dixie Valley Road because it borders Category B lands that would remain open for public access and use.

Local roads historically used to access mining areas would be located in Category A-designated lands. These roads include local roads off Highway 50 that provide access to the Nevada Hills Mine and other mines around it. These roads currently are closed under the BLM emergency closure action and would continue to be closed to public use in all alternatives. While alternative routes may be identified, the loss of an existing road is an unmitigable impact. A gas line service road east of B-19, which has been swept and cleaned, was recently reopened even though it is located in an area identified as containing off-range ordnance. A 200-foot corridor is fenced to allow road access, and the road is swept annually for off-range ordnance. The road would remain open for public access under the proposed land withdrawal. This is possible because soil-to-bedrock conditions are shallow, which doesn't permit ordnance to be buried under the surface. Off-range ordnance would remain on the surface and would be easily identified and collected by the explosive ordnance disposal team. In addition, training operations at B-19 have been altered to greatly reduce the potential for off-range ordnance to fall in this corridor.

Public access across the developed EW, TACTS, and visual cueing device sites generally would not be permitted. However, because these 55 sites are relatively small and dispersed throughout a large area, this impact is not expected to be significant. Road conditions are adequate to handle any additional traffic from site construction, moving visual cueing sites, and integrated air and ground training. Therefore, these activities are not expected to have a significant impact.

No increase in local traffic is expected to occur as a result of the proposed land withdrawal.

Mitigation: The land use categories proposed for Alternative I include provisions to minimize possible disruption of transportation within the project area. Alternate transportation routes will be identified for any through roads that are closed. Road closure on Category A lands is unmitigable.

4.2.14.2 Alternative II (Preferred Alternative)

Impacts: Impacts would be similar to those described for Alternative I.

Mitigation: Mitigation measures are as described under Alternative I.

4.2.14.3 Alternative III

Impacts: Impacts would be similar to those described for Alternative I.

Mitigation: Mitigation measures are as described under Alternative I.

4.2.14.4 No Action Alternative

Impacts: The closure of roads into the off-range ordnance lands would continue to be addressed through Navy and BLM administrative processes.

Mitigation: No mitigation.

4.2.15 Airspace Designation and Use

4.2.15.1 Alternative I, II, III and No Action Alternative

Impacts: These alternatives would not affect airspace designation or use.

Mitigation: No mitigation required.

4.3 UNAVOIDABLE ADVERSE IMPACTS

Based on the alternative analysis, the following are potential direct unavoidable impacts for each alternative. Unavoidable impacts in this section include those impacts that cannot be mitigated to a less than significant level. All potential direct impacts by resource category and alternative are summarized in Table 2-6.

Alternatives I, II (Preferred Alternative), and III

Potential impacts to mining, grazing, water rights, and recreation on Category A lands could result in significant unmitigable impacts. These impacts include loss of access to valid claims and loss of revenue from areas that would otherwise be mined, loss of AUMs, and foregone recreational opportunities.

No Action Alternative

The No Action Alternative would adversely impact public health and safety because the off-range ordnance lands and lands identified in the HAZARD report as needed to contain ordnance employed in training would not be under Navy control. This alternative also would adversely affect the realism and effectiveness of training operations.

4.3.1 Local Short-term versus Long-term Productivity

The withdrawal would not affect the productivity of the land, although there would be a reduction in economic productivity arising from impacts to commercial uses such as mining. Short- and long-term protection of the public from off-range ordnance would be a positive impact of the withdrawal action. Integrated air and ground training would have an adverse effect on the short-

and long-term productivity of recreational opportunities on withdrawn Category A lands.

Under the No Action Alternative, the benefit of short- and long-term protection of the public from noise and safety incidents from high-speed and low-altitude flights and aerial maneuvers would not occur. In addition, the long-term viability of the existing FRTC could be endangered through the encroachment of incompatible land uses.

4.3.2 Possible Conflicts with Land Use Plans

None of the alternatives would conflict with federal, state, or local land use plans except for the BLM's Lahontan Resource Management Plan. This plan recognizes multiple uses, including mining, grazing, and recreation on the public lands proposed for withdrawal. The resource management plan that was developed by the Navy in consultation with the BLM, DOE, and BUREC for this proposed withdrawal action would amend the Lahontan Resource Management Plan. Once the new plan is approved, there will be no conflicts with land use plans.

The BUREC lands associated with the proposed withdrawal alternatives already have been withdrawn for the Newlands Project and cannot be used for other purposes that conflict with the purposes of the Newlands project. Multiple public uses would be allowed on Category B lands. Public access on Category A lands is restricted and would continue to be so under the action alternatives for public safety. Such restrictions were requested by the BLM.

4.3.3 Irreversible and Irretrievable Commitment of Resources

Public use, access, and development of Category A withdrawn lands would be closed because of off-range ordnance and HAZARD analysis concerns. Such restrictions would constitute a potentially irretrievable commitment of land and mineral resources. This commitment of resources can be reversed if the lands eventually are returned to the public domain or are managed under a less regulated program. This will require technology to detect and remove subsurface ordnance to acceptable levels. Such technology is not yet proven or cost-effective.

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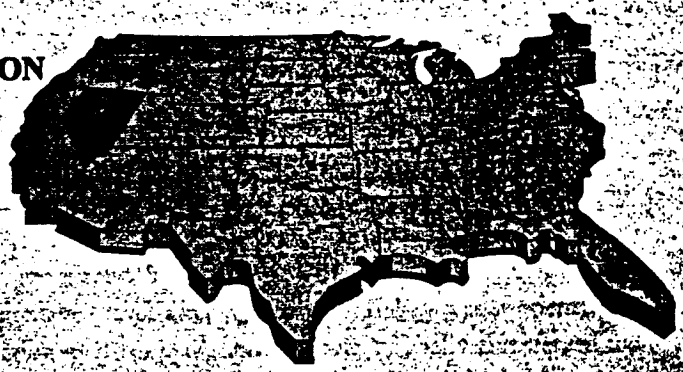

5.0 CUMULATIVE IMPACTS

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5. CUMULATIVE IMPACTS

5.1 OVERVIEW AND NEED FOR ANALYSIS

The CEQ regulations that govern the preparation of environmental impact statements provide that where federal actions would generate "cumulative impacts," those impacts should be considered in relevant EISs (40 CFR 1508.25 [1988]). The cumulative impacts analysis presented here is prepared in response to this regulatory requirement.

"Cumulative Impact" is defined as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time (40 CFR 1508.7 [1988]).

This analysis considers additional effects arising from the currently proposed NAS Fallon land withdrawal, together with effects of other known current and future actions in the region. These other actions could include existing, proposed, or reasonably foreseeable Department of Defense or other federal or nonfederal major actions. The only other actions identified in the region and included in the cumulative analysis are land withdrawals and airspace designations at NAS Fallon and the Hawthorne Army Depot (HWAD).

Other than the range safety and training land withdrawal discussed as the proposed action of this EIS, the Special Nevada Report (SAIC 1991) listed two foreseeable land withdrawals in Nevada-the Navy B-17/B-19 land bridge and B-18 range and the Army's Hawthorne Reserve Component Training Center (RCTC). Since the publication of the Special Nevada Report, the Navy's land bridge and B-18 withdrawals have been put on hold indefinitely due to changes in weaponry and the global military climate.

5.2 CUMULATIVE EFFECTS REGION

In order to analyze cumulative effects, a cumulative effects region must be identified. This area would be one in which effects of the NAS Fallon land withdrawal and other past, proposed, and reasonably foreseeable actions would be cumulatively recorded or experienced.

The primary cumulative effects region is comprised of Churchill County, Mineral County, and the Gabbs Valley area of Nye County, as shown in Figure 5-1. This region is defined for the analysis of the cumulative land surface effects of all existing and proposed land withdrawals. For certain

resources, a smaller region of influence is used, as detailed in each resource category discussion. The cumulative effects of DOE and DOD military and defense-related uses on withdrawn lands in Nevada were analyzed in the Special Nevada Report, prepared pursuant to Section 6 of the Military Lands Withdrawal Act of 1986 (Public Law 99-606). Also pursuant to Public Law 99-606, NAS Fallon will prepare an EIS to evaluate the environmental effects of continued military use of Navy-withdrawn lands supporting training activities of NAS Fallon. The EIS, expected to be completed in 1998, will examine the cumulative effects of the continued withdrawal of land by NAS Fallon.

The secondary cumulative effects region comprises a larger area, which includes the region defined above and covers part of the counties of Pershing, Lander, Eureka, White Pine, Nye, Elko, and Esmeralda. This region is defined based on the collective footprint of existing, proposed, and reasonably foreseeable undertakings associated with NAS Fallon and Hawthorne Army Depot, formerly the Hawthorne Army Ammunition Plant (Figures 5-2 and 5-3). This region is identified and used mainly to evaluate the cumulative effects of airspace designations on public health and safety. The cumulative effects of DOE and DOD military and defense-related uses in airspace over Nevada also were analyzed in the Special Nevada Report.

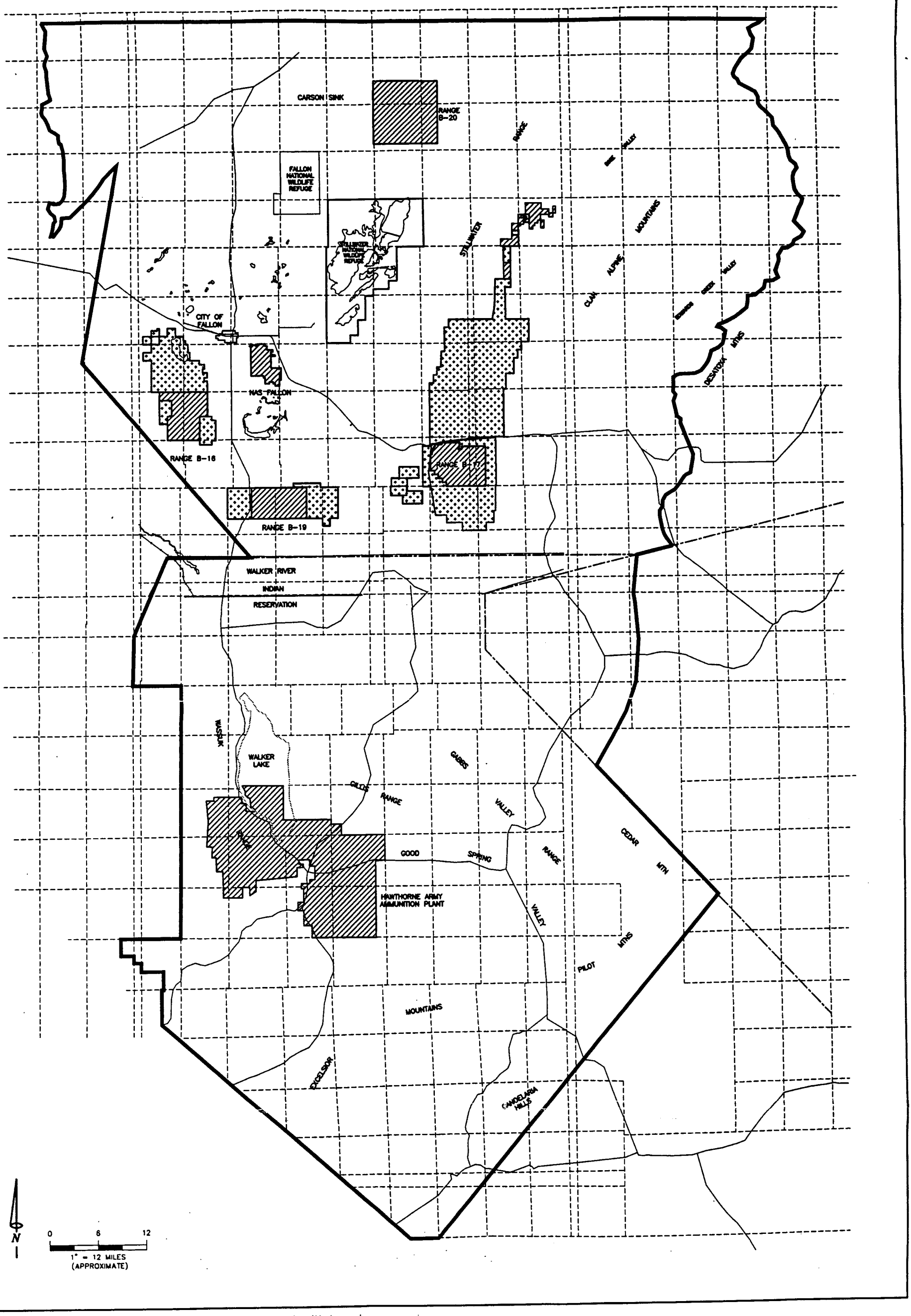
5.3 METHODOLOGY

This section describes the five-step methodology that was used to determine the magnitude of regionally significant cumulative effects arising from proposed military withdrawals.

Step 1: Determining the Regional Baseline. The first step in this cumulative effects analysis is establishing a regional baseline. By gathering data and analyzing trends, it is possible to make general conclusions concerning the natural environment, land use and socioeconomic conditions, and public health and safety conditions in the primary region.

In order to ensure that conclusions are valid, it is necessary to gather data that addresses a period of several years. The principal limitations in this regard are the availability of data and its reliability. Section 5.4 presents the regional baseline data.

Step 2: Determining the Effects of Existing Actions. The focus of a cumulative effects analysis is on the incremental effects of an action when added to other past, present, and reasonably foreseeable future actions. Accordingly, the second step in a cumulative effects analysis is the



The proposed range safety and training public land withdrawal depicted here encompasses lands proposed for withdrawal under all alternatives, not the boundary for the preferred alternative.

LEGEND:

- Existing Owned or Withdrawn Military Lands
- Proposed Range Safety & Training Public Land Withdrawal

Source: SAIC 1991

Existing and Proposed Military Land Withdrawals in the Region

NAS Fallon, Nevada

Figure 5-1

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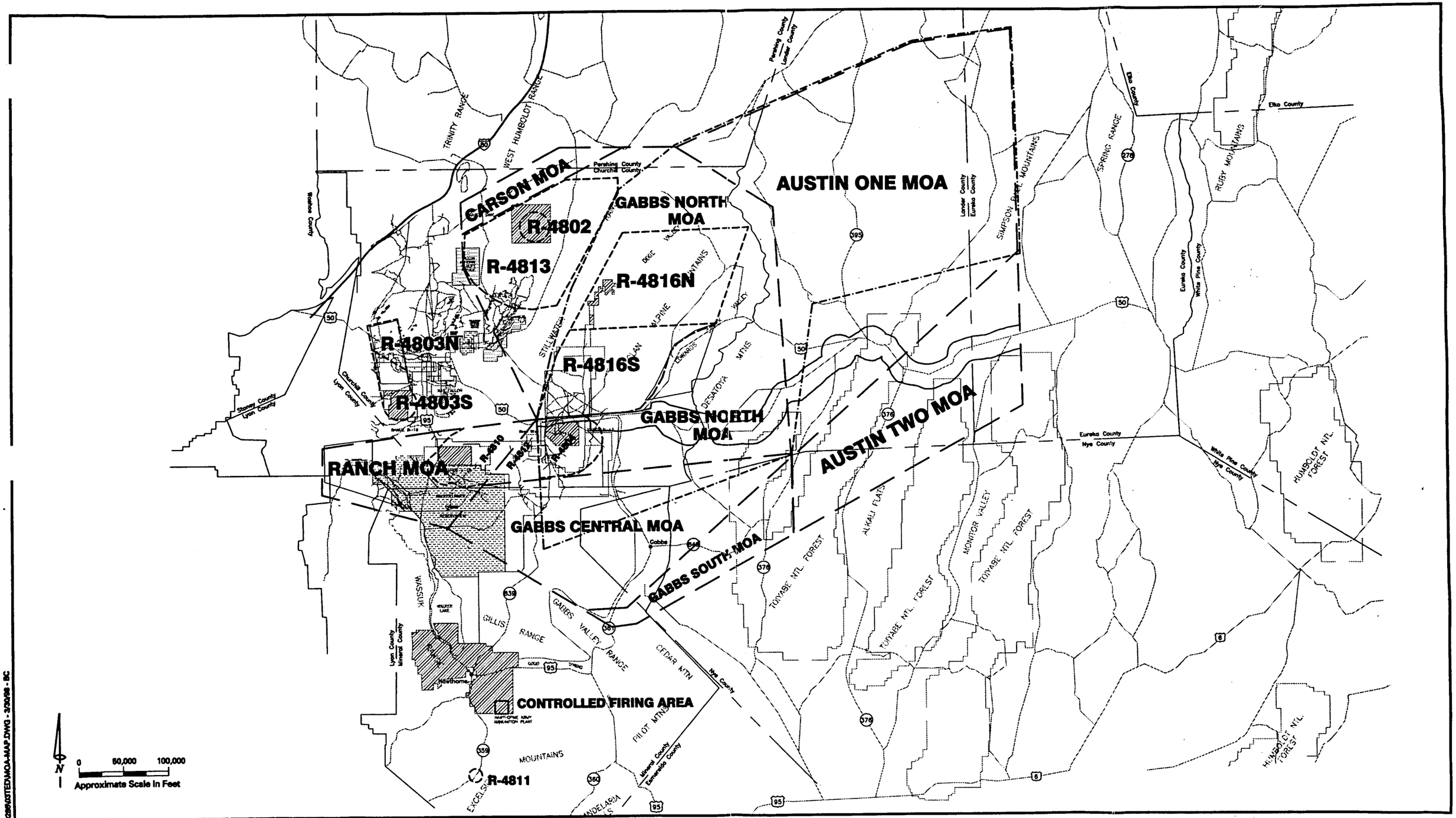


Current MOA and restricted airspace provide training areas for NAS Fallon.

LEGEND:

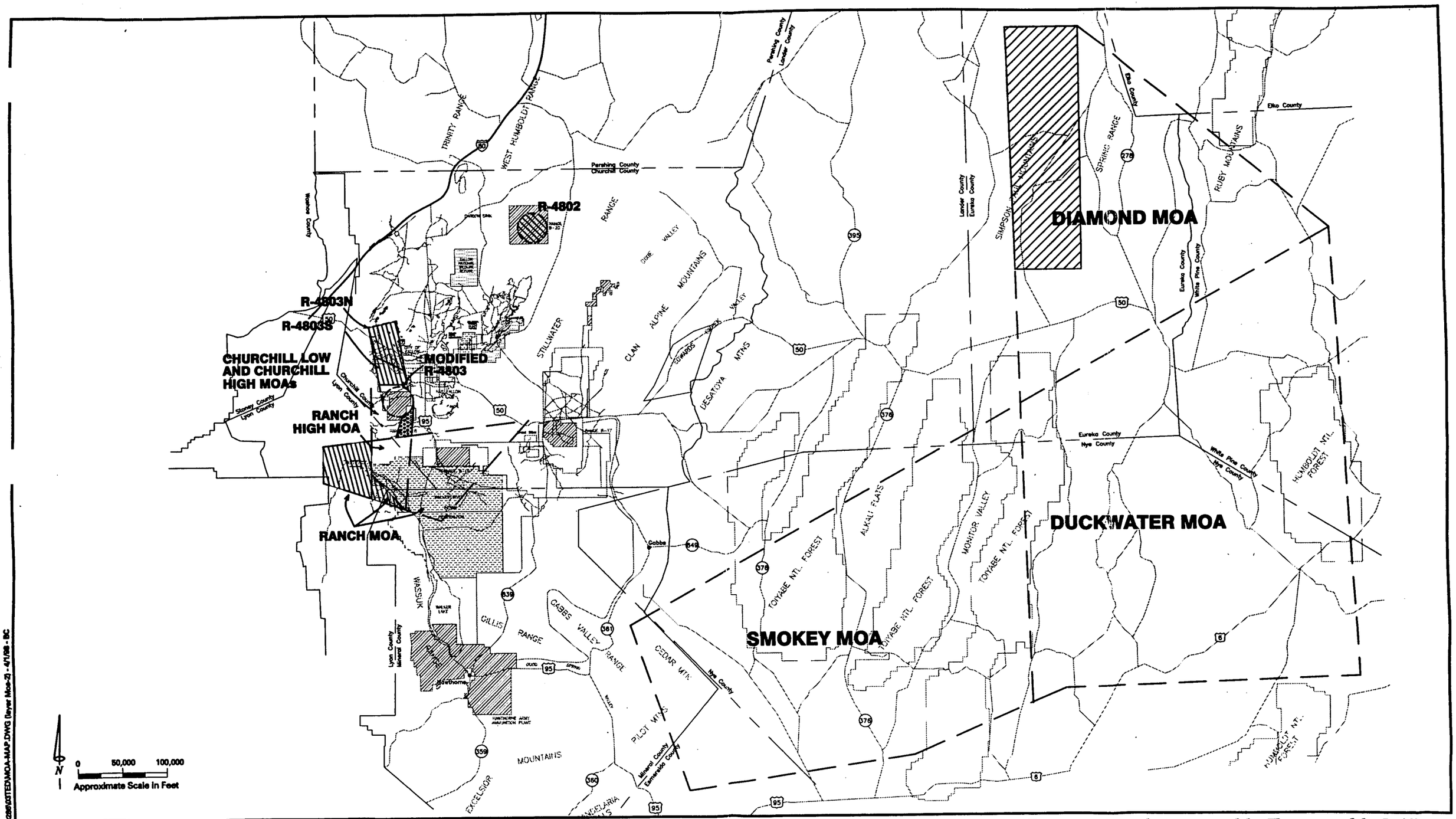
- Military Reservation
- Indian reservation
- MOA — Military Operations Area
- R-4803S — Restricted Area
- Other Airspace
- VRF Corridor
- Supersonic Operating Area

Source: SAIC 1991

Existing Military Airspace Designations in the Region

NAS Fallon, Nevada

Figure 5-2



The proposed airspace consolidation near B-16 is in the initial stages of the formal FAA review process.

LEGEND:

- Military Reservation
- Indian reservation
- MOA — Military Operations Area
- R-4803S — Restricted Area
- Area Proposed for Deletion
- Area Not Included in Churchill High MOA
- Area Authorized for Supersonic Activity as Identified in the Special Nevada Report - no longer proposed at this time.

Source: SAIC; Tetra Tech 1996

Proposed and Reasonably Foreseeable Military Airspace Designations in the Region

NAS Fallon, Nevada

Figure 5-3

determination of the relevant effects of past and present actions. The discussion in Section 5.5 addresses the effects of existing withdrawals and airspace designations in the region.

Step 3: Determining the Effects of Proposed Actions. The proposed land withdrawal evaluated in this EIS, the proposed renewal of the B-20 land withdrawal, and the proposed airspace restructuring at B-16 are summarized in Section 5.6. Chapter 4 provides a detailed analysis of effects of the proposed land withdrawal to determine changes that may occur to the regional baseline conditions.

Step 4: Determining the Effects of Reasonably Foreseeable Actions. Cumulative effects could arise from the other foreseeable land withdrawals or airspace designations within the region. Although no new land withdrawals, in addition to the one proposed in this document, are foreseeable, Section 5.7 discusses effects from foreseeable changes in airspace.

Step 5: Determining Cumulative Effects. Once all potential effects have been identified, the final step in the cumulative effects analysis is to determine how those effects, when viewed together, could precipitate changes in the regional baseline conditions (Section 5.8). The essence of this process involves educated predictions and best available data of how the natural resources, land use and socioeconomic, transportation, and public health and safety aspects of the regional baseline conditions would be modified if one or more land withdrawals and airspace designations were implemented while existing withdrawals and air space designations remained in place.

5.4 REGIONAL BASELINE

Data regarding past and existing conditions were collected and analyzed in response to issues and concerns raised during the scoping process. Issues and concerns were grouped into eight major categories to encompass all topics of concern including water resources, biological resources, land use and socioeconomic conditions, visual resources, cultural resources, noise, public health and safety, and transportation. The existing conditions of these resources are described below.

5.4.1 Water Resources

Surface water resources in the region include the Lahontan, Sheckler, and Stillwater Point Reservoirs, Carson Lake and various playa lakes, springs, ponds, irrigation canals, and perennial streams. Surface water drains to closed basins, such as the Carson Sink, Dixie and Fairview Valleys, and Rawhide Flats. Springs vary in size from small seeps to substantial flows (BLM 1983).

Ground water availability and quality are variable. Salinity generally increases toward the centers of basins. In irrigated areas of the Lahontan Valley, agricultural irrigation has established shallow ground water aquifers and in some instances return irrigation flows may have reduced the water quality of the shallow ground water. Basin recharge typically occurs along the range fronts at the basin margins. Shallow ground water outside the saline central basins is generally suitable, at a minimum, for livestock and wildlife watering (BLM 1983; BLM 1984).

5.4.2 Biological Resources

The region supports a diversity of vegetation communities. The salt and alkali flats, shadscale, sagebrush, and pinyon-juniper woodland vegetation zones are typical of the Great Basin region. Small areas of riparian vegetation are found throughout the region, covering less than one percent of the total land area.

Over 300 wildlife species inhabit the region. These include mule deer, bighorn sheep, mountain lion, and upland game species, such as sage grouse, mountain quail, chukar, and mourning dove. A variety of waterfowl are found in wetlands in the region. Federally listed threatened and endangered species that may inhabit the region include the cui-ui, Lahontan cutthroat trout, bald eagle, and the American peregrine falcon. The region with its wetlands serves as an important nesting, resting, and foraging place for migratory birds.

5.4.3 Land Use

This section discusses the regional baseline conditions as they relate to land-based activities, including mining, grazing and recreation.

5.4.3.1 Mining

Information on the mineral resources of the region was derived from the Mineral Resource Inventory of Churchill County (Nevada Bureau of Mines and Geology 1987), Lahontan Resource Management Plan (BLM 1983; BLM 1985a; BLM 1985b), Walker Resource Management Plan (BLM 1984), and the 1990, 1992, 1995, and 1996 mineral resource evaluations performed for the proposed withdrawal area at NAS Fallon (US Bureau of Mines 1990; US Bureau of Mines 1992; US Bureau of Mines 1995; Thompson 1996).

There are 51 mining districts within the region. Metallic minerals, such as gold, silver, iron, tungsten, copper, lead, zinc, mercury, manganese, and antimony have been produced in the past from some of the mining districts. Gold, silver, and iron are of economic interest currently. Gold is mined in Fondaway Canyon in the Stillwater Range of Churchill County; at the Borealis project southwest of Hawthorne; at Rawhide Mine, about 23 miles northeast of Schurz; at Paradise Peak Mine, 15 miles southeast of Gabbs; at

Santa Fe Mine on Highway 361 between Gabbs and Luning; and at the "County Line" Project, south of Highway 361, on the Mineral/Nye County line. The Candelaria Project, southeast of Mina in Mineral County, is inactive. Exploration is active in the Stillwater Range area and in the area along Walker Lineament, north of Luning in Mineral County (BLM 1983; BLM 1984).

Nonmetallic minerals, such as clays, sand, gravel, diatomite, pumice, salt, limestone, graphite, magnetite, gem stones, gypsum, corundum, and other aluminous minerals have been produced in the region. Construction material, magnetite, and salt are currently of commercial value (BLM 1983; BLM 1984).

Of the energy resources of the region, geothermal resources are of greatest commercial significance. Dixie Valley contains several areas, especially in the northeast corner of Churchill County, with significant geothermal potential. Other important geothermal resource areas are Stillwater-Soda Lake to the north of Fallon and Desert Peak near the eastern boundary of Churchill County. Commercial production of electricity from geothermal resources commenced in most of these areas in the early 1980s, and there are five operating geothermal power plants in Churchill County. These include the Oxbow, Stillwater, Soda Springs, Brady Peak, and Desert Hot Spring geothermal plants. Geothermal heat is used for some manufacturing processes in the county. The geothermal resources of NAS Fallon also have been evaluated, and the Navy is moving forward with developing the resource for energy. Although geothermal resources of commercial significance have not been discovered in Mineral County and the Gabbs Valley area of Nye County, exploration continues. Public lands also are leased for oil and gas, but significant resources have not been discovered (SAIC 1991).

The contributions of mining to the regional economy are demonstrated by income and employment in the industry. Net proceeds from mining in Churchill County amounted to about $376,000 in 1988, and tax revenues from mining constituted about 0.4 percent of the county budget. About 1.7 percent of county employment was in mining in 1989. Net proceeds from mining in Mineral County were $1.4 million in 1988, and tax revenues from mining represented about two percent of the county budget (SAIC 1991). In 1992, almost 16 percent of the total employment in Mineral County was mining-related.

5.4.3.2 Grazing

Sources of data and information on grazing are the Walker Resource Management Plan (BLM 1984), Lahontan Resource Management Plan (BLM 1983; BLM 1985a; BLM 1985b), and Churchill County Master Plan (Churchill County 1990). Grazing historically has been one of the primary land uses in the region. There are 20 BLM grazing allotments, with a total area of

approximately 2,204,000 acres, in Churchill County and Gabbs Valley. There are 17 BLM grazing allotments, with an approximate total area of 148,500 acres, in Mineral County. Prior to 1934, livestock grazing was controlled by individual claims to customary use of certain grazing areas. Grazing permits originally were awarded to previously established livestock operators, in accordance with the Taylor Grazing Act of 1934; this was followed in the early 1960s by an adjudication based on a range survey. Most of the livestock permittees are cattle operators. While most of the allotments are used for winter grazing, a few are used for year-round and summer grazing (BLM 1983; BLM 1984).

5.4.3.3 Recreation

Major forms of recreation in Churchill County are hunting, fishing, horseback riding, cultural resource interpretive sightseeing, and off-road vehicle use. Figure 3-12 presents important recreation areas in the region. Hunting occurs primarily in the mountainous areas during the fall season. Most of these hunting areas are in the Stillwater, Clan Alpine, and Desatoya mountain ranges. Hunting focuses primarily on mule deer, game birds (such as chukar), and small game species. Waterfowl hunting is important in the Stillwater Marsh. Sheckler Reservoir near Fallon also is used for recreation. Off-road vehicle use occurs at Sand Mountain Recreation Area, which was visited by 29,640 persons in 1989 (BLM 1989a).

The Grimes Point and Hidden Cave archaeological sites are important for cultural resource interpretative sightseeing as sites of historic and archaeological significance. About 24,000 persons visit these sites annually (BLM 1997). Other sites of historic significance include the Cold Springs and Sand Springs Pony Express stations. Additional recreational activities include rock hounding, horseback riding, fishing, hiking, camping, and photography. Much of this recreation use occurs in the "backcountry," within or near the wilderness study areas, which include Job Peak, Clan Alpine, Desatoya, and Stillwater (BLM 1985a; BLM 1985b). Of the three state parks in Churchill County, Lahontan State Park attracts the greatest number of visitors; about 274,500 visitors were recorded in 1989 (BLM 1989b).

Recreation resources of Mineral County and the Gabbs Valley of Nye County are similar to those of Churchill County. Areas important for hunting are within the Gabbs Valley Range, Bodie-Aurora area, Wassuk Range, Gillis Mountain, Pilot Range, Candelaria Hills, Excelsior Range, and the Cedar Hills. Species hunted include mule deer, upland game birds, and small game species. While no particular area has been designated for ORV use in Mineral County, areas currently used include Mason Valley, Wilson Canyon, and Carson Valley ORV corridors. Walker Lake State Park and the land along the lake managed by the BLM are popular for camping and other recreation. In 1988, this area attracted over 110,000 visitors (BLM 1990).

5.4.4 Socioeconomics

In 1980, Churchill County had a total population of 13,917, representing a population growth of 32 percent between 1970 and 1980. By 1990, the total population was 17,938 (US Bureau of the Census 1990). While there is some population dispersed in the Stillwater area, Edwards Creek Valley, Hazen, and Middlegate, the bulk of the county's population historically has been and currently is concentrated in the county seat at Fallon, which by 1990 had a population of 6,438 persons.

The Gabbs Valley area (Gabbs Division) of Nye County contained a population of about 812 in 1990 (US Bureau of the Census 1990). This population is concentrated in the Town of Gabbs (population, 667), where the primary economic pursuits are mining and minerals processing.

The population in Mineral County declined between 1970 and 1986, and only a small increase was recorded in 1987. By 1990, the county had a population of 6,475 (US Bureau of the Census 1990). Most of the residents of Mineral County are concentrated in the Towns of Hawthorne (population, 4,162), Luning, Mina, Montgomery Pass, and Schurz.

From the point of view of income (earnings by place of work), government is the leading economic sector in Churchill County. The economic base of the Gabbs area in Nye County is provided by mining. In Mineral County, services constitute the single most important sector in terms of income and employment, followed by mining, construction, and state and local government. Federal government income produces about 30 percent of all government income in the county. A small tourism industry also exists due to the attraction of Walker Lake and gaming opportunities in the county.

As noted above, federal government operations in Churchill and Mineral counties contribute a significant portion of the regional income and employment. Additionally, these operations provide support to a large service sector in the region through local spending by the federal government and local spending of payroll income by federal government employees. The HWAD contracts out most of its operations, resulting in the development of a large service sector in Mineral County. Similarly, the economy of the City of Fallon is in large part based on the services provided to NAS Fallon.

In 1996, the assessed value of airspace used by commercial airlines in Nevada was $140 million. The assessed values of airspace in Churchill, Lander, Eureka, and Nye Counties were $3.3 million, $3.1 million, $1.6 million, and $14.6 million, respectively (Nevada 1996).

5.4.5. Visual Resources

Information on visual resources is derived from the Lahontan Resource Management Plan (BLM 1983; BLM 1985a; BLM 1985b) and the Walker Resource Management Plan (BLM 1984).

Scenic qualities of the region are characteristic of the basin and range area of the western United States. Some areas in the region are highly regarded for their scenic quality. The Stillwater, Clan Alpine, and Desatoya mountain ranges, Sand Mountain, Carson River, Wassuk Range, and Gabbs Valley Range ranked as above-average, or "Class B," scenery, according to the BLM Visual Resource Management Classification. The southern portion of the Desatoya Range and Deep Canyon in Clan Alpine Mountains would be considered "Class A," or outstanding scenery. The remainder of the region would rank as common scenery. Cultural modifications in the region include roads, fences, and utility corridors.

5.4.6 Cultural Resources

Prehistoric, historic, architectural, and Native American traditional use sites are known to exist throughout the project region. Prehistoric sites include lithic scatters, rock shelters, petroglyph and pictograph sites, rock alignments, and caves. Historic sites include the remnants of 19th century mining communities, portions of the original Pony Express National Historic Trail and early 19th century exploration and emigrant trails, overland stage stations, telegraph and trade routes, and other evidence of early settlement. Recorded historic and prehistoric sites number into the low thousands within the region. Grimes Point and Hidden Cave archeological sites are tourist attractions, as are numerous "ghost towns" in the area. Only a very small percentage of the region, however, has been surveyed for cultural resources (BLM 1983; BLM 1984). Areas of traditional Native American use are even less well-defined.

5.4.7 Noise

Ambient noise levels in the region vary widely. A large portion of the region within NAS Fallon-associated airspace records elevated noise levels between 75 Ldn near the station boundary and 60 Ldn in adjacent areas of Fallon, resulting mainly from aircraft overflights. Noise levels also are elevated in and around the training ranges from 60 Ldn outside the ranges to over 75 Ldn inside the ranges and along aircraft flight patterns, as a result of gunnery, bombing, and aircraft noise (SAIC 1991; US Navy 1995f).

Elevated noise levels (above 65 Ldn) in and around HWAD occur from use of the Controlled Firing area, from the demolition of ordnance and ammunition

at Restricted Area R-4811, and from the use of the small arms range. Aircraft noise is not recorded, as aircraft use is not associated with HWAD.

Noise levels in the rest of the region are generally lower because of the sparse distribution of population and the limited amounts of traffic and other noise-generating activities.

5.4.8 Public Health and Safety

Public health and safety conditions vary in the region. Parts of the region subject to NAS Fallon aircraft overflights are affected by noise, as discussed in Section 5.4.7 above. These areas are also at a small risk of impacts from objects inadvertently dropped by aircraft. In and adjacent to the training ranges, public safety is affected by ordnance delivery. Ordnance-contaminated lands outside the ranges are closed to the public. When receiving air traffic control advisory services there exists only a small risk to general aviation because aircraft are separated by air traffic control. Public health and safety conditions around HWAD are affected mainly by noise generated by ordnance demolition. Civilian aircraft could be damaged if they enter the restricted area when ordnance is being demolished.

5.4.9 Transportation

The region is served by US Route 50, an east-west highway that links the region to other parts of the state and California. The chief north-south route through the region is US Route 95. Other important routes are Nevada Routes 361 and 376.

5.4.10 Airspace Designation and Use

The airspace over the region is used by both military and civilian aircraft. Civilian aircraft use the visual flight rules (VFRs) corridor, which is aligned over Route 50 and allows civilian aircraft to travel through the NAS Fallon complex (see Figure 5-2). Other airways are established in the region for civilian aircraft use. Major commercial airways also exist over Nevada.

5.5 EXISTING MILITARY LAND WITHDRAWALS AND AIRSPACE DESIGNATIONS AND EFFECTS

This discussion presents a summary of all existing military land withdrawals in the region in terms of their functions, use, and regional effects. As noted above, lands in the region have been withdrawn by the military for locating facilities and for air and surface training and bombing areas. Figures 5-1 and 5-3 present the location of all existing land withdrawals and airspace designations in the region. Table 5-1 provides data on the size of each existing

and proposed withdrawal or military facility. Table 5-2 presents data on the size of each existing airspace designation. Tables 5-1 and 5-2 also contain information on proposed and reasonably foreseeable actions to present an overview of all potential actions.

TABLE 5-1
EXISTING AND PROPOSED REGIONAL MILITARY LAND WITHDRAWALS

Withdrawal	Area (Acres)
Existing Land Withdrawals	
NAS Fallon Air Station	4,627[1]
FRTC	77,589
Bravo 16	17,280
Bravo 17	21,400
Bravo 19	17,332
Bravo 20	21,577[2]
Hawthorne Army Ammunition Plant	147,431
	229,647 (4.0%)[3]
Proposed NAS Fallon Range Safety and Training Land Withdrawal *(Total withdrawal area—not the Preferred Alternative area)*	
FRTC	195,180 (3.4%)[4]
Bravo-16	34,025
Bravo-17	35,895
Bravo-19	19,080
Dixie Valley Area	98,775
Shoal Site	7,405
Total Withdrawn Area	424,827 (7.3%)
Total Area of the Region[5]	5,796,481 (100%)

Source: SAIC 1991, Tetra Tech 1996

[1]An additional 3,934 acres are held in fee simple.
[2]An additional 19,430 acres are held in fee simple.
[3]Figures in parentheses are lands withdrawn or under consideration for withdrawal as percentage of total land in the study area.
[4]This represents the total land area evaluated for withdrawal, not the preferred withdrawal footprint of approximately 127,365 acres; no alternative in the EIS proposes to withdraw this amount of land.
[5]Includes Churchill County, Mineral County, and the Gabbs Valley in Nye County.

5.5.1 Existing Military Facilities, Land Withdrawals, and Airspace Designations

Existing facilities and designated airspace include NAS Fallon, the FRTC, the Dixie Valley area and shoal site, and the HWAD and its associated airspace.

5.5.1.1 *Existing Military Facilities and Land Withdrawals*

NAS Fallon Facilities and Land Withdrawals

NAS Fallon, established in 1942 during the early stages of World War II, originally was an Army Corps training post. The Navy began using the facility in 1943 as a training and support station for air groups on training missions. The station encompassed 7,982 acres, including other lands controlled by NAS Fallon, such as the electronic warfare emitter sites, easements, and rights-of-way. These are not within the range or station boundaries but are dispersed throughout the region. Of this acreage, 3,527 acres are withdrawn under PLO 275, 788, and 2635. About 2,934 acres are acquired lands held in fee simple and are water-righted, and approximately 1,000 acres are acquired lands held in fee simple but are not water-righted. In April 1991, 400 acres of land adjacent to NAS Fallon were withdrawn for Navy housing and a safety arc by PLO 6834. This brought the total acreage of the station to 8,382 acres, of which 3,927 acres are withdrawn.

Since 1980, approximately 70 EW and TACTS sites have been constructed. The total amount of public land affected, including access roads, utility corridors, and site location, is about 565 acres. These lands are dispersed throughout the 4.2 million acres administered by the BLM Carson City District. All sites were developed under BLM rights-of-way with BLM coordination and review of Navy environmental documentation. These sites are critical to the NAS Fallon training mission.

The FRTC

The FRTC includes training ranges B-16, B-17, B-19, B-20, TACTS, the Dixie Valley area, and associated special use airspace. The locations, dimensions, facilities, and use of these areas are described in Chapter 2.

Under the National Emergency War Powers Act, the NAS Fallon training range was created in April of 1944 with the temporary establishment of B-20. B-17 and B-19 were established by use permit in 1945. NAS Fallon was deactivated to a maintenance level after World War II but was reopened in 1951. In 1953, jurisdiction of B-16, B-17, and B-19 was officially transferred to the Navy by congressional legislation. A fourth range, B-20, also was requested, but the Navy withdrew the request and obtained the use of the range through lease arrangements.

In 1958, the Navy used temporary withdrawals to establish the Black Rock and Sahwave ranges. These lands were returned to the BLM in 1965. In 1974, the BLM asked the Navy to obtain a congressional withdrawal for the use of B-20. The withdrawal of federal lands within B-20 (21,577 acres) was completed in 1986 through the enactment of PL 99-606.

In addition to these lands currently withdrawn for military use, there are two other areas in the region where military use historically has occurred under special use permits. The first of these is the central portion of the shoal site, a 2,560-acre area withdrawn by the Atomic Energy Commission (now DOE) in the 1950s. The entire shoal site has been used by the Navy since 1965 for helicopter search and rescue training. The second area is the Dixie Valley area, which has been used by the Navy under a special land use permit since 1966. The land use permit has since expired, and individual equipment sites are now authorized by the BLM through the use of ROWs.

HWAD Facilities and Land Withdrawals

The first military facility in the region, established in 1928, was the Hawthorne Naval Ammunition Depot near Hawthorne in Mineral County. The lands selected for the depot consisted mainly of public domain lands administered by the federal government. These lands were withdrawn for the depot under a presidential executive order. From 1928 to 1977 the depot was owned by the Navy. After 1977 it was transferred to the Army to centralize all ammunition functions under one service. In 1980, the depot was converted to a government-owned contractor-operated facility. HWAD serves as an ammunition depot and as a facility to produce, assemble, test, and demilitarize munitions. It also provides tenant support to the US Army Information Systems, Naval Undersea Warfare Engineering Station, and Nevada National Guard (US Army 1990).

5.5.1.2 Existing Military Airspace Designations

NAS Fallon Airspace

Figure 5-2 presents military airspace associated with NAS Fallon. This includes nine restricted areas, seven military operations areas, five air traffic control assigned airspace areas (ATCAAs), one aerial refueling route (AR), and several MTRs. Hereinafter, these designations are collectively referred to as NAS Fallon Airspace. Table 5-2 includes the approximate size of the various airspace designations.

Restricted Areas. Restricted areas are located above and extend beyond the boundaries of NAS Fallon training ranges or target areas. Table 5-3 presents information on these restricted areas. Civil aircraft can fly in these areas when they are not being used for military training activities.

Military Operations Areas (MOAs). MOAs are used for military training activities that do not involve the release of ordnance, such as air combat maneuvers, air intercepts, and aerobatics. Civil aircraft can use all the airspace in MOAs anytime, including when military use is in progress. In 1958, for

TABLE 5-2
EXISTING, PROPOSED, AND REASONABLY FORESEEABLE REGIONAL MILITARY AIRSPACE DESIGNATIONS

Airspace Designation	Approximate Size (square miles)
Existing Military Airspace Designations	
NAS Fallon	
Restricted Areas	958
MOAs	10,387
HWAD	
Controlled Firing Area SUA	14
Restricted Area (R-4811)	9
Proposed Airspace Designations	
Disestablish R-4803N	-46
Restructure R-4803S	-71
Restructure Ranch MOA	-104
Create Churchill Low MOA	109
Note: A modified Restricted Area R-4803, Churchill High MOA, and Ranch High MOA also are proposed but will be located above existing and proposed designated airspace, thereby not affecting the square miles of ground covered.	
Reasonably Foreseeable Military Air Space Designations	
Diamond MOA	2,085
Duckwater MOA	4,818
Smokey MOA	3,853
TOTAL	22,012

Source: SAIC 1991, Tetra Tech 1996

reasons of enhancing flight safety, a VFR corridor was created specifically for general aviation needs within the FRTC special use area. General aviation aircraft flying by instrument flight rules (IFR) also can use the airspace but in practice are routed around MOAs or can be separated from military activities occurring in MOAs by air traffic control. The existing MOAs around NAS Fallon are depicted in Figure 5-2. The sizes are reported in Table 5-4.

Air Traffic Control Assigned Airspace Areas. ATCAAs are airspace of defined vertical/lateral limits, assigned by the air traffic controller for purposes of providing air traffic separation between the specific military activities being conducted within the assigned airspace and other IFR traffic. These areas normally are established at 18,000 feet MSL and above and usually are placed above a MOA.

Other Military Airspace Designations. One AR is associated with NAS Fallon. Civil aircraft can use the airspace within the AR while refueling operations are underway. MTRs are "flight paths," usually established below 10,000 feet MSL, for low altitude navigation and terrain-following training at speeds in excess of 250 knots. MTRs may be designated IFR, operated in accordance with instrument flight rules, or VFR, operated in accordance with visual flight rules.

TABLE 5-3
EXISTING RESTRICTED AREAS

Restricted Areas	Associated Range	Approximate area (in square miles)
FRTC		
R-4802	B-20	28
R-4803N & S	B-16	113
R-4804	B-17	120
R-4810	B-19	120
R-4813	B-20	531
R-4812	B-17 & B-19	174
R-4816N & S	None	872
	TOTAL	1,958
HWAD		
R-4811	Not Applicable	9.3

Source: SAIC 1991

TABLE 5-4
EXISTING MOAs IN THE REGION

MOA	Approximate Area (in square miles)
Carson	171
Gabbs North	3,644
Gabbs South & Gabbs Central	1,634
Ranch	564
Austin 1	3,238
Austin 2	1,136
TOTAL	10,387

Source: SAIC 1991

Recent MTR Revisions. The Navy recently altered 12 MTRs associated with B-16 that terminate in R-4803 N/S. The change altered the terminal legs of six VFRs and one IFR. It also deleted the terminal legs of four VFRs. All affected routes now terminate with entry into B-20. The action reduces low-level military air traffic into B-16, thereby reducing noise levels (US Navy 1995d).

HWAD Airspace

Figure 5-2 presents existing military airspace designations associated with HWAD. These are the Controlled Firing Area and R-4811, both described below.

Controlled Firing Area Special Use Airspace. Aircraft transit through this airspace is not restricted. During firing, a ground-based observer watches for overflying aircraft. If aircraft is spotted, all gunfire must be terminated until the aircraft departs the controlled firing area.

Restricted Area R-4811. This area is located 25 miles south of HWAD. This cylindrical airspace, 1.5 nautical miles in radius, is restricted from surface to 15,000 feet AGL because fragments from detonations at surface can rise up to 15,000 feet. The airspace is not used for military flying activity.

5.5.2 Effects of Existing Land Withdrawals and Airspace Designations

The following sections summarize the effects of existing land withdrawals and airspace designations on the eight resource areas of concern.

5.5.2.1 Water Resources

The effects of the existing withdrawals on perennial streams and springs in the region are not known or expected to occur. It is likely that land disturbing activities on the withdrawn lands may have caused an increase in sedimentation in some of the surface water resources. There is no indication that significant impacts to surface water resources have occurred as a result of land withdrawals. There are water rights for 114 acre-feet per year (AFY) of ground water and 18 AFY of surface water in Rawhide Flats hydrological basin affected by B-19. The Navy does not hold these water rights (SAIC 1991). No significant impacts to surface water have occurred as a result of the withdrawal at B-19. The Navy holds water rights to 10,269 AFY of surface water in the Newland's Reclamation Project and to 2,298 AFY of ground water in Carson Desert. In addition, the Navy owns 3,168 acres of water-righted land in the Dixie Valley. Only a part of the surface water allocated to the Navy is used, and NAS Fallon actions have not resulted in a lowering of the area water table and have not exceeded existing water rights. The use of airspace associated with NAS Fallon has had no known effects on water resources (SAIC 1991).

HWAD has water rights to 399 AFY of ground water and 7,529 AFY of surface water, which represents about 15 percent of water rights in the Walker Lake and Whiskey Flats area. The HWAD boundaries also affect areas in the Wassuk Range with privately held water rights of 164 AFY. The Mt. Grant watershed, a source of high quality water, has been removed from public

access by HWAD. This action has had no known effect on water resources. The use of airspace associated with HWAD has had no known effects on water resources (SAIC 1991).

5.5.2.2 *Biological Resources*

NAS Fallon is in an area that supports greasewood communities typical of alkali flats in the region as well as shadscale, sagebrush, and pinyon-juniper communities. Direct and indirect effects on wildlife and its habitat have occurred from the establishment of the station and FRTC facilities. Although some of the original vegetation in the area of the air station has been removed, several of the training range areas and the Dixie Valley area support large areas of native vegetation (SAIC 1991).

The land located under the FRTC airspace contains wetlands important to migrating birds and many other animals. In 1989, NDOW monitored the effects of military air operations at NAS Fallon on wildlife inhabiting the region. The study recorded that most animal and bird species, including sensitive species in the area, were subjected to startle effects from aircraft noise but that the reproduction process apparently was not affected (NDOW 1989). Other studies on the effects of aircraft overflight on wildlife found that aircraft overflight does not affect the numbers or diversity of animals, does not cause a change in daily activity patterns, does not result in a cumulative increase in energy cost, and does not affect reproductive success (Krausman 1993a, b, c; Workman et al. 1992; Ellis et al. 1991; Anderson 1989; Manci et al. 1987). NAS Fallon has tried to reduce impacts to wildlife by avoiding overflight of the Stillwater area and Carson Lake below 3,000 feet AGL whenever tactically feasible. In addition, in-flight releases of fuel are performed in specified locations, and fuel is released only above 6,000 feet AGL where it evaporates before contact with the ground (SAIC 1991). As discussed in Section 4.2.3.1, the consumption of chaff by wildlife has not been shown to be biologically significant (SEA 1989; Naval Research Laboratory, 1995).

Portions of the land area on HWAD have been affected by construction and explosive ordnance. Habitat destruction, water pollution, and increased noise levels may have resulted from HWAD operations (SAIC 1991). Although the effects of these activities at HWAD have not been evaluated, there has been no indication of significant impacts to biological resources.

5.5.2.3 *Land Use*

The following sections describe the effects of existing military land withdrawals and airspace designations on land use in the region.

Mining. The existing land withdrawals have removed land from mining availability. Although no significant mineral deposits are known to underlie NAS Fallon or the shoal site, some mineral deposits may underlie B-16, B-17, B-19, and the Dixie Valley area (Figures 3-8 and 3-9). Portions of four mining districts fall within or extend into the training ranges. These are the Camp Gregory District, which is covered in part by B-16; the Fairview District, which is affected by B-17; and the Cinnabar Hill mining area and Holy Cross District, which are affected by B-19. There is moderate to high potential for the development of one or more small- to medium-sized silver and gold deposits in the northeastern part of B-17. The area extending from Cinnabar Hill through the northeastern portion of B-19 has high potential for discovery and development of precious metal deposits (SAIC 1991).

Churchill County has extensive geothermal resources. Significant geothermal resources have been discovered in Dixie Valley, primarily outside the proposed withdrawal area. Given the distribution of these resources, it is considered likely that the existing land withdrawals could be underlain by geothermal resources with moderate to high development potential. B-19 is considered to have better than average geothermal potential. Exploration that has taken place around Fallon indicates that the geothermal resources of NAS Fallon lands would be capable of supporting development of a geothermal powerplant. The Navy is examining the possibility of developing geothermal resources at NAS Fallon to generate power and for heating purposes, and has initiated the environmental review process for this proposal. Based on the geology and the results of exploration in the region, oil and gas potential is considered to be low for all lands that are currently withdrawn (SAIC 1991).

The existing HWAD withdrawn lands also have removed some land from mining. Portions of three mining districts, Lucky Boy, Mt. Grant, and Pamlico, overlap with the withdrawn lands. A small part of the Lucky Boy District extends into the HWAD. Silver and lead are the minerals associated with this district, but the area of the district under HWAD is assessed as having low potential for these minerals. A large part of the Mt. Grant District falls under HWAD lands. This area is assessed as having low to moderate development potential for gold and a low to moderate potential for molybdenum deposits. The area of the Pamlico District under HWAD has a low to moderate potential for gold deposits (SAIC 1991). Given that exploration and development of minerals is not permitted on HWAD lands, the withdrawal has reduced the opportunities for mineral development in the region. However, the affected areas have only low to moderate mineral potential. A known geothermal resource area extends under HWAD lands in the southern Walker Lake basin, and there is some potential for geothermal development, based on this resource within HWAD. The potential for oil and gas resources in the withdrawn lands is considered to be low, based on the

geology and explorations conducted in the area. Geothermal resources under HWAD as yet have not been examined for generating electricity.

The airspace designations associated with NAS Fallon and HWAD have not had any known effects on mining.

Grazing. Existing land withdrawals in Churchill County have taken land out of potential grazing and livestock production. Given the topography, climate, and vegetation in the region and the prevalence of ranching and grazing around the withdrawn lands, it is likely that these lands were under grazing prior to their withdrawal. Agricultural outleases are issued each year for approximately 3,000 acres of Navy land on-station and approximately 9,000 acres in the Dixie Valley area. These lands are water-righted and held in fee simple. Livestock and feed production are the chief uses of the land leased to the public. As discussed in Section 4.2.11, chaff would not adversely affect livestock. Studies have shown that since chaff passes through the digestive system of cattle with only insignificant amounts being retained in the body, consumption of chaff has no significant adverse effect on the animals or on products used by humans (SEA 1989; Naval Research Laboratory 1995).

Existing land withdrawals at HWAD also have removed lands from grazing and agricultural production. HWAD lands are not leased out for grazing, though grazing likely would have been the major land use if the lands had not been withdrawn.

Recreation. NAS Fallon is situated in an agricultural valley. It is likely that the withdrawn lands had only a low recreation potential relative to other areas of Churchill County. Accordingly, the land withdrawal for the station probably did not affect recreational resources of the region significantly. Because wilderness regions were defined after the withdrawals were enacted, none of the current WSAs are affected. A variety of outdoor recreation could occur on the existing FRTC withdrawn lands if these were accessible to the public. It is likely that the FRTC withdrawals have reduced the amount of land available for hunting, especially for upland game.

Recreation in the region also has been affected by the use of airspace associated with NAS Fallon. A survey of recreationists, conducted in the vicinity of NAS Fallon, indicated that about 20 percent were so affected by aircraft disturbance that they would be reluctant to return to the region for recreation. MOAs extend over the WSAs and established recreation facilities. A MOU between the Navy, Department of the Interior, and the State of Nevada concerning use of airspace by NAS Fallon requires that the aircraft operate at a minimum altitude of 3,000 feet AGL over Clan Alpine and Desatoya WSAs, Stillwater, and Carson Lake, where tactically feasible. While these measures have combined to minimize potential impacts on recreation,

nonetheless some type of recreational opportunity is affected by aircraft activity in the region.

The lands withdrawn at HWAD include a part of the Wassuk Range. Although use of this area for hunting, fishing, and sightseeing is permitted by HWAD, overnight use is not permitted. In addition, the general association of the lands with HWAD may have resulted in a lower use of these areas compared to other similar areas (SAIC 1991). Thus, the HWAD designation has resulted in some restriction of recreational opportunities. Airspace associated with HWAD is not used by aircraft; therefore, recreational impacts from airspace use do not occur.

5.5.2.4 Socioeconomics

NAS Fallon received a change in designation from a naval auxiliary air station to naval air station in 1972. This redesignation was responsible for a significant increase in the population of Churchill County from 1970 to 1980. In 1994, there were 2,330 jobs directly and indirectly associated with NAS Fallon, including contract employees. Therefore, NAS Fallon employs about 30 percent of Churchill County's residents. Although NAS Fallon and FRTC withdrawals have reduced the area available for grazing and livestock production, mining production, and recreation in the region, the economic losses due to the land withdrawals are offset by income and employment benefits generated by the station.

In 1988, about 850 personnel were employed at HWAD, constituting about 24 percent of all workers in Mineral County. In addition, the local spending of these employees supports jobs in local businesses. As a contractor-operated facility, most of the plant operations are contracted out; therefore, a large service sector has developed. Employment indirectly supported by HWAD formed about eight percent of the total employment in the county in 1988. If the withdrawn lands had been used for grazing and mining land uses, the employment benefits from those uses likely would have been much smaller than the employment benefits from the military use of the lands.

5.5.2.5 Visual Resources

The establishment of NAS Fallon has not significantly affected the visual resources in the region because the station is located in an agricultural valley where some settlement had already occurred prior to the construction of the station. The training ranges have resulted in land-disturbing activities and the construction of structures in areas that formerly were rugged undisturbed terrain. However, as these lands are not open to the public, most of these areas are not viewed by a large number of people, although travelers along regional roads and highways may be subjected to some disturbed landscape. Land-disturbing activities on HWAD have affected the visual resources in

some parts of the withdrawn lands. The airspace designations associated with NAS Fallon and HWAD have had no effects on visual resources.

During surveys for chaff on a portion of the Dixie Valley area in 1994 and 1995, evidence of chaff activity was found within the boundaries of the wilderness study area, which may affect the visual quality of this area because wilderness areas are meant to show no effects from human presence. However, due to the generally wide dispersion patterns, visual effects from chaff are expected to be minimal.

5.5.2.6 Cultural Resources

The construction of NAS Fallon took place before the enactment of the National Historic Preservation Act. At that time, no requirement existed for identifying and evaluating cultural resources prior to construction. Cultural resource surveys have been performed for specific development proposals subsequent to enactment of the NHPA. The surveys have indicated the existence of more than 100 cultural resource sites at the station. Numerous sites have been recorded on B-17 and B-19, although only limited areas have been subjected to archaeological survey. A small section of B-20 has been surveyed.

No recorded sites are located on the EW military developments, and no sites were recorded in a survey conducted on the shoal site. A CRMP and programmatic agreement have been prepared for NAS Fallon landholdings (US Navy 1993a), and this document sets forth a plan for identifying, evaluating, and managing NAS Fallon cultural resources, consistent with Section 106 of the NRHP. Airspace use in the FRTC has a limited potential to affect cultural resources (SAIC 1991).

Although archaeological surveys were not conducted prior to the establishment of HWAD, it is likely that a number of sites were affected by the original construction. Approximately 1.6 percent of the HWAD withdrawal has been surveyed during 14 cultural resources surveys. Record searches have indicated that 85 prehistoric and 15 historic sites have been recorded in the HWAD, including a number of structures that have been found to be eligible to the National Register of Historic Places. While the significance and integrity of most of the recorded sites is not known, some sites are known to have been partially or completely destroyed. Six sites have been recorded on Restricted Area R-4811, some of which have been affected by the military use of the area (SAIC 1991).

5.5.2.7 Noise

The primary source of noise associated with NAS Fallon is from sortie take-offs and landings. Noise was evaluated at all of the FRTC training ranges in

the 1982 RAICUZ study (US Navy 1982b) and was updated at the air station and B-16 in a 1995 Noise Study (US Navy 1995f). The 1995 study, which plotted Ldn contours at B-16, found that residential developments near the Sheckler Reservoir are outside the 60 dB Ldn contours. Other non-Navy noise sensitive areas in the county, such as the Stillwater Wildlife Management Area, Fallon National Wildlife Refuge, and Stillwater National Wildlife Refuge, are not affected by Navy operations at B-16 (US Navy 1995f).

Airspace use of Restricted Areas, MOAs, and MTRs associated with the FRTC has resulted in significant noise effects in the region. The Special Nevada Report reported that the 65 and 75 dB contours over B-16 extended in a general north-south direction from B-16 up to Highway 50 to the west of the City of Fallon (i.e., some of the western section of the city received noise effects from this airspace use).

Aircraft using restricted areas of the remaining FRTC ranges (B-17, B-19, B-20), the Dixie Valley area, and MOAs and MTRs also produce noise; however, the number of sensitive receptors in these areas is insignificant, and effects are therefore relatively insignificant (SAIC 1991).

Supersonic aircraft operations also are conducted in the NAS Fallon airspace, within certain parts of the Gabbs North and Central and Austin One MOAs. It is estimated that about 310 persons reside under this airspace. Sonic booms occur at random throughout the area and in 1989 occurred at an average overpressure that was sufficient to startle some humans and animals (SAIC 1991). Studies conducted by the State of Nevada have determined that sonic booms do not adversely affect wildlife (NDOW 1989) or human health (NDHR 1988).

The two sources of noise at HWAD are the Controlled Firing Area where mortar testing occurs, and the Western Area Demilitarization Facility to the north of Hawthorne where the demolition of ordnance occurs. Both noise sources are located at a sufficient distance as to not be detected by the general public in Hawthorne (SAIC 1991).

5.5.2.8 Public Health and Safety

Aircraft mishaps and objects dropped from aircraft are potential sources of impact on public safety in the NAS Fallon region. As noted in Chapter 3, the chances of people or structures being hit by such objects is very small. Ordnance intended to be dropped on B-16, B-17, and B-19 has fallen on public lands and the Walker River Indian Reservation adjacent to these training ranges. During surface sweeps in 1989 and 1990, live and practice/inert ordnance and ordnance scrap were retrieved, and the effectiveness of surface sweeps in clearing ordnance is estimated to be 92.7 percent. There is currently no reliable means of determining the location of subsurface ordnance (SAIC

1991). Areas presenting the greatest risk of unexploded buried ordnance are those near B-19 and B-17. These lands are under closure by the BLM, and the BLM has requested the Navy to post signs and/or fence these areas.

Accidents involving ordnance are potential sources of public safety effects on HWAD lands. Three serious ordnance-related mishaps have occurred since 1971 at HWAD, but none affected any property or life off-site (SAIC 1991). There is no risk from aircraft accidents or objects or ordnance dropped from aircraft since HWAD does not operate any aircraft (US Army 1990).

As noted in Section 4.2.13.1, there is no indication that aluminum-coated chaff used by the US military poses a threat to human health. None of the materials contained in chaff are known to pose a health hazard. Based on the data available, the materials (aluminum, stearic acid, and silica fiberglass) are irritants and therefore pass easily through the system of those species that might ingest them (SEA 1989; Bohman 1991). Chaff is not known to break down into particles small enough to be an inhalation risk, nor does the type of chaff used at NAS Fallon and elsewhere in the US cause allergic contact dermititis. US chaff manufacturers, when contacted, revealed no instances of allergies or irritation among their employees. These manufacturers stated that while employees are provided with protective gowns and masks, very few choose to use them (Naval Research Laboratory 1995).

5.5.2.9 Transportation

The existing land withdrawals have not affected any major transportation routes in the region because major roads were avoided when these withdrawals were enacted.

5.5.2.10 5Airspace Designation and Use

Airspace designation and use have affected civil aviation in the region. Typically, restricted areas are used by military aircraft from 7:15 AM to 11:30 PM (local time), Monday through Friday, and for a somewhat shorter period on Saturdays. Therefore, nonmilitary aircraft use of this airspace is limited. Civilian aircraft are free to use MOAs when military activity is occurring; however, in practice civilian aircraft often are routed out of the MOAs (SAIC 1991). Dispersion of chaff may have short-term effects on local radar used in air transportation by causing radio frequency pollution. The airspace associated with HWAD is not used for military flying activity. Aircraft transit through the Controlled Firing Area is not restricted. When firing takes place, a ground-based observer watches for overflying aircraft, and if aircraft is spotted, all gunfire is terminated until the aircraft departs the controlled firing area. Civilian aircraft is not allowed to transit R-4811.

5.5.3 Summary

Table 5-5 presents a summary of the land effects of existing land withdrawals and military activity on the region. Existing military land withdrawals cumulatively have withdrawn about four percent of land in the region from public domain. Another 23,364 acres held in fee simple by NAS Fallon are closed to all nonmilitary uses except agriculture, which is conducted under lease. Approximately 23,153 square miles are affected by overflight activity.

TABLE 5-5
LAND EFFECTS OF CURRENT MILITARY ACTIVITY IN THE REGION

Area	Lands Withdrawn (acres)	Lands Used by Permits/ROWs (acres)	Lands Held in Fee (acres)	Lands Affected by Overflight (sq. mi.)	Control Use
NAS Fallon	3,927	0	3,934	–	Portion of lands held in fee is leased out; rest is closed to nonmilitary use.
FRTC	77,589	700	19,430	–	All land is closed to nonmilitary use.
Shoal Site[1]	–	2,764	–	–	Open to nonmilitary use.
Dixie Valley Landholdings	–	–	9,741	–	Portion of lands held in fee is leased out; rest is closed to nonmilitary use.
HWAD	147,431	–	–	–	Only recreational use is allowed on a part of the withdrawal. Other areas are closed to nonmilitary use.
NAS Fallon Airspace	–	–	–	11,345	Civilian aircraft are allowed the use of airspace.
TOTAL	228,628	3,464	33,105	11,345	
REGION TOTAL	5,796,481				

Source: SAIC 1991, Tetra Tech 1992
[1] Used through casual use permits issued by the BLM.

5.6 PROPOSED MILITARY LAND WITHDRAWALS AND AIRSPACE DESIGNATIONS AND THEIR POTENTIAL EFFECTS

5.6.1 Proposed NAS Fallon Land Withdrawal

The proposed NAS Fallon land withdrawal, as described in Chapter 2, would withdraw between approximately 127,365 and approximately 189,080 acres of public lands adjacent to existing training ranges. These withdrawn lands

would provide the necessary land area to allow the Navy to maintain and improve realistic operational and strategic combat training and would provide safety buffers around the training ranges. EW, TACTS, and visual cueing device sites would be developed on withdrawn land, and integrated air and ground training would occur. These activities would be contained within the withdrawal area to the extent possible. Any EW or TACTS site or Navy training activity that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency.

The withdrawn lands would be placed in land use categories to define compatible land uses with training operations and public uses. All withdrawn lands would be managed under a resource management plan that would be developed by the Navy, in conjunction with the BLM, BUREC, and DOE, subsequent to the withdrawal. The plan would be submitted to the BLM for approval. The land withdrawal would not cause an increase in designated airspace or the size of the range impact areas.

5.6.2 Effects of the Proposed NAS Fallon Land Withdrawal

The impacts of the proposed NAS Fallon land withdrawal and alternatives are described in Section 4.2 and are summarized in Table 2-6.

5.6.3 Proposed NAS Fallon B-20 Land Withdrawal Renewal

The Military Lands Withdrawal Act of 1986 (Public Law 99-606) identified approximately 21,576 acres of land in a checkerboard pattern for Navy use to support the NAS Fallon B-20 training range. PL 99-606 terminates 15 years after enactment (November 6, 2001). The Navy is proposing to renew the land withdrawal at B-20 for continued Navy use. Pursuant to PL 99-606 Section 5, the Navy is preparing a legislative environmental impact statement (LEIS) evaluating the renewal. The LEIS will be released for public review in the spring of 1998.

5.6.4 Effects of the Proposed NAS Fallon B-20 Land Withdrawal Renewal

The effects of the proposed B-20 land withdrawal renewal are evaluated in the LEIS for the Renewal of the B-20 Land Withdrawal at Naval Air Station Fallon, Nevada. No significant impacts to land use, biological resources, geology and soils, water resources, cultural resources, cultural resources, socioeconomics, air quality, noise, mineral resources, livestock grazing and wild horse management, recreation and visual resources, public health and safety, or transportation were identified.

5.6.4 B-16 Airspace Designation Restructuring

Noise from aircraft operations is a common concern, especially when the operations take place near residential areas. Military uses at NAS Fallon, such as low-flying high-speed aircraft, have resulted in such concerns by the state of Nevada and the public. The region that has been most affected by aircraft noise is the area north of B-16, known as the Sheckler District. The Navy is investigating changes in aircraft flight patterns at B-16 to reduce noise levels in this area. The Navy already realigned 12 MTRs to terminate at B-20 instead of B-16, which has reduced noise levels around B-16. Airspace changes are a separate action from the land withdrawal action evaluated in this EIS.

Aircraft training at B-16 takes place in restricted airspace R-4803N and R-4803S and run-in lines that approach B-16 from north-northwest, resulting in noise complaints from nearby Sheckler District residents. The existing airspace designations in the vicinity of B-16, both restricted and military operations areas (MOAs), are shown in Figure 5-2. The Navy proposes to lessen noise effects north of B-16 by changing aircraft flight patterns using a run-in line approach to B-16 from the south. Modifying the flight patterns would necessitate restructuring airspace over and south of B-16. Under the proposal, three joint-use MOAs would be established—Churchill Low, Churchill High, and Ranch High. Creating the new Churchill MOAs would allow for disestablishing all of R-4803N and part of R-4803S (Figure 5-3). Disestablishing the restricted airspace north of B-16 would simplify flying for general aviation aircraft coming from the Yerington, Silver Springs, and Fallon Municipal airports. A portion of the Ranch MOA also would be disestablished, as the airspace would no longer be needed for training. The net effect of the airspace restructuring would be to decrease designated airspace at B-16 by approximately 112 square miles.

The Churchill Low MOA would include airspace from 500 AGL (feet above ground level) up to and including 9,000 feet above mean sea level (MSL). The Churchill High MOA would include airspace above the Churchill Low MOA from 9,000 MSL up to but not including flight level 180 (18,000 feet above mean sea level). The Ranch High MOA would be located above the existing Ranch MOA and would include airspace from 9,000 MSL up to and including 13,000 MSL. The western portion of the Ranch MOA would be disestablished from the MOA boundary. All of R-4803N and the northern part of R-4803S would be disestablished. Table 5-6 details the boundary locations of the current and proposed airspace.

Flights originating out of NAS Fallon, which account for approximately 95 percent of all range activity at B-16, would enter B-16 from the southeast at an approximate elevation of 9,500 MSL (approximately 5,000 feet AGL). Flights

TABLE 5-6
CURRENT AND PROPOSED AIRSPACE BOUNDARIES

Name of Airspace	Current Boundaries	Proposed Boundaries
R-4803N	Beginning at: lat. 39°34'53"N., long. 118°59'36"W. to lat. 39°35'48"N., long. 118°53'14"W. to lat. 39°26'48"N., long. 118°51'03"W. to lat. 39°30'00"N., long. 118°58'30"W. to the point of beginning.	Release this airspace for public use.
R-4803S	Beginning at: lat. 39°30'00"N., long. 118°58'30"W. to lat. 39°26'48"N., long. 118°51'03"W. to lat. 39°23'13"N., long. 118°50'10"W. then via the 3NM arc radius circle centered at lat. 39°20'40"N., long. 118°52'15"W. to lat. 39°20'07"N., long. 118°56'03"W. to the point of beginning.	3NM arc centered at: lat. 39°20'40"N., long. 118°52'15"W. to the point of beginning.
Ranch MOA	Beginning at: lat. 38°58'00"N., long. 118°42'50"W. to lat. 39°17'00"N., long. 118°21'00"W. to lat. 39°12'10"N., long. 119°11'00"W. to lat. 39°04'00"N., long. 119°11'00"W. to the point of beginning.	Beginning at: lat. 39°58'00"N., long. 118°42'50"W. to lat. 39°17'00"N., long. 118°21'00"W. to lat. 39°13'15"N., long. 119°00'00"W. to lat. 39°01'50"N., long. 119°00'00"W. to the point of beginning.
Churchill Low MOA	Not currently established.	Beginning at: lat. 39°23'43"N., long. 119°02'00"W. to lat. 39°13'15"N., long. 119°02'00"W. to lat. 39°14'25"N., long. 118°49'25"W. to lat. 39°20'12"N., long. 118°48'20"W. then via the 3NM arc centered at lat. 39°20'40"N., long. 118°52'19"W. to lat. 39°23'43"N., long. 118°53'00"W. to the point of beginning, excluding the airspace within R-4803.
Churchill High MOA	Not currently established.	Beginning at: lat. 39°23'43"N., long. 119°02'00"W. to lat. 39°13'15"N., long. 119°02'00"W. to lat. 39°14'00"N., long. 118°53'00"W. to lat. 39°18'30"N., long. 118°50'10"W. then via the 3NM arc centered at lat. 39°20'40"N., long. 118°52'19"W. to lat. 39°23'43"N., long. 118°53'00"W. to the point of beginning, excluding the airspace within R-4803.
Ranch High MOA	Not currently established.	Beginning at: lat. 39°13'15"N., long. 119°02'00"W. to lat. 39°08'00"N., long. 119°01'00"W. to lat. 38°59'11"N., long. 118°48'00"W. to lat. 39°14'25"N., long. 118°49'25"W. to the point of beginning.

originating out of other facilities, such as NAS Lemoore, California, and NAS Miramar, California, which account for the remaining B-16 flight activity, would enter B-16 from the southwest using existing low-level routes at an

approximate elevation of 9,500 MSL (approximately 5,000 feet AGL). No increase in the number of flights over Walker River Indian Reservation would occur.

5.6.5 Potential Effects of the B-16 Airspace Designation Restructuring

The potential effects of the B-16 airspace designation restructuring are examined below. The airspace restructuring would involve rerouting the flight patterns to approach B-16 from the south instead of from the north and restructuring airspace to accommodate that change. No increase in the number of flights or size of the target area would occur.

5.6.5.1 Water Resources

No impacts to water resources are anticipated from the airspace designation restructuring.

5.6.5.2 Biological Resources

The change in flight patterns at B-16 would reduce noise levels near Sheckler Reservoir, thereby benefiting bald eagle habitat and waterfowl. No impacts to sensitive biological resources are expected from the new airspace designations.

The new flight pattern would result in increased noise levels immediately south of B-16. No sensitive species are known to exist in this area. There are rock outcrops and cliff-like rim rocks that may provide habitat for raptors and other birds on the lands south of B-16. An NAS Fallon biologist conducted a site survey on March 4, 1996, and did not observe any raptors or residue from old bird nests. Stains on the rocks were noted, which may indicate a rodent population (Rathbun 1996a). Based on the literature review discussed above, many raptors inhabiting this area are expected to habituate to noise levels. Although there may be short-term startle effects, reproduction is not expected to be affected (Ellis et al. 1991; Anderson et al. 1989; Manci et al. 1987, NDOW 1989).

5.6.5.3 Land Use

The proposed B-16 airspace designation restructuring would have no impacts on mining or grazing underneath this airspace. The airspace designation restructuring would result in decreased noise levels north of B-16, benefiting recreation in the Sheckler District. The action would result in increased noise levels south of B-16, potentially affecting recreation south of B-16 during times that aircraft training is occurring. The Navy will work to alter training to the extent practicable to reduce noise during permitted organized events on the Pony Express National Historic Trail.

5.6.5.4 *Socioeconomics and Environmental Justice*

Airspace designations are not expected to have any socioeconomic impact. Beneficial impacts are expected from the proposal to change the flight direction at B-16 from a northerly approach to a southerly approach. During public scoping, county and state officials and local residents voiced concerns about noise resulting from the existing approach pattern to B-16. The current approach has resulted in complaints from residents living north of B-16. The proposed approach would use airspace south of B-16 over public land that is undeveloped and sparsely populated. Therefore, the decreased overflight west of Fallon and north of B-16 would be a beneficial impact for all residents in the Sheckler District regardless of income and race.

The Churchill MOAs would be established over and north of the Walker River Indian Reservation. Relocating the flight operations from R-4803N to the MOAs would increase noise levels south of B-16; however, military air operations would occur north of the reservation and at a high altitude (approximately 5,000 feet AGL) when directly above the reservation. Although audible, the noise levels would be less than 60 dB, a noise level that can be compared to the sound of an air conditioner operating 100 feet away. Activities such as grazing, recreation, ranching, and mining would not be affected by the proposal. The small number of operations in the proposed Ranch High MOA would not significantly affect most activities in the reservation because these aircraft would be at an altitude higher than historical operations in the Ranch MOA. For these reasons, the proposed change in flight patterns was not found to have disproportionately high and adverse human health or environmental effects on minority or low-income populations.

5.6.5.5 *Visual Resources*

The airspace designation restructuring would have no effect on visual resources.

5.6.5.6 *Cultural Resources*

The airspace designation restructuring would have no significant adverse effects on cultural resources in the area.

5.6.5.7 *Noise*

In response to concerns about aircraft operations north of B-16, the Navy initiated two noise studies. The 1995 Aircraft Noise Study for the B-16 Range Complex (U.S. Navy 1995f) used the DOD-approved NOISEMAP model and 1994 "busy day" operations data to update the noise contours around B-16. A busy day is defined as any 24-hour period in which the day's total operations are at least 50 percent of the annual average daily operations. The average

busy day Ldn contours are shown on Figure 5-4. With the current operations and airspace configurations near B-16, the City of Fallon and residential developments near Sheckler Reservoir are outside the 60 dBA Ldn contours. While these areas are outside the 60 dBA Ldn contours, concerns as to noise levels north of B-16 still were raised at the scoping meeting by residents and by the state of Nevada.

The 1996 Aircraft Noise Study for the Proposed B-16 Range Complex (U.S. Navy 1996b) evaluated noise levels of the proposed airspace designation restructuring using the same DOD-approved NOISEMAP model and 1994 "busy day" operations data as the 1995 study of existing noise conditions. Figure 5-5 illustrates the modeled noise contours around B-16 if this action were implemented. As shown on Figure 5-5, City of Fallon and Sheckler District residents would be well outside the 60 dBA Ldn contour lines under proposed modified flight approach patterns.

Given that the land south of B-16 is rural undeveloped public land and that there are no nearby permanent settlements, this action would mitigate noise concerns north of B-16 while not causing significant noise impacts south of B-16. Aircraft would approach B-16 at 9,500 feet MSL, which will minimize startle effects. Noise levels over the Walker River Indian Reservation would not exceed an average Ldn of 60 dB, as discussed in Section 5.6.6.4, and would not result in a significant impact.

5.6.5.8 Public Health and Safety

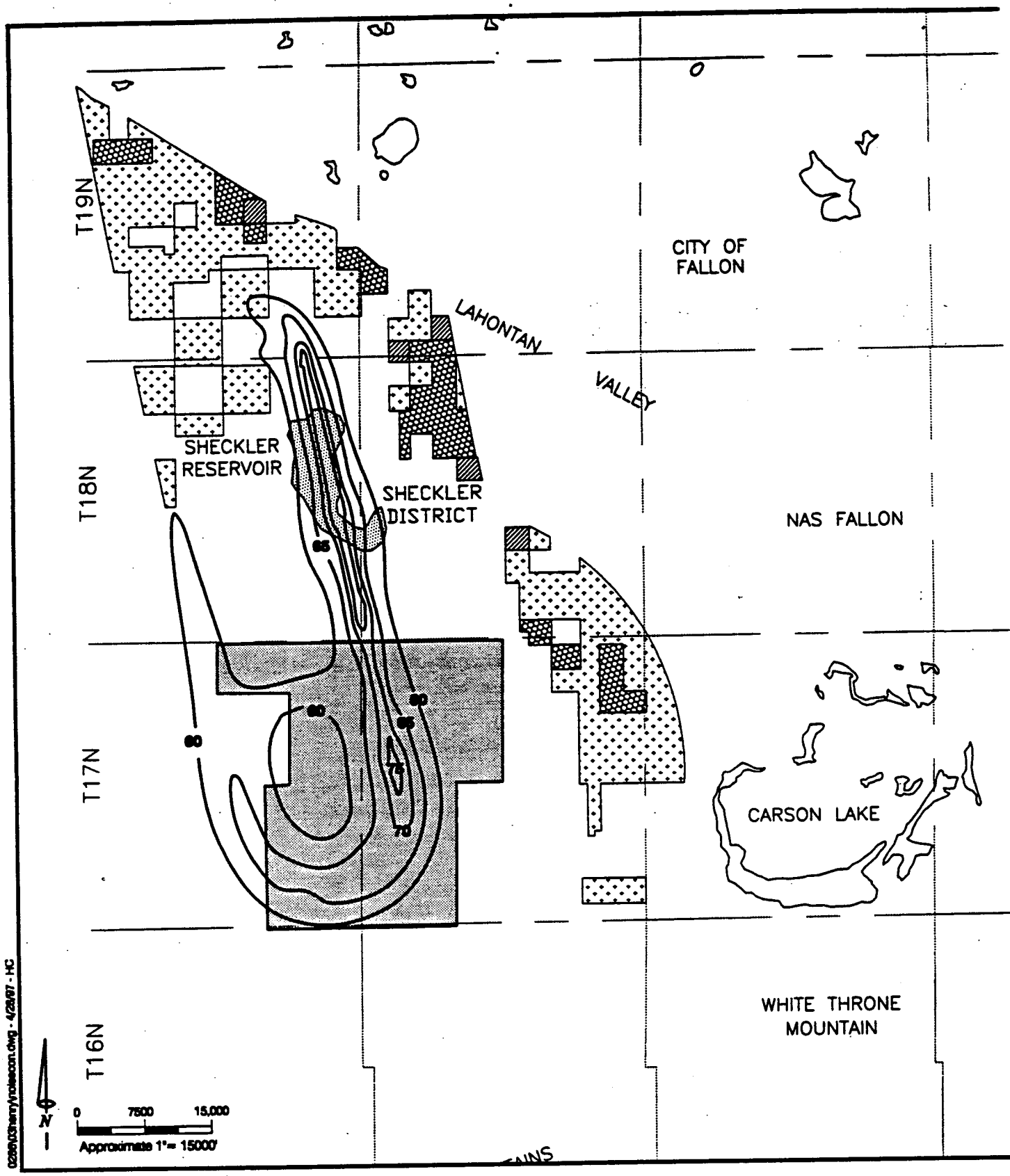
The change in B-16 flight paths would not increase public health hazards because the action shifts flight activity from north of B-16 to south of B-16 where the population is significantly less.

5.6.5.9 Transportation

Airspace designation restructuring would not impact regional roads and highways.

5.6.5.10 Airspace Designation and Use

Creating the new Churchill MOAs would allow for the disestablishment of R-4803N, the northern portion of R-4803S, and the western portion of the Ranch MOA (see Figure 5-3). The FAA has reviewed the restructuring of this airspace and there is no indication that civil air traffic would be affected. None of the proposed changes in designated airspace occur in a major airway.



A 1995 study of B-16 mapped the noise contours for current operations. The residential densities of the Sheckler District also are presented.

LEGEND:

60 —— Ldn Contours

Existing Range B-16

Sheckler Reservoir

Dwelling Units per Quarter Section (160 acres)

0-5

6-15

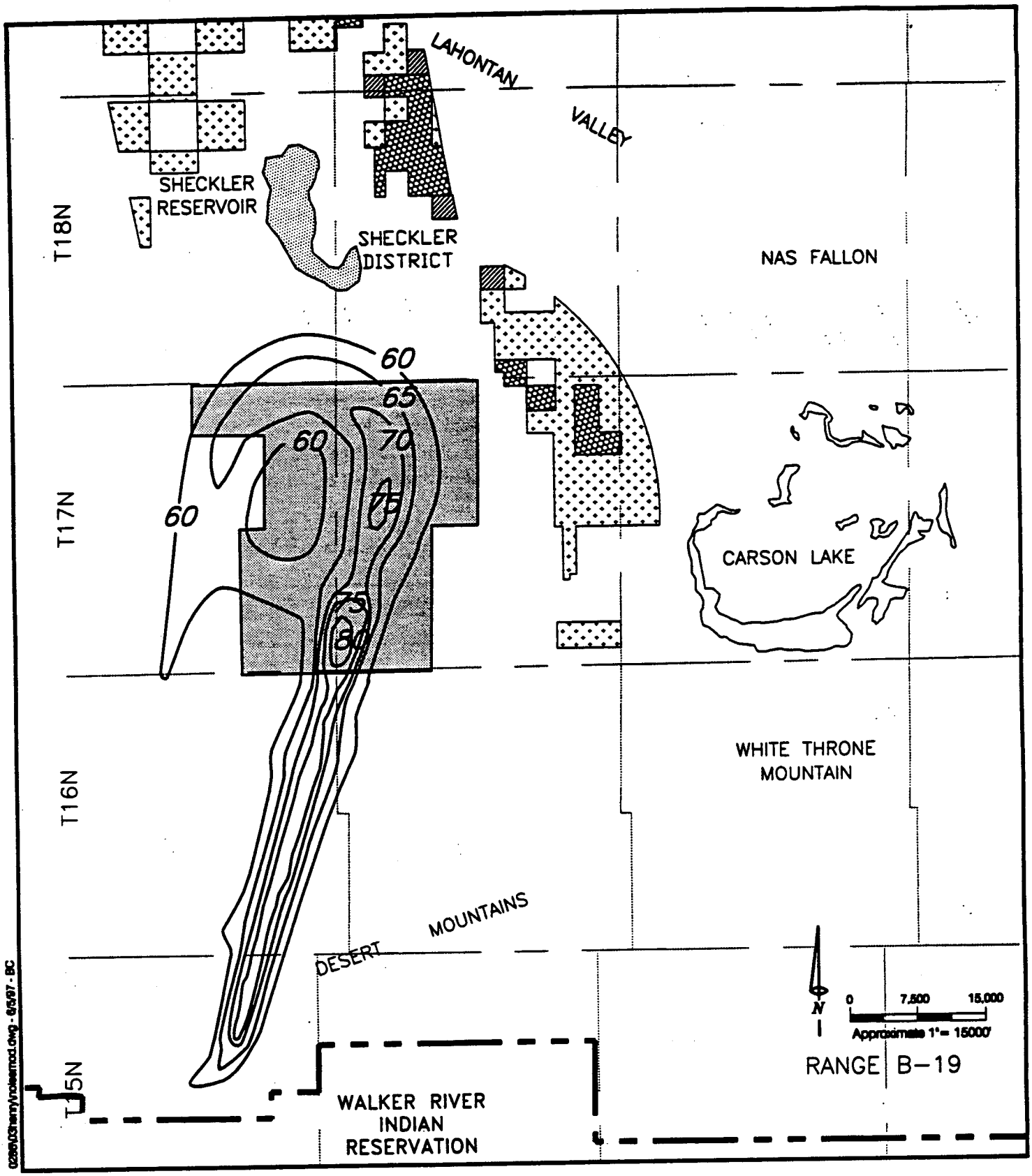
16 and Greater

Source: US Navy, 1995f.

Average Busy Da
Noise Contours at ... l
Under Current Condi...n

NAS Fallon, Neva...

Figure 5-



The Navy has proposed flight approach patterns to alleviate noise impacts north of B-16 in the Sheckler District.

LEGEND:

60 —— Ldn Contours

Existing Range B-16

Sheckler Reservoir

Dwelling Units per Quarter Section (160 acres)

0-5

6-15

16 and Greater

Source: US Navy, 1996

Average Busy Day Noise Contours at B-16 Under Modified Conditions

NAS Fallon, Nevada

Figure 5-5

Creating the Churchill Low and Churchill High MOAs would result in an adjustment to the flight training area beginning at 500 AGL, ending at 18,000 feet above mean sea level and overlaying 109 square miles. Adding the Ranch High MOA would raise the flight training ceiling from 9,000 MSL to 13,000 MSL for the western area of the remaining portion of the Ranch MOA. As shown in Table 5-7, the net effect of the proposed changes under this alternative, including the changes to R-4803N/S and the Ranch MOA, would be to reduce the area under designated airspace by approximately 112 square miles. Chaff is not and would not be released in the airspace above B-16.

The proposed airspace configuration changes will benefit general aviation in that Hazen VORTAC will be unencumbered by restricted airspace. This will facilitate instrument and VFR approaches to Fallon, Silver Springs, and Reno airports. Additionally, the VFR route between Mustang and Mina will no longer pass through the Ranch MOA.

TABLE 5-7
SUMMARY OF PROPOSED AIRSPACE DESIGNATIONS AND BOUNDARIES

Designated Airspace	Existing Boundaries (mi^2)	Proposed Boundaries (mi^2)
R-4803N	46	–
R-4803S	71	41[1]
Ranch MOA	564	460[2]
Churchill Low	–	109[1]
Churchill High	–	109[1]
Ranch High	–	98[2]
Total Land Area Below Airspace	681	569[3]

[1]R-4803S, Churchill Low MOA, and Churchill High MOA would overlay the same land area.
Ranch High MOA would overlay a portion of the Ranch MOA.
[3]Total represents the sum of the land area that would be overlain by airspace. R-4803S, Churchill Low MOA, and Churchill High MOA would overlay 109 square miles and the Ranch MOA and Ranch High MOA would overlay 460 square miles for a total of 569 square miles. See Figure 5-3.

5.7 EFFECTS OF REASONABLY FORESEEABLE LAND WITHDRAWALS AND AIRSPACE DESIGNATIONS

This section presents reasonably foreseeable land withdrawals and military airspace designations in the region and evaluates their potential environmental effects.

5.7.1 Reasonably Foreseeable Land Withdrawals

There are no reasonably foreseeable land withdrawals associated with NAS Fallon or HWAD. The Special Nevada Report (SAIC 1991) listed two foreseeable land withdrawals in Nevada, the Navy B-17/B-19 land bridge and B-18 range and the Army's Hawthorne RCTC. Since publication of the

Special Nevada Report, the Navy's land bridge and B-18 withdrawal and the Hawthorne RCTC have been put on hold indefinitely due to changes in weaponry and the global tactical requirements.

5.7.2 Reasonably Foreseeable Airspace Designations

Figure 5-3 presents reasonably foreseeable future airspace designations in the region. The size of each airspace designation is reported in Table 5-2. All reasonably foreseeable future airspace designations are associated with NAS Fallon.

5.7.2.1 Alterations of NAS Fallon Special Use Airspace (SUA)

The Navy is investigating changes to certain existing restricted areas and MOAs around NAS Fallon and the FRTC, based on a review of NAS Fallon's overall training and operational requirements. The changes involve redesignation and continued use of certain restricted airspace, disestablishment of some restricted airspace, establishment of new restricted areas, and change in use time of certain MOAs. The elements of the airspace changes include the following:

- Disestablish Restricted Area R-4802;
- Reduce the area of R-4813;
- Redesignate R-4804, R-4810, and R-4813 to R-4804A, R-4810A, and R-4813A;
- Establish joint-use Restricted Areas R-4804B, R-4810B, and R-4813B above the redesignated restricted areas;
- Include high altitude bombing at B-17 and B-20; up to FL300 with the ordnance delivery at FL290. All such high altitude bombing is conducted with authorization from FAA;
- Change published times of designation of certain restricted areas; and
- Alter Gabbs Central MOA by excluding airspace around Gabbs Airport and change the time of use of this MOA.

5.7.2.2 Diamond MOA

This reasonably foreseeable MOA could overlay 2,085 square miles, with a floor of 10,000 feet MSL and ceiling of 18,000 feet MSL. This would be used for strike aircraft rendezvous (when attack aircraft regroup during ingress prior to striking the target) and for stand-off jammer operations (when

electronic aircraft stand at a distance to jam enemy radar while strike aircraft approach). A part of the MOA would be used for supersonic activity (SAIC 1991). An ATCAA would be established over this airspace.

5.7.2.3 Duckwater MOA

This MOA could overlay 4,818 square miles. The floor and ceiling altitudes of this MOA could be the same as noted above for the Diamond MOA. This would be used to provide a rendezvous area (where aircraft regroup) and a jammer axis (electronic jamming area) (SAIC 1991). An ATCAA would be established over this airspace.

5.7.2.4 Smokey MOA

This MOA could overlay 3,853 square miles, with a floor of 200 feet AGL and ceiling altitude of 18,000 feet MSL. This MOA would provide a tactical low-level ingress to B-17 and B-19 target areas. An ATCAA would be established over this airspace.

5.7.2.5 Reno MOA

The Reno MOA is an existing MOA, however scheduling and user agency authority could change from 152 Airlift Wing Reno, Nevada Air National Guard to Commander, Naval Strike and Air Warfare Center, Fallon, Nevada. The Reno MOA is located 40 miles north of Reno and covers approximately 1,380 square miles. This MOA overlies the Smoke Creek Desert, Winnemucca Lake, and part of the Black Rock Desert, and is above the towns of Empire and Gerlach. The Reno MOA extends from 13,000 feet MSL up to, but not including FL180, with an overlying ATCAA up to FL310. The Reno MOA/ATCAA is used for reconnaissance training, air combat training, air refueling, instrument training, flight testing, and proficiency training. Supersonic operations are not permitted, except above FL300.

5.7.3 Potential Effects of Reasonably Foreseeable Airspace Designations

Potential effects of these actions are examined below to provide an analysis of long-range cumulative effects. A degree of uncertainty is associated with the actions, and these actions are subject to change prior to implementation. The effects described below are based on general examination of the conditions and resources currently in the region. More precise impacts would be determined through project-specific NEPA analyses.

5.7.3.1 Water Resources

No impacts to water resources are anticipated from airspace designations.

5.7.3.2 *Biological Resources*

The proposed airspace designations potentially would enlarge the area that would be affected by overflights, although there would be no increase in the number of flights. Wildlife in these areas could be subject to some startle effects, but studies of effects from existing flight activities suggest that they would not be significant (NDOW 1989; Krausman 1993a, b, c; Workman et al. 1992; Ellis et al. 1991; Anderson 1989; Manci et al. 1987).

5.7.3.3 *Land Use*

The proposed airspace designations may have impacts on mining and grazing underneath the proposed Smokey MOA airspace space from low altitude flights. The designations could reduce recreational values from increased noise.

5.7.3.4 *Socioeconomics and Environmental Justice*

Airspace designations are not expected to have any socioeconomic impact or result in disproportionately high and adverse human health or environmental effects on minority or low-income populations.

5.7.3.5 *Visual Resources*

The future airspace designations would have no effect on visual resources.

5.7.3.6 *Cultural Resources*

The lands under the airspace have the potential to contain cultural resources. The location and type of resources are unknown at this time. The Navy would have to undertake some effort to identify cultural resources and evaluate potential effects to cultural resources and determine their significance in the area of the MOAs from low altitude flights, as per the requirements of the CRMP and PA.

5.7.3.7 *Noise*

The reasonably foreseeable airspace designations have the potential to affect noise levels. The recent MTR revisions reduced the flight activity focused on B-16, thus reducing noise levels over the Sheckler District. Creating the Diamond, Duckwater, and Smokey MOAs would enlarge the area in which noise effects would be recorded. Noise effects would be relatively greater under Smokey MOA, given that the MOA floor may be at 200 feet AGL. The area of supersonic operations may be expanded as part of the Diamond MOA; however, the flight activity in the new MOAs would be very dispersed and generally would be conducted at altitudes above 15,000 feet AGL. In addition, the area underlying this airspace is not densely populated, and sensitive receptors in the area are few.

5.7.3.8 *Public Health and Safety*

The MTR revisions enhanced safety by removing overflight activity from the relatively more populated parts of the region. The net effect would be that fewer persons would be at risk from objects dropped by aircraft or other aircraft mishaps.

The NAS Fallon SUA alterations would slightly increase the hours of use of the airspace. As no increase in sorties is planned, the increase in use time would reduce the hourly frequency of flying in the region and would enhance safety. Establishing these future MOAs would increase the area that is at risk from objects dropped inadvertently by aircraft and aircraft mishap. However, due to low population density, the risk factor under the airspace is extremely low.

5.7.3.9 *Transportation*

Airspace designations would not impact regional roads and highways.

5.7.3.10 *Airspace Designation and Use*

Establishing of the Diamond, Duckwater, and Smokey MOAs would encourage civilian aircraft to use this airspace with assistance from air traffic controllers. Establishing new restricted areas above the four existing restricted areas essentially would raise the ceiling of restricted areas to flight level 300 (30,000 feet above MSL) from the current levels. Currently, these proposed restricted areas fall within the established ATCAAs, and nonhazardous military use occurs through coordination with the Oakland and Salt Lake City Centers. With the designation of the proposed restricted areas, the Navy would use the airspace at designated use times, and civilian aircraft would be routed around these areas. The net effect would be that a larger airspace around Fallon would be restricted for military aircraft to conduct hazardous operations, protecting civilian lives and aircraft that necessarily would be rerouted around that airspace by FAA and NAS Fallon air traffic controllers. This would result in greater air safety. The change to Gabbs Central MOA would improve conditions for civilian aircraft operations in the vicinity of Gabbs Airport.

5.8 REGIONAL CUMULATIVE EFFECTS

This section discusses the cumulative effects of DOD use of existing, proposed, and reasonably foreseeable land withdrawals and airspace designations. Approximately four percent of the land in the cumulative effects region is withdrawn for defense purposes. Another 1.1 percent of the land area is used for defense-related activities but is not withdrawn. Under the NAS Fallon land withdrawal preferred alternative, about 127,365 acres would be withdrawn for military training and to provide safety buffers around

existing ranges. If this acreage were added to existing withdrawals, a cumulative total of approximately eight percent of the region's acreage (5.7 million acres) would be affected by withdrawals for military training.

As noted in the preceding sections, varying levels of land use controls apply to existing and proposed land withdrawals. Lands currently withdrawn for NAS Fallon and the FRTC are closed to nonmilitary uses, although lands held in fee simple at NAS Fallon are leased out for agriculture. Some parts of the existing HWAD withdrawal are open for recreational use with military approval. Other uses, such as grazing and mining, are not permitted. Under the NAS Fallon proposed land withdrawal, current access characteristics generally would be maintained, and present uses of lands would continue on most of the lands proposed for withdrawal. Land use restrictions would apply on the remaining lands.

5.8.1 Water Resources

It is likely that land-disturbing activities on the withdrawn lands may have caused an increase in sedimentation in some of the surface water resources. However, there is no indication that significant impacts to surface water resources have occurred as a result of land withdrawals and subsequent military use.

Ground water resources within withdrawn lands are not expected to be significantly affected by continued military activities. Ground water contamination has been identified at DOD sites and remediation programs have been adopted to mitigate effects. Monitoring and hazardous material and waste management policies have been implemented to prevent future actions that could result in ground water contamination.

Most withdrawn lands restrict access for the development of water sources. As the population of Nevada continues to expand, and the demand for water increases, these restrictions may hinder growth opportunities. Water management plans and access rights could be developed between the state and DOD if needed to address water demand issues.

5.8.2 Biological Resources

Habitat conditions on DOD withdrawn lands have been affected by construction and military activities, including the delivery of explosive ordnance and ground-based training, and from noise due to aircraft overflights and ordnance detonation. Continued use of the withdrawn lands would further degrade habitat conditions near impact areas. The habitat quality at these areas, however, is already low due to past use. Wildlife on withdrawn lands may have startle effects due to overflights. This may produce a variety

of responses from short-term mild interest to extreme distress, which may result in fleeing, panic calling, reduced foraging, and reduced reproduction. The extent of the effect is a function of the type and intensity of activity, the wildlife species, population, or habitat type exposed to the activity, and the nature and duration of the interaction. Past studies suggest that most ungulates and avian species potentially found on withdrawn lands habituate to aircraft noise (SAIC 1991), although the level of effect cannot be conclusively determined. It is evident that military activities have not had a widespread catastrophic effect on wildlife and vegetation in Nevada. Continued use would result in similar effects as currently resulting from military operations.

5.8.3 Land Use

5.8.3.1 Mining

Existing land withdrawals have affected the discovery and development of two areas with moderate to high potential for precious metals. The proposed NAS Fallon land withdrawal would remove some areas with high mineral potential from open public use, affecting both discovery and development of minerals. While it is not possible to determine the economic loss that has resulted or would result from these actions, economic losses, in terms of lost opportunities, may be offset by income and employment generated by military activities. Reasonably foreseeable airspace designations would not result in cumulative effects on mining.

5.8.3.2 Grazing

Existing DOD land withdrawals have taken land out of potential grazing and livestock production. The NAS Fallon proposed land withdrawal would remove from grazing approximately 75 acres for developed military sites. In addition, no grazing would be allowed on Category A lands, resulting in the loss of an additional 40,280 acres. In all, 1,130 AUMs could be affected by the land withdrawal, or 1.4 percent of the 80,000 AUMs in the Lahontan Resource Management Area. While existing and proposed land withdrawals have and would result in lost revenue from grazing and agriculture, indirect growth in the private sector to support military facilities likely exceeds that lost from grazing and agriculture. Changes in airspace will not affect sheep or livestock production.

5.8.3.3 Recreation

NAS Fallon landholdings contain some potential for hunting, and this activity has been reduced in the region due to the withdrawals. Under all NAS Fallon land withdrawal alternatives, recreation in the Fairview Mining District would not be allowed. The withdrawal also could affect a part of the Job Peak WSA under Alternative I. The Job Peak WSA is not, however,

included in the withdrawal footprint under the preferred alternative. While other parts of Churchill and Mineral Counties and the State of Nevada offer recreational opportunities similar to those that have been or would be lost because of the withdrawals, military activities have affected the quality of recreational experiences in portions of Churchill County, particularly in the Dixie Valley basin. The cumulative effects of overflights, developments, and operations have impacted the primitive and wilderness recreation opportunities in small and localized areas for a portion of recreationists. The Special Nevada Report included the results of a survey of recreationists' perceptions of overflight in which 39 percent of those surveyed were annoyed by overflight and 61 percent were not affected by overflight (SAIC 1991). Restructuring of airspace and changes in flight patterns proposed at B-16 would have a positive effect on recreational experiences north of B-16 at the Sheckler Reservoir with only minor losses of recreation experience elsewhere around B-16.

5.8.4 Socioeconomics

Defense-related activities on withdrawn lands in Nevada are projected to contribute $2,027 million to the state Gross Regional Product by the year 2000 and employ approximately 22,000 people (SAIC 1991). This represents approximately four percent of the total state Gross Regional Product and over two percent of total state employment. The primary economic trade-off of DOD use is the land use restrictions placed on withdrawn lands, which prevent or limit agriculture, grazing, mining, and recreation. The economic value of these foregone opportunities would not exceed current contributions to the state economy from the DOD.

All populations would continue to be equally impacted by defense operations; therefore, no disproportionately high or adverse effects are expected to minority or low-income communities. Similarly, defense-related actions on withdrawn lands are not known to result in environmental health risks and safety risks that disproportionately affect children.

5.8.5 Visual Resources

Most withdrawn lands used by the military are remote and similar in topography and scenic quality with surrounding lands. Land-disturbing activities, such as ordnance detonation, have affected the visual qualities by creating unnatural features, including structures and craters. Continued use of these areas may culminate in additional alterations to the viewshed. These effects, however, would not be significant because of the homogeneity within viewsheds and because there are few sensitive receptors, such as highways, homes, and high-use recreation areas, near the withdrawn lands.

5.8.6 Cultural Resources

Defense-related activities have impacted cultural resources located on withdrawn lands in Nevada (SAIC 1991). The Air Force, Navy, and Army have adopted or are developing cultural resource management plans to minimize future impacts. Inadvertent losses may still occur from military uses; however, historically and archaeologically significant resources on withdrawn lands are not expected to be impacted. Any direct effects to significant identified cultural resources would be addressed through the procedures set forth in 36 CFR 800 for compliance with Sections 106 and 110 of NHPA. Cultural resources on the NAS Fallon withdrawn lands would be identified and managed through the NAS Fallon CRMP consistent with the NHPA and PA. On withdrawn lands restricted from public access, beneficial effects to cultural resources could occur in the form of reduced pilferage and vandalism and reduced traffic on identified and unidentified sites.

5.8.7 Noise

Noise associated with military activity results from aircraft overflights, helicopter operations, ground-based training, including vehicle operations, and live ordnance explosions. As populations increase around DOD facilities, the potential for noise complaints may increase. The City of Fallon has adopted land use and building codes to try to reduce such incompatible land uses. The region around NAS Fallon will continue to be exposed to aircraft noise, but MTR revisions have reduced and airspace restructuring described under Section 5.6.5 would reduce noise north of B-16, and the potential creation of new MOAs would allow the current and projected sorties to be flown in a more dispersed pattern. In other words, the use of airspace would be less dense. Establishing the Diamond, Duckwater, and Smokey MOAs would increase the total area that would receive noise impacts from general airspace use and from sonic booms but should reduce the frequency of impacts.

5.8.8 Public Health and Safety

Current military activities do not cause unreasonable risks to the health, safety, or property of the citizens of Nevada (SAIC 1991). Although military activities have introduced an element of risk to the public in the region, existing and proposed safety procedures, buffers, and training restrictions at the facilities and the ranges have reduced or would reduce the potential magnitude of risk to an acceptable level. The proposed NAS Fallon land withdrawal would make inaccessible to the public those areas that have been affected by ordnance in the past or that potentially could be affected in the future. The continued use of chaff is not thought to adversely impact public health, though the General Accounting Office currently is studying the effects

of chaff use on the human and natural environment. The addition of new airspace could result in risks from aircraft mishaps in previously unaffected areas.

5.8.9 Transportation

Cumulatively, the land withdrawals and airspace designations would not significantly affect ground transportation. No major roads would be closed, and only minor roads would be affected.

5.8.10 Airspace Designation and Use

The military airspace designations have the potential to change civil aviation in the FRTC. Creating new MOAs and restricted areas could place additional restrictions on civil aircraft, but these would be balanced partially by disestablishing portions of other MOAs and restricted areas.

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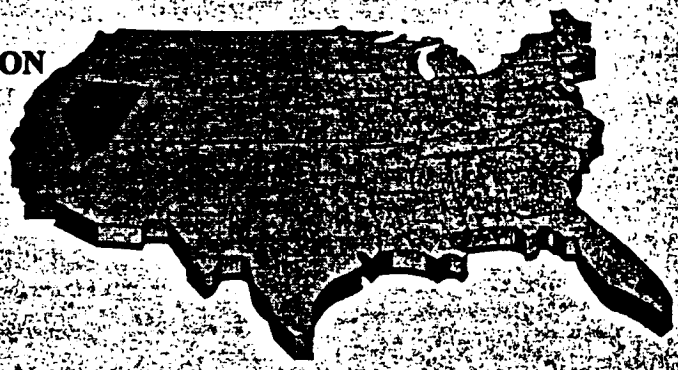

6.0 LIST OF PREPARERS

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The Navy contracted Woodward-Clyde Consultants in 1991 to prepare a Supplemental DEIS for the master land withdrawal. The document was completed but not reviewed or finalized. In 1995, Tetra Tech, Inc. was contracted to conduct a new public scoping effort and revise the Supplemental DEIS. Additional information and analysis was incorporated into the report to make it a stand-alone DEIS.

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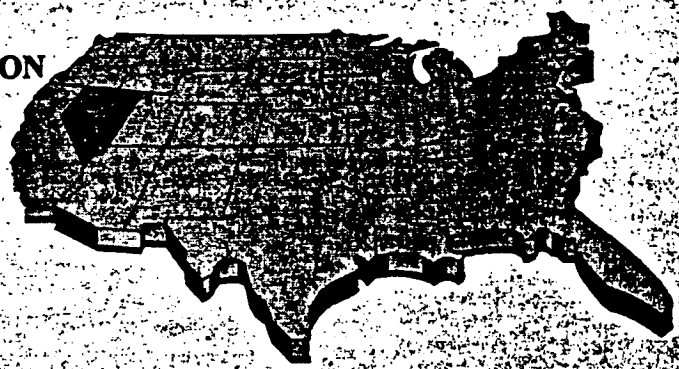

APPENDICES

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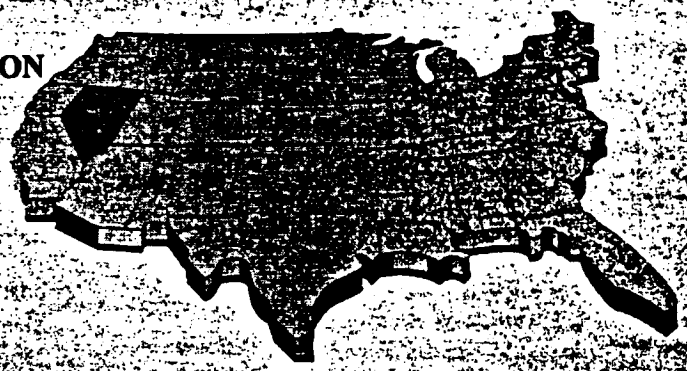

APPENDIX A

HISTORY OF THE WITHDRAWAL AREA

APPENDIX A HISTORY OF THE LAND WITHDRAWAL

The original withdrawal proposal, announced in 1982, has been redefined in several ways over the past thirteen years. The basic proposal, to provide realistic operational and strategic training, and to provide noise and safety buffer zones adjacent to the ranges remains. Most notable changes have concerned (a) clarifying the military's purpose for withdrawing the land; (b) defining policies for how the lands would be managed after being withdrawn; (c) explaining the proposed Resource Management Plan and its effects on public access; and (d) refining the boundaries of the areas to be withdrawn. Table A-1 is a time line showing the steps through which the withdrawal proposal has been refined.

In 1981 through 1982, the Navy conducted the RAICUZ analysis on the ranges, which recommended withdrawal of 181,323 acres of federally owned lands. In 1982, the Navy filed an application with the BLM to withdraw the subject lands, filed a notice in the Federal Register, and published formal public notices in newspapers throughout north-central Nevada. It also announced and held scoping meetings with state and federal agencies and with the general public. The purpose of these meetings was to notify the public of the proposed withdrawal and to solicit input on issues of concern that should be addressed in the forthcoming environmental review process.

TABLE A-1
WITHDRAWAL PROPOSAL HISTORY

Date	Action
1954	Navy transfers approximately 500,000 acres to BLM
1981-1982	Range Air Installation Compatible Use Zone Study
1982	Application for land withdrawal
1982	Public notification and scoping meetings
1984	Publication of Draft EIS
1985-1987	Agency and public review and comment
1986-1987	Clarification of proposed land withdrawal
1987	Public notification and scoping for Supplemental EIS (SEIS)
1988	Preparation of an Administrative Draft SEIS
1989-1990	Off-range ordnance surveys
1990	Increase of proposed land withdrawal area
1991	Preparation of Draft SEIS
1993	NAS Fallon Ranges Hazard Analysis Mitigation Report
1994	Changes in training operations
1995	Stopped preparation of SEIS, published Notice of Intent for DEIS
1995	Conducted public involvement and started preparation of DEIS
1997	Finished preparation of DEIS

In late 1984, a Draft EIS was published for the purposes of clearly defining the proposed action and the purpose of the action and identifying and describing what appeared to be the major environmental implications of the proposed withdrawal. The document was not finalized.

In 1987, in an effort to begin addressing these concerns, the Navy provided formal public notification of its intent to prepare an SEIS and solicited scoping comments. An SEIS is prepared, under NEPA guidelines, when substantial changes are made in the proposed action or when significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts becomes available. The 1987 analysis focused on the environmental topics determined through scoping to be of greatest concern to the public, in keeping with 40 CFR 1501.7(a)(3).

In 1989 and 1990, the Navy conducted on-ground surveys to locate ordnance outside the B-16, B-17, and B-19 boundaries. Based on the findings of those surveys, approximately 7,750 acres were added to the originally proposed withdrawal lands, in order to protect the public from potential exposure to off-range ordnance. The proposed withdrawal was then increased to approximately 189,073 acres.

In 1994, the Navy proposed changes in the military training routes (MTR) associated with NAS Fallon ranges (U.S. Navy 1995d). In 1996 the final approach of all MTRs were moved from the B-16 range to the B-20 range, reducing the noise and safety impacts on areas around B-16. This realignment decreased the amount of land needed around B-16 as a safety and noise buffer. Similarly, recent changes in training operations at B-19 and the Dixie Valley area also reduced the required buffer areas around those sites. These operational changes, however, restricted training activities by reducing the diversity of training exercises and capacity of the FRTC.

Due to operational changes and the over ten year time gap from the original Draft EIS and scoping process, the Navy dropped the SEIS in 1995 and prepared this DEIS. A notice of intent was published in the Federal Register and local papers. In addition, a formal scoping process was conducted and results were incorporated into this document as discussed in Section 1.5. Original data from the 1982 EIS effort has been used and updated for this report.

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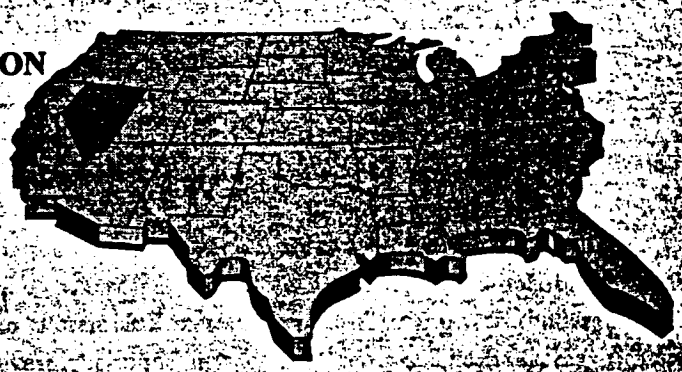

APPENDIX B

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	Mr.	Arnold	Bosley	Federal Aviation Administration Salt Lake City ARTCC
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	Mr.	Jim	Evans	Natural Resource Conservation Service
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				US Department Health/Human Services Reno District
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	Ms.	Alice	Baldrica	State of Nevada Department of Museums, Library & Arts
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*	Mr.	Jim	Baumann	Eureka County Public Land Advisory Commission
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				Fallon Dept of Community Development
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				Lovelock Paiute Tribe
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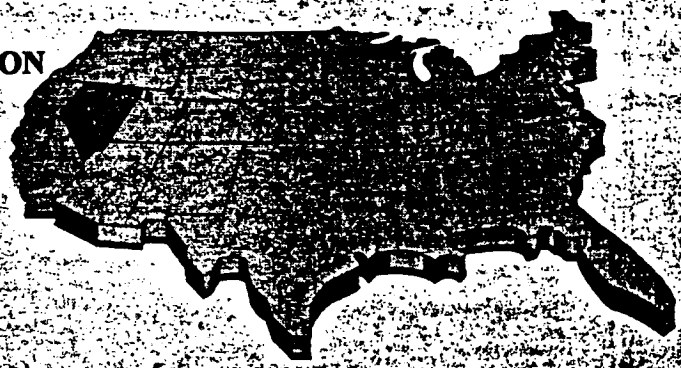
*Mr. William E. Stephens
Ms. Karen Stephenson
*Ms. Susan, Amanda, and Krysta Stevenson
*Russ & Fredda Stevenson
John and Ruth Strmiska
Mr. Elliott Sutton
*Mr. Clifford Talbot
*Mr. Don Ten Eyck
Ms. Marianne H. Theler
Mr. Bryce Thiekin
*Ms. Rose Thomas
Mr. Ed Tilzey
*Mr. Jerry Todd
Dale Toweill
Ms. Kim Townsend
H.W. Trapwell
Ms. Betty Tregero
*Mr. Tomas Tuerino
Clark & Charlene Valceschini
Ms. Carolyn Valentine
Geri Van Riper
Mr. Leo Vath
Mr. Steward Wakefield
Mr. Charles Walker
*Mr. Dan Walsworth
*Mr. Kenneth Washburn
Mr. Steve Wathen
Ms. Deborah Watts
*Ms. Lura Weaver
FS Wilde
Orie L. Wiles
Robert & Alyce Williams
Mr. Aaron Williams
*Mr. Vic Williams
Mr. Ray H. Williams, Jr
Mr. Kurt Wilson
Mr. Jay Winrod

Mr. Les Winterling
Mr. Dennis Wiseman
Mr. Ed Wishart
Mr. Scott Wolf
*Mr. David Wood
*Ms. Diane Woods
Ms. Mary Lu Woods
Mr. Mike Yates
S. Zumwalt



APPENDIX C

SUMMARY OF RAICUZ METHODOLOGY

APPENDIX C SUMMARY OF RAICUZ METHODOLOGY

A Range Air Installation Compatible Use Zone study provides detailed analysis of safety and noise zones around training ranges. This appendix consists of a brief description of the RAICUZ process.

The RAICUZ process uses a computer model to map noise volumes around the ranges. This mapping is based on specific data from each range, including aircraft flight paths and intended training syllabi (i.e., aircraft altitudes, speeds, attitudes, use of afterburners, turning points for each aircraft type), mix of aircraft types, and proportion of range use by each type. Noise Zones (NZ) are checked against field measurements of noise and then plotted on regional maps, showing noise contours with average annual values ranging from NZ1 (below 60 dBA) to NZ3 (above 75 dBA).

Range Safety Zones (RSZ) are similarly mapped for each range. Data used in the model includes flight paths, altitudes, location of arming points for ordnance, and locations of targets on each range. Three RSZs are defined for each range: RSZ A, ordnance impact areas, are extremely hazardous; RSZ B, areas of armed overflight, are of intermediate hazard; and RSZ C, range approaches without armed ordnance, are least hazardous.

Concurrently, existing land use patterns in the vicinity of the ranges are defined on the basis of maps, aerial photos, field reconnaissance, and input from military and civilian personnel familiar with the area.

Land use compatibility within the noise zones is then evaluated by comparing noise contour maps with data on existing land uses. Evaluation of compatibility is based on DOD planning criteria regarding suitability of noise levels with surface uses, such as would be associated with schools, residences, industries, agricultural activities, and recreational uses.

Land use suitability for the defined RSZs is further evaluated by comparing information on local land use patterns with DOD guidelines for compatibility of land uses in Accident Potential Zones and modified to apply to the large areas of low-altitude overflight found in the range setting. The modeling is refined by overlaying a noise zone map on the safety zone maps to define twelve RAICUZ subzones. Land use suitability is evaluated relative to each subzone.

The resulting definitions of land use suitability are refined through input from planners and real estate experts; aviators, instructors, air traffic officers, and range officers; and representatives of federal, state, and local government agencies. These representatives are familiar with the following subjects: the

Navy's aircrew training programs, airfield and range operations, aircraft maneuverability, accident histories and statistics, local land use (e.g., minerals exploration, mining, grazing), land development trends and pressures, local patterns of land ownership and control, land management programs administered by government agencies, and Churchill County General Plan and zoning provisions.

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APPENDIX D

SUMMARY OF HAZARD MITIGATION REPORT

APPENDIX D SUMMARY OF HAZARD MITIGATION REPORT

The Naval Air Station Fallon Ranges Hazard Analysis Mitigation Report, as amended September 1995, used the HAZARD methodology to identify the land area around the targets necessary to contain ordnance employed in training (US Navy 1995g). Unlike the RAICUZ study that covered noise and safety associated with range operations, the HAZARD analysis examines effects of ordnance drops only (RSZ A).

The HAZARD methodology develops safety footprints showing the total area needed to contain potential off-range ordnance for that range based on current operations. The analysis accounts for specific aircraft, ordnance, and delivery parameters (including dive angle, release altitude, and airspeed), terrain, and how ordnance enters the range relative to the targets. The range composite weapons safety footprint is developed by combining the footprints for each specific operation that takes place at each target.

This appendix provides the June 1994 Executive Summary of the HAZARD report and the September 1995 Addendum. The addendum is presented first because it provides the most up to date safety footprints. This information was used in developing the withdrawal footprints. The June 1994 Executive Summary is provided as background information on the HAZARD report and methodology. The figures showing the safety footprints are not included because they did not adequately reflect the operations at the ranges and were superseded by the 1995 analysis as presented in the addendum.

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PURPOSE.

This Addendum to the Executive Summary of 29 June 1994 presents the revised composite footprints for the NAS Fallon Ranges B-17, B-19 and B-20 that result from changes in operational procedures adopted by the Department of the Navy. These footprints are a culmination of several stages of comprehensive analysis of the Fallon Range Training Complex (FRTC). The operational changes resulting from this extensive analysis are incorporated in the Fallon Range Users Manual (NAFINST 3752.1F), dated 30 November 1994.

BACKGROUND.

The analyses have been concerned with air-to-ground training operations resulting in ordnance delivery at each target. An initial composite footprint for each range, representing all operations conducted on each target at that point in time, was developed to show the result of desired operations. The earliest work identified weapon safety footprints that had a potential to extend beyond range boundaries. Subsequent analyses have addressed how operational procedures affect the footprints, how terrain affects the footprints, and how mitigation alternatives affect the footprints. The analysis presented in this addendum has taken into account all available data from previous analyses.

A weapon safety footprint is a two-dimensional representation of the ground area where weapon impacts may occur (including ricochet) for a specified weapon delivery event. Weapon safety footprints are unlike Circular Error Average or Circular Error Probability analyses. Those are typically performed to determine how good average scores are or how many weapons are needed to assure target destruction. Weapon safety footprints address the other side of the coin. The key word is *safety*. They are developed to account for the weapon impacts that represent the worst case, in terms of distance from the target, that may occur during training operations. This type of information is necessary to intelligently plan for many issues, such as where to place targets relative to range boundaries, where manned sites or high value assets should (or should not) be located, and the types of activity (such as other land use) that may be compatible with certain parts of the range. Footprints are developed using observed data collected over time from as many ranges as possible, representing the variety of pilot training levels and aircraft systems performance. When external mitigating factors are present, such as significant vertical terrain, further analysis is possible to determine the effect on weapon behavior, such as ricochet. The footprints comprise one of the databases of the HAZARD Program, which was developed to assist planners in performing the Hazard Methodology process. The Hazard Methodology is a step-by-step process to address safety issues associated with air-to-ground weapon delivery events. Among other things, it assists in decision making about compatible land uses, range design and layout, mitigation of hazards, and risk assessment.

The Hazard Methodology is the method endorsed by the Chief of Naval Operations for defining land area requirements to support FRTC operations. This proven methodology has also been used and refined for many years by other components of the Department of Defense. It has been instrumental in compliance with the National Environmental Policy

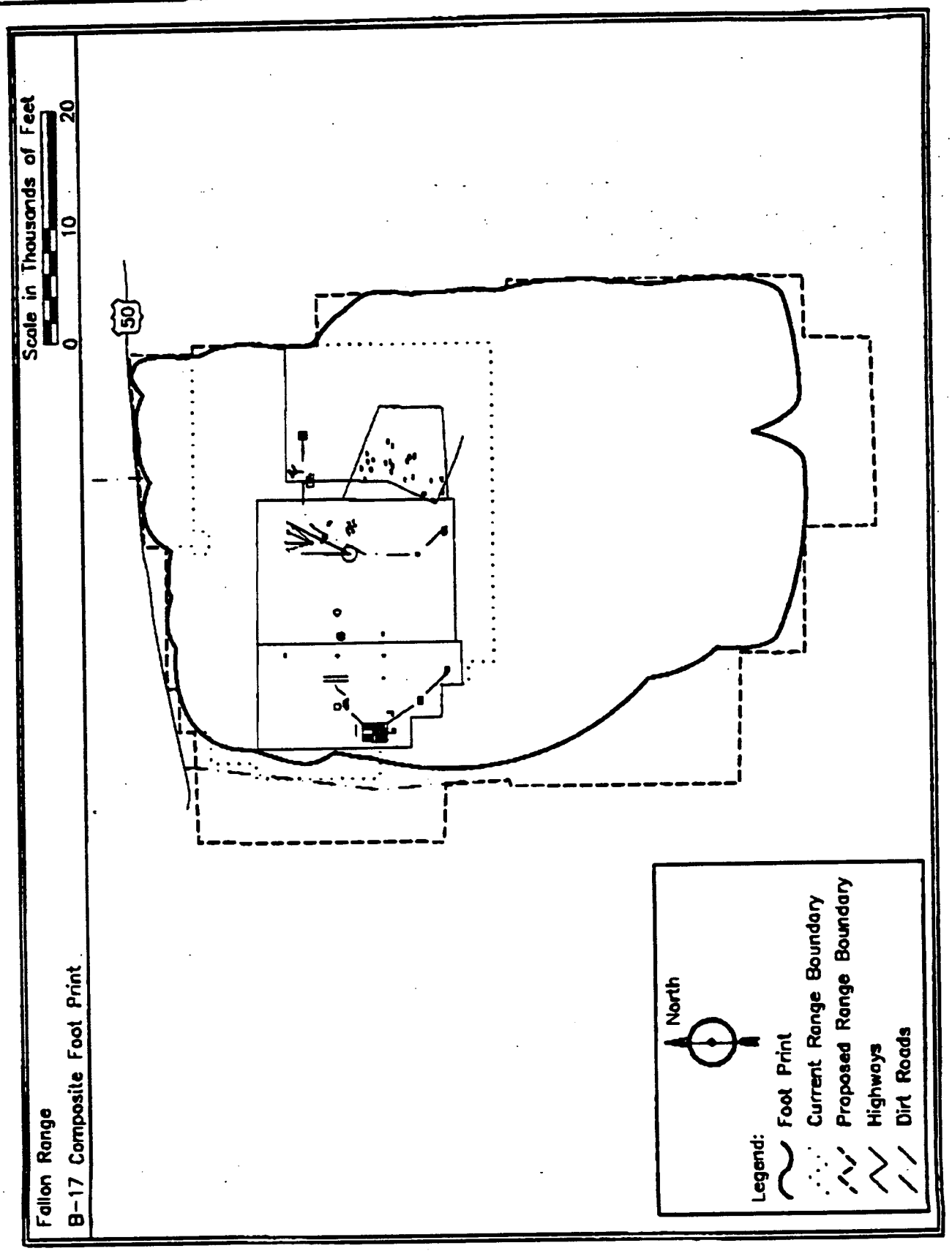
Act process and, due to the high level of confidence to which the model is designed, has been accepted in public and political forums.

ANALYSIS.

Development of the revised composite footprints began with a review of the changes implemented in operations for each individual range and target, as well as the changes applicable across the board to all the ranges. Earlier analysis had identified the employment limitations using footprints from the Department of the Navy footprint database. In order to avoid unnecessary restrictions, a more in-depth analysis was conducted to determine the effect of terrain on the footprints. Some footprints are totally mitigated by the terrain on the range, where ricochet is minimized or eliminated, and by the "backstop" effect of rising terrain. Other footprints are partially mitigated, which resulted in revised restrictions. Using these restrictions and the analyses performed earlier, the final operational restrictions were selected and implemented. For the range composite footprints, all weapon safety footprints authorized for each target were applied according to implemented restrictions, forming a composite footprint for each *target*. The individual target composite footprints were then combined to form a *range* composite footprint. The composite footprints for Ranges B-17, B-19, and B-20 are presented on Addendum Pages 3 through 5, respectively. The composite footprints indicate the areas where ordnance may impact, including ricochet, during routine training operations.

CONCLUSION.

The operational restrictions implemented by the U.S. Navy at the FRTC are effective in confining the weapon safety footprints within the proposed range boundaries. The restrictions provide for maximum training flexibility, given the size and shape of each range, while promoting safe operations.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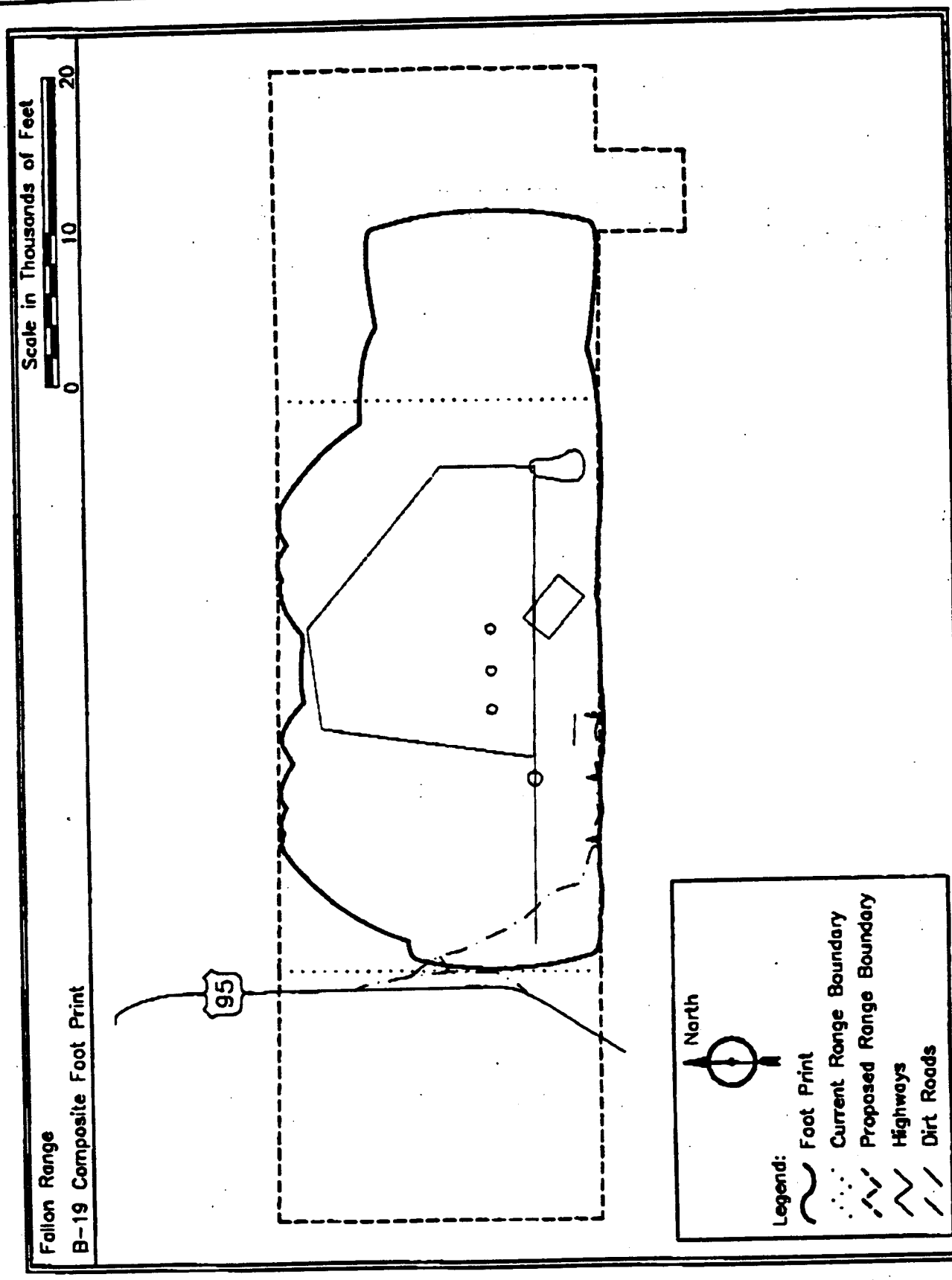
Fallon Range
B-17 Composite Foot Print
North
Legend:
Foot Print
Current Range Boundary
Proposed Range Boundary
Highways
Dirt Roads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Proposed Range Boundary
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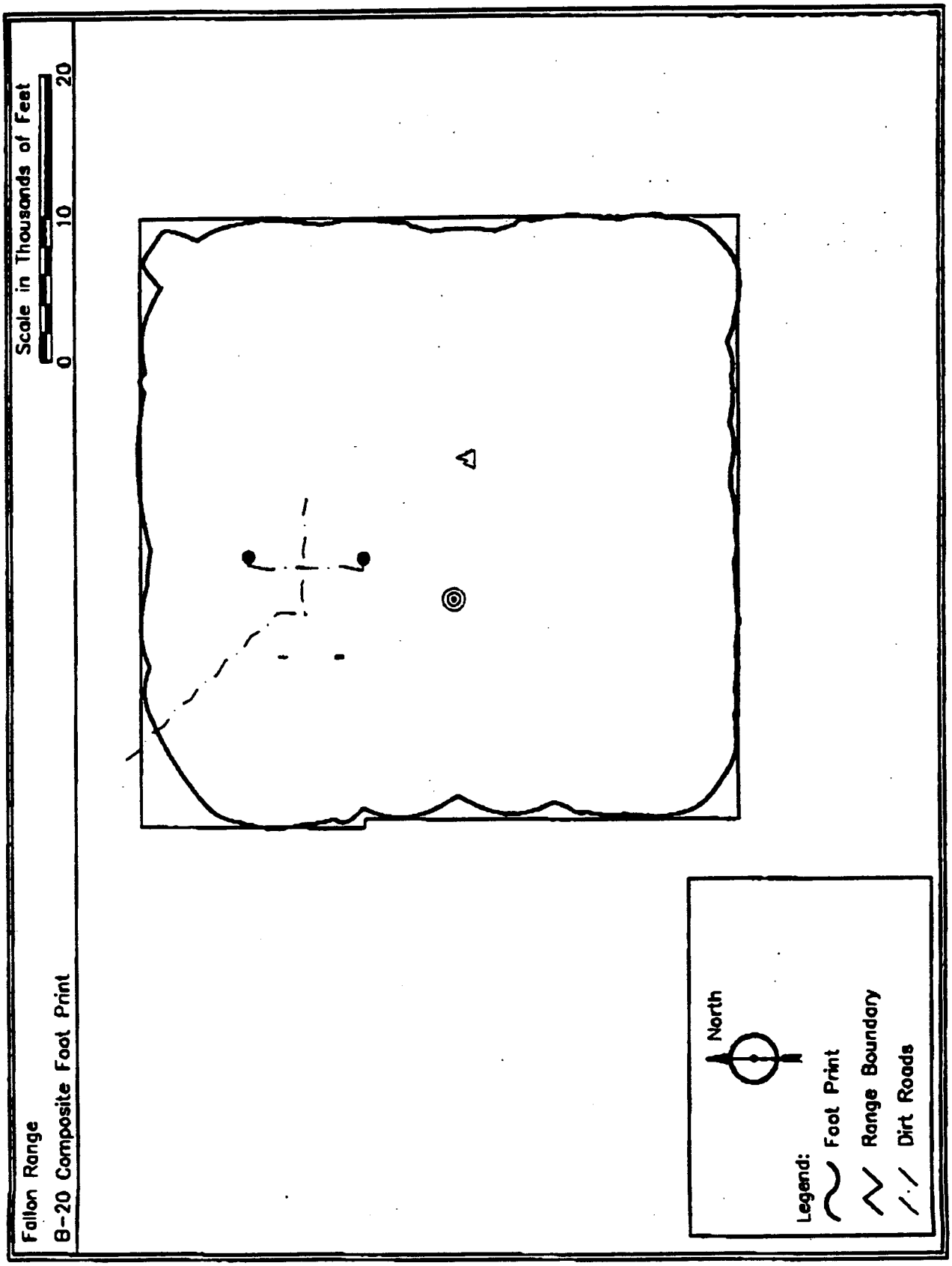
Dirt Roads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Range Boundary
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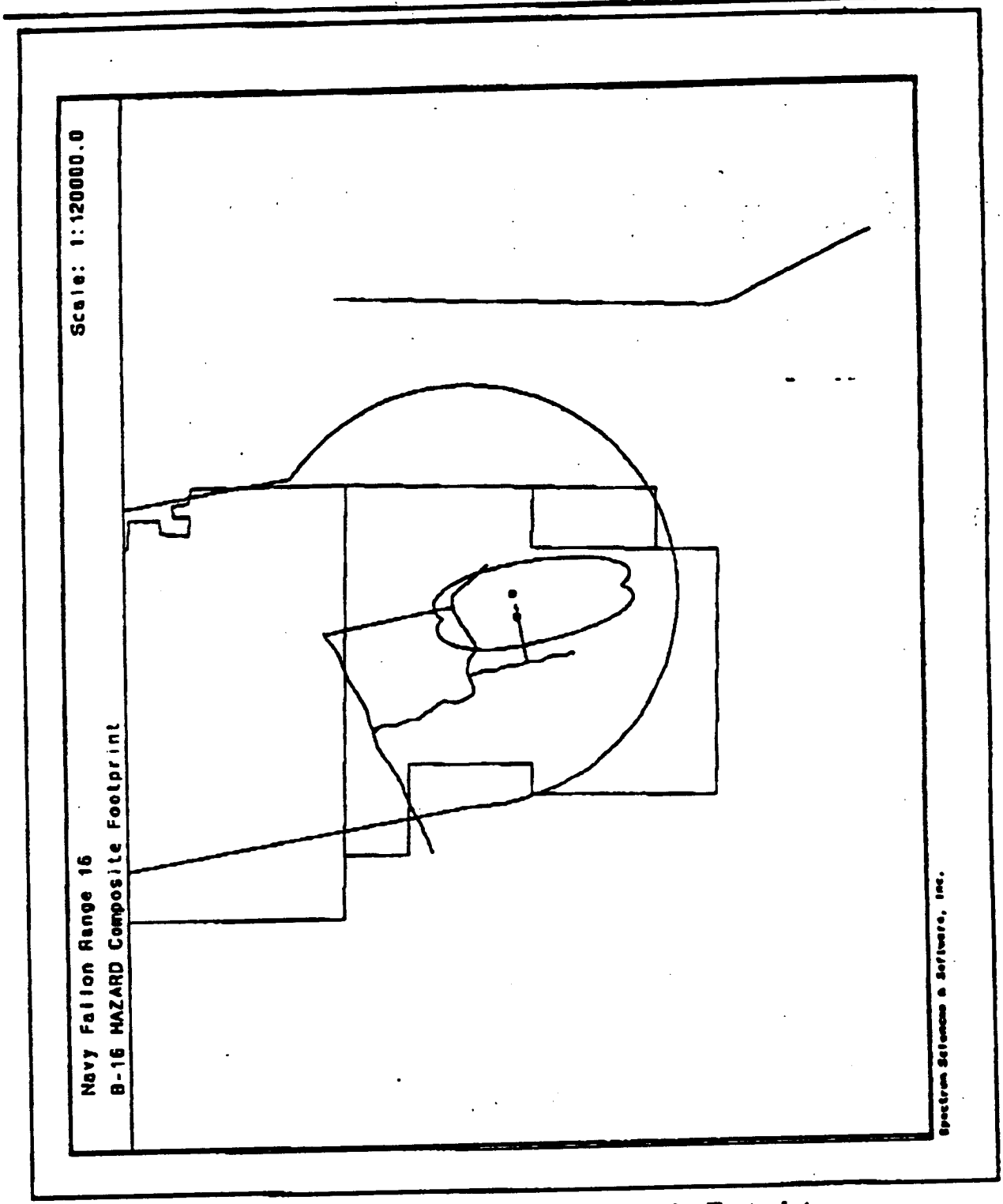

Range B-16 HAZARD Composite Footprint

INTRODUCTION AND BACKGROUND.

The establishment, operation, maintenance and enhancement of air-to-ground ranges constitutes a significant challenge to all echelons of command. In addition to cost, elements of this challenge include safety, environmental concerns, encroachment, and political and public support. These issues directly affect the management of range programs throughout their life cycle. Because of increased concern for these issues, it has become necessary for the U.S. Navy to more accurately define specific range requirements, and to defend those requirements in various local, state, and federal forums.

Until recently, adequate technologies and programs did not exist to consistently address the real or potential impacts of air-to-ground range operations on the environment. Nor were there adequate methodologies to evaluate the activities which caused concern. As a result, methodologies had to be developed and constantly improved to meet the information requirements of decision makers at various levels of command. Where there exists a lack of methodologies to adequately define the impact of an activity, the proponent's position is generally weakened, and the outcome of the analysis process may be unacceptably flawed. The result of this condition may result in an intolerable impact on national defense due to loss of training capability. It is an established concept that the military must train the way they expect to fight. Training our aviators requires adequate land space, airspace, equipment and other valuable assets. To protect existing ranges and permit future range initiatives, methodologies must be employed to adequately define the impacts of range activities.

Past policies and practices, which were acceptable when implemented, have come under recent criticism. One of the main concerns is the potential hazard associated with weapon delivery and ordnance falling outside range boundaries. The Navy has recognized this concern and has taken action to address it. In searching for a proven methodology to define the minimum amount of range land needed to contain ordnance employed in training, the Navy identified the HAZARD Methodology (HAZARD), which was in use by the U.S. Air Force. HAZARD has been developed and refined over the past twelve years, and provides key information to the decision maker.

The HAZARD Methodology

The most significant information HAZARD provides is the land area needed to contain ordnance employed in training. It does this by using a "footprint" (also known as a descriptor) developed for a specific aircraft, ordnance, and set of delivery parameters (dive angle, release altitude, airspeed). These footprints are further defined by the type of target (hard or soft) and whether there is a person (such as a Forward Air Controller) on the ground at the range in a range control or safety observer position. An example of a footprint is provided in Figure 1. The composite footprint, which is achieved by combining the footprints for all authorized events on each target, describes the land area needed to contain ordnance on that range.

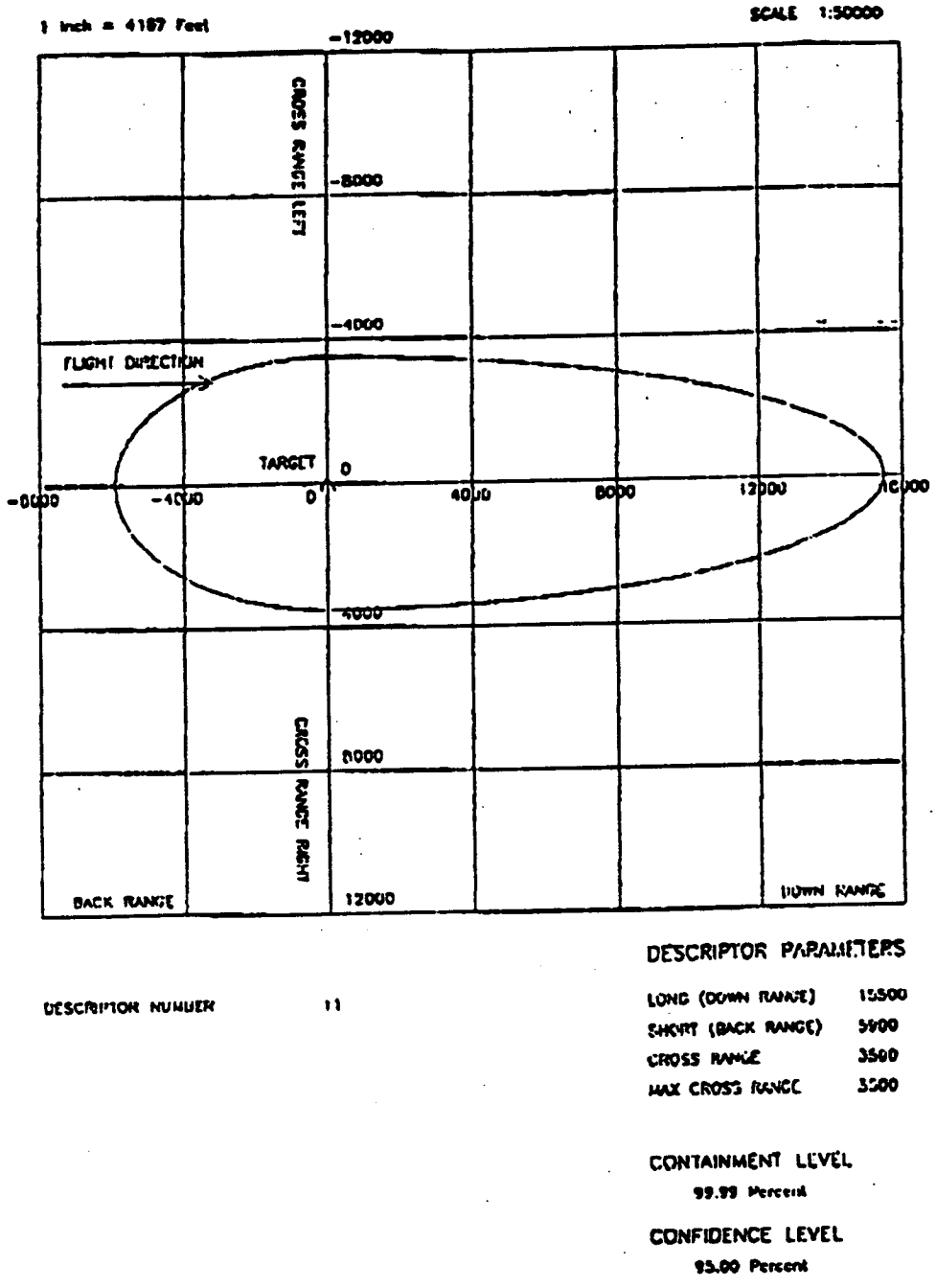

Figure 1. Example of a Footprint

Another key piece of information provided by HAZARD is the probability of ordnance impact at any location within the footprint, based on a specified number of times that event is performed. Therefore, areas of critical concern (ACC) can be assessed for the hazard of ordnance impact. ACCs may include such things as manned positions, scoring towers, high value equipment, explosive ordnance disposal areas, etc. Manned positions and high value assets can be placed/constructed with prior knowledge of the risk involved.

A footprint is developed from a database of observed weapon impacts. These impacts were observed during training at various manned Air Force ranges. In addition to the impacts that were scored, a special effort was made to estimate and include the impact points of ordnance that were unscoreable due to early/late release, pilots not achieving delivery parameters, aircraft system malfunctions, and ordnance malfunctions. These impacts that are typically not scored are essential in defining a footprint. From the observed initial impact data, a ricochet trajectory is modeled to determine the subsequent ricochet impact point. The footprints are then statistically developed to contain 99.99% of all initial and ricochet impacts at the 95% confidence interval. These footprints are developed with the assumption that the terrain is flat, so that the footprints can be used at any range on any target. The result is that the user can be confident that the footprints will in fact define the extent of the hazard area. Based on the statistics, the probability of an impact outside the defined footprint for any event is no more than one in ten thousand. Within the HAZARD program a probability distribution function (pdf) for each footprint is used for calculating the probability of impact within a footprint for an ACC.

It is important to note that a footprint does not represent how good pilots are- but how far ordnance may travel when something goes wrong in a training scenario. Therefore, a footprint may seem large to someone familiar with the Circular Error Probable (CEP) data in the Joint Munitions Effectiveness Manuals. That is because the CEP is only concerned with weapons impacting on or near the target, while HAZARD is concerned with all weapon impacts. However, both the CEP and the HAZARD footprint are developed using similar analysis techniques.

This methodology allows the planner and decision maker to implement or modify procedures to meet training needs with a high degree of confidence that the events will be accomplished safely. If any alternative procedure would adversely affect the quality of training, the planner would be able to document the need for other alternatives.

Navy Evaluation of HAZARD

Upon identification of the HAZARD Program, the Navy initiated a test program to determine if it was suitable for use by the Navy. The Fallon Range Training Complex (FRTC) was selected as the test location. Figure 2, taken from the current Fallon Range Users Manual, illustrates the geographic relationship between the individual ranges, NAS Fallon, and training airspace. Figures 3 thru 6, also taken from the Fallon Range Users Manual, depict the individual ranges. Since the Navy has not developed any footprints for Navy-specific training events, the Air Force footprints were used where applicable. The first

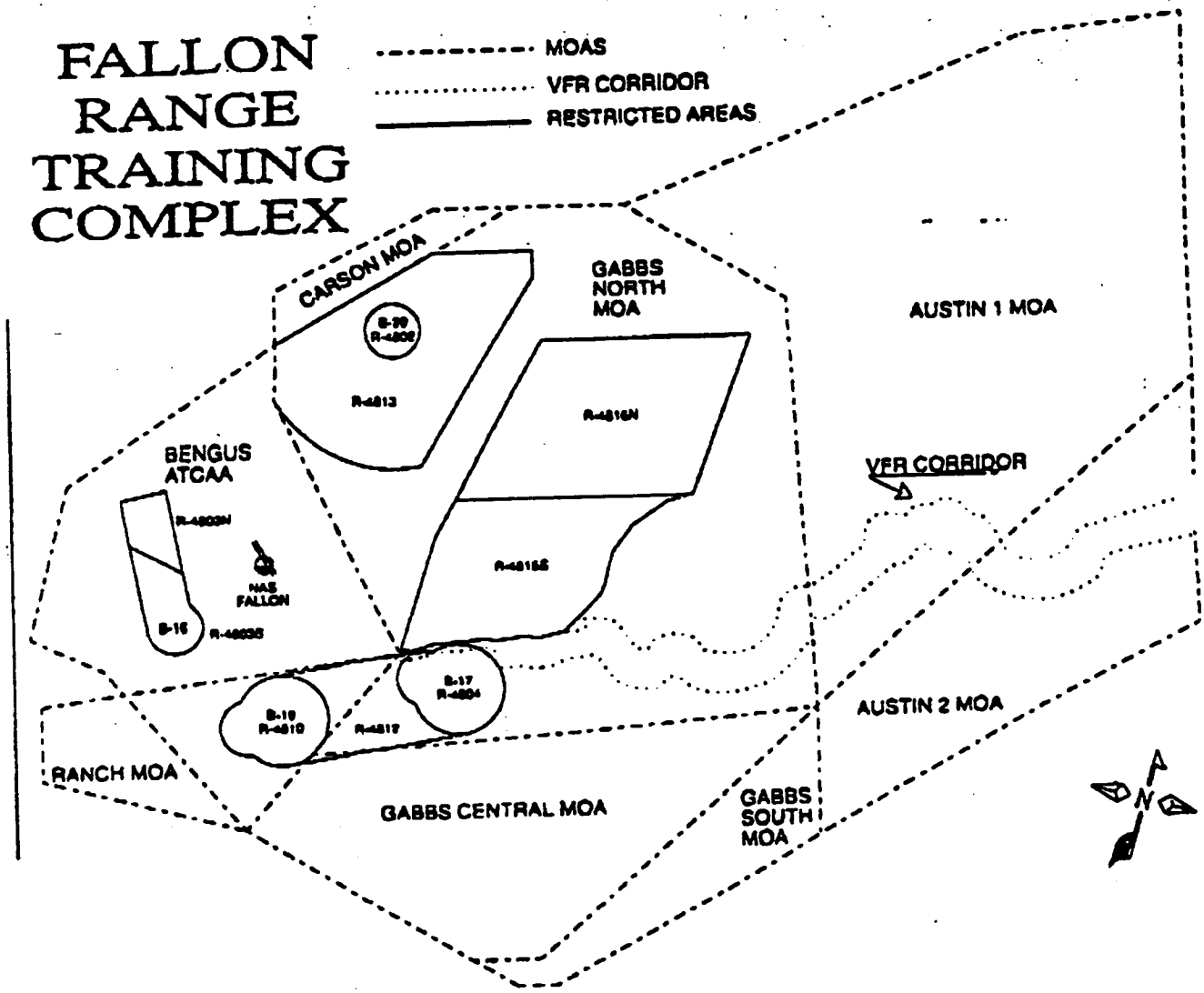

Figure 2. Overview of the FRTC

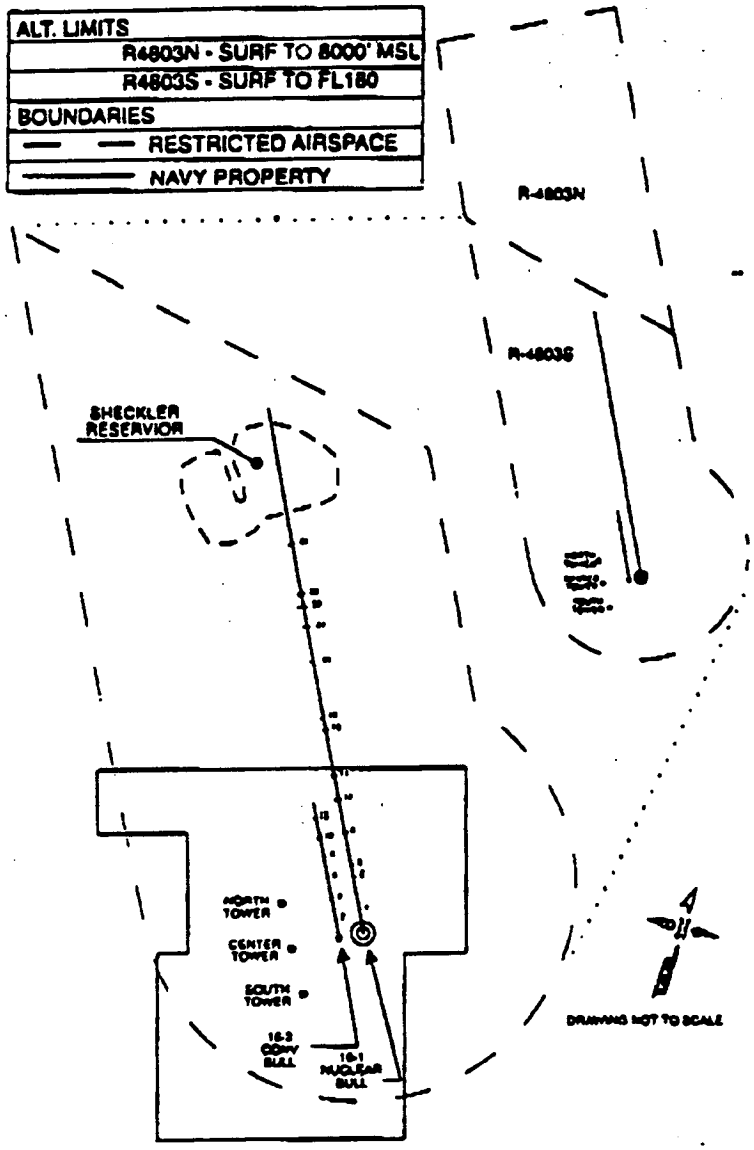

Figure 3. Range B-16

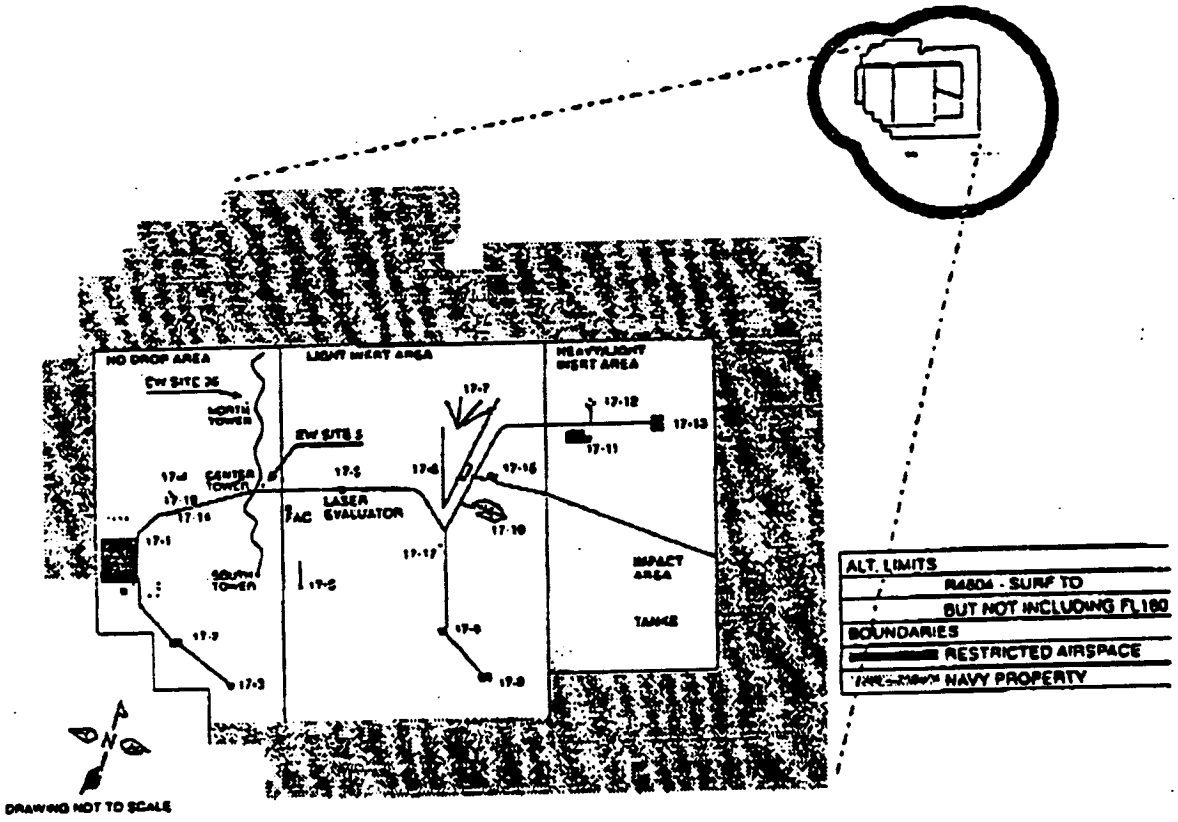

Figure 4. Range B-17

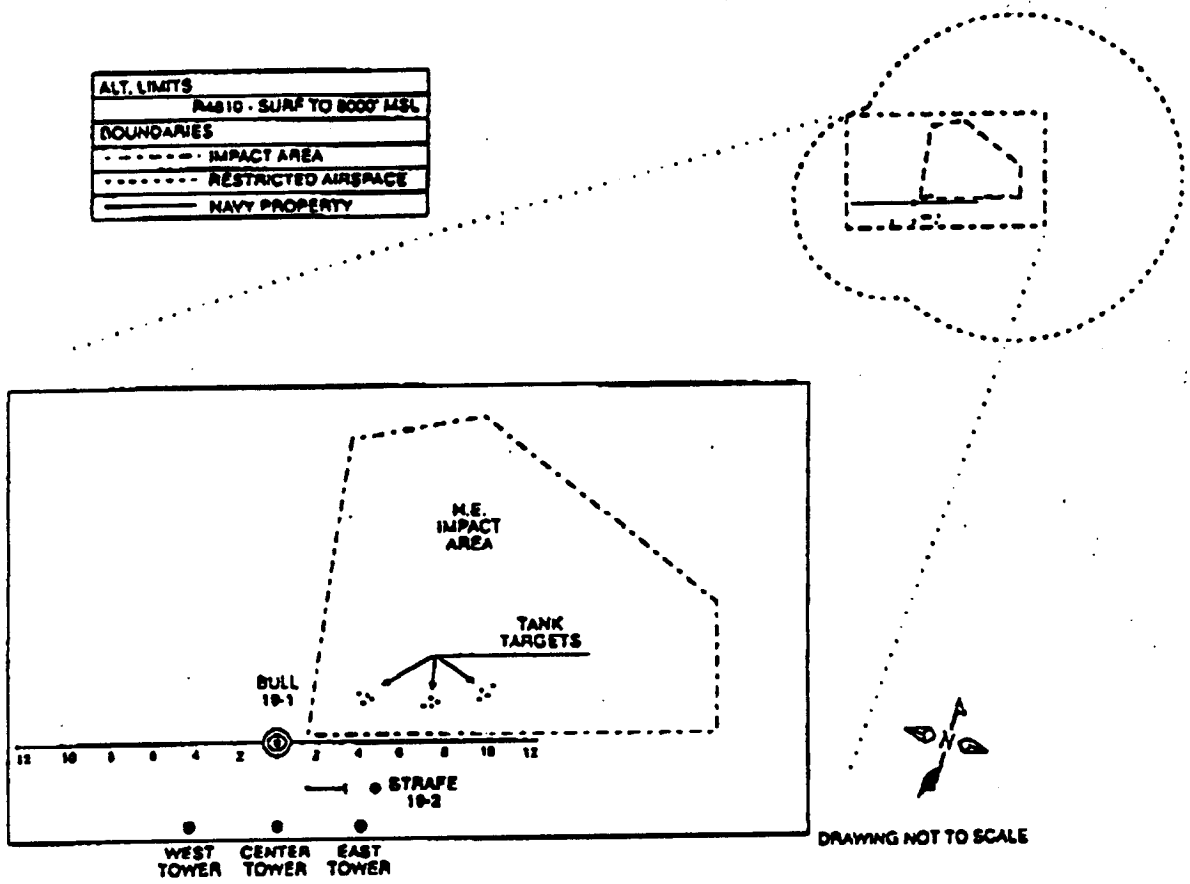

Figure 5. Range B-19

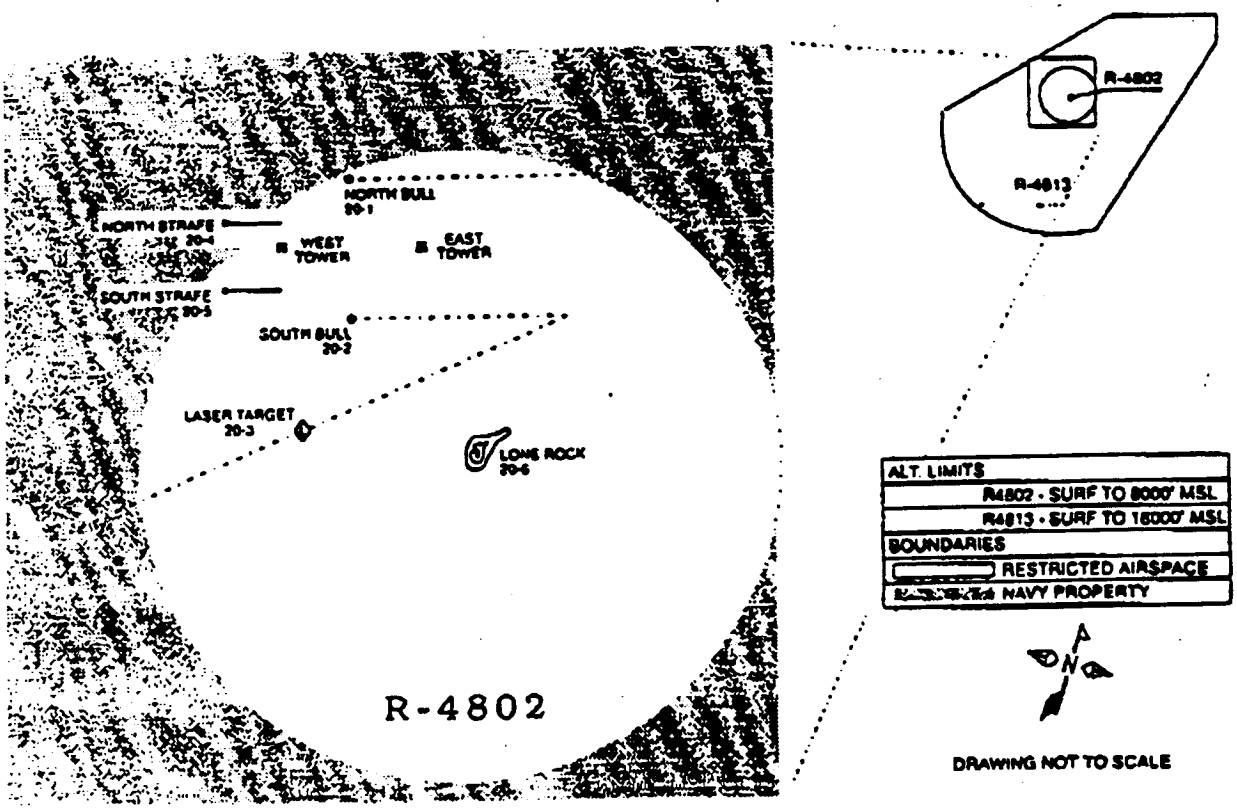

Figure 6. Range B-20

effort in the Navy's evaluation of HAZARD was the Descriptor Database Review, dated 20 March, 1991. This document provided the results of an analysis to determine how Navy/Marine aircraft, tactics, and weapons compare to their Air Force counterparts, and therefore which footprints would be applicable to Navy training operations. This analysis also considered the difference in range operations and maintenance procedures. As part of the analysis, Navy and contractor personnel visited NAS Fallon and MCAS Yuma to meet with operations personnel and range maintenance personnel. At NAS Fallon, discussions were held with the Naval Strike Warfare Center (STRIKE), Range Department personnel, and with contractor personnel that were involved with range operations and maintenance (O&M). The ranges were visited to observe target conditions and training missions. The same scenario was followed with operations and maintenance personnel at MCAS Yuma, including the range visit.

During this time, analysis of a proposed land withdrawal of approximately 188,000 acres for the FRTC was underway, and HAZARD had the potential to validate the proposed land withdrawal. Therefore, the next effort in evaluating HAZARD was to apply the identified footprints to the targets at the FRTC. The ranges and targets were digitized into HAZARD using range maps provided by the Range Department at NAS Fallon and the target coordinates provided in the Fallon Range Users Manual (NASFINST 3752.1E). The footprints were then applied in accordance with the operations procedures provided in the Range Users Manual. The result was identification of specific training events that had a high probability of causing off-range (including proposed withdrawal boundaries) ordnance impacts. These findings were presented in the U.S. Navy Hazard Methodology Test Program at Naval Air Station Fallon, NV (Draft, undated), provided to the Navy in December 1991.

Mitigating Off-Range Ordnance Impacts

Since there was found to be a high probability of off-range ordnance impacts from certain training events, a mitigation analysis was performed so that alternatives to reduce or eliminate the off-range impacts could be identified. The HAZARD Mitigation Analysis Report, NAS Fallon Ranges, June 1992, identified the limits of run-in, or attack headings that could be used for each training event to mitigate off-range ordnance impacts. However, some of the training events could not be mitigated, due to size of the footprint and allowable run-in headings.

Rather than imposing limits on run-in headings, and in effect restricting training at the FRTC, the Navy decided to perform an analysis on another possible mitigating effect: the effect of terrain on the ricochet component of the footprint. The initial weapon impact points are not dependent upon terrain, but ricochet is affected by the initial impact angle of the ordnance and by the "backstop" effect that rising terrain (hills) down-range may have. The terrain analysis involved integrating the HAZARD database into a Geographic Information System (GIS) capable of using Digital Elevation Model (DEM) data with ricochet trajectory algorithms to determine the effect of terrain elevation and slope on the ricochet. The weapon trajectory is continually compared to the terrain elevation and where the two coincide is the ricochet impact point. The product of this three-dimensional (3D) analysis is not a statistical footprint. It is a graphical representation of where the initial ordnance impacts occur based on observed data, and where the resultant ricochet impacts

are calculated to occur based on proven trajectory calculations and actual terrain. The impact plots depict each initial and ricochet impact point, rather than a geometric shape bounded by a line.

During preparation of this analysis, NAS Fallon requested that new close air support (CAS) training events and procedures be included in the final report. These training events are conducted in the presence of a forward air controller (FAC) who performs as a range control/safety observer. Based on the presence of a FAC, further analysis of the Air Force controlled range footprints was conducted to determine which footprints could be modified for use by the Navy. Four footprints were modified and applied to the CAS targets on B-17. In addition, certain training events previously evaluated were identified by the operations personnel at NAS Fallon as not applicable to current training scenarios. They include events no longer performed, such as loft deliveries and some special weapons deliveries. These events were eliminated from further consideration. Operations personnel further indicated that attacks are not generally made from behind the high terrain on Ranges B-17 and B-19. Thus, run-in headings from those general directions were eliminated from further analysis. The remaining training events and run-in headings were analyzed for the mitigating effect of terrain on ricochet impacts, and to develop the composite weapons impact areas based on these current operating procedures. This work is presented in the attached document titled NAS Fallon Ranges Hazard Analysis Mitigation Report, Volume 2 (Including Terrain), dated 15 October 1993. Also, for this summary, the HAZARD composite footprints were revised to reflect the new conditions. These are presented in Figures 7 thru 10.

The graphics in figures 7 through 10 depict plots generated for each range, using the HAZARD Program, showing the new composite footprint that resulted from the operational changes incorporated into this analysis. These plots do not include legends, because HAZARD does not produce one. Instead, it permits a title line for pertinent data. The title line on these plots is used to specify the range and the footprint. Figures 11 and 12 are comprised of the current and proposed withdrawal boundaries with an overlay illustrating the mitigating effect of terrain on off-range impacts for ranges B-17 and B-19. Initial and ricochet impact points from the 3D analysis are plotted along with the composite footprint from HAZARD. The 3D impact points are depicted by small diamond shapes that are either white for initial impact, or black for ricochet impact. The composite footprints from HAZARD are labeled as the 2D HAZARD impact area and are represented by the bounded, shaded area. Range B-16 has no off-range impacts resulting from training events accomplished there, and B-20 has no significant terrain to mitigate ricochet. Therefore, terrain mitigation analysis was not requested for those ranges.

CONCLUSIONS.

The mitigating effect of terrain on B-17 and B-19 is significant, as expected. There remains some off-range impact potential, so other mitigating actions may need to be considered. These could include restricting run-in headings, moving targets, prohibiting certain training events on some ranges, and/or other actions. Another alternative, if none of those are acceptable for critical training events, is to withdraw additional land beyond the proposed 188,000 acres to support the FRTC.

If additional land is withdrawn to incorporate off-range impact areas at B-17 and B-19, approximately 20,300 total additional acres will be needed, including 9,700 acres for B-17 and 10,600 acres for B-19. These acreage figures are estimated by bounding all off-range impacts with straight lines, so that land might be withdrawn by sections. A survey, based on a logical withdrawal by land parcel, would provide a precise number of acres.

ENDORSEMENT BY NAS FALLON.

In lieu of withdrawing an additional 20,300 acres to support FRTC, NAS Fallon has identified operational restrictions to mitigate any off-range impact potential. These specific mission requirements, as identified in Figure 13, will be included in NASFINST 3752.1E, the Fallon Range Users Manual. Therefore, additional land withdrawal is not required for those missions addressed in this report.

NAS FALLON AIRCRAFT PROFILE RESTRICTIONS

Tgts	Run-in Heading (Mag)	Weapon Type	Dive/ Climb Angle	Release Altitude (FT AGL)	Release Speed (KTAS)	Aircraft (Type)
17-7	356-026	MK-106	+20 to +65	200-9000	300-500	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
17-11	346-166	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-166	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	-25 to -70	5K-10K	350-980	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B.
	346-236	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
17-12	346-166	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-166	MK-82LGB MK-84LGB	-25 to -70	5K-10K	350-980	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	346-236	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-
	346-236	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-

Figure 13. NAS Fallon Aircraft Profile Restrictions

Tgts	Run-in Heading (Mag)	Weapon Type	Dive/ Climb Angle	Release Altitude (FT AGL)	Release Speed (KTAS)	Aircraft (Type)
17-13	346-166	MK-82LGB MK-84LGB	-40 to +20	1K-11K	400-600	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	026-166	MK-106	+20 to +65	200-9000	300-500	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-25 to -70	5K-10K	350-980	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
B-17 IMPACT AREA	026-236	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-25 to -70	5K-10K	350-980	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	346-236	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14

Figure 13, Continued.

Tgts	Run-in Heading (Mag)	Weapon Type	Dive/ Climb Angle	Release Altitude (FT AGL)	Release Speed (KTAS)	Aircraft (Type)
B-19 IMPACT AREA	016-106	GP BOMBS	-45 to +20	1K-10K	300-600	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	016-106	GP BOMBS	-5 to +5	100-2000	300-700	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	036-108	MK-82LGB MK-84LGB	-40 to +20	1K-11K	400-600	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	036-108	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	036-108	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	036-108	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F- FA-18/T-45/AV-8b. -1
	036-108	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-1
	036-108	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-
20-3 LGB TGT	053-083	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-
	053-083	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-
	053-083	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-
	053-083	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-

Figure 13, Continued.

Tgts	Run-in Heading (Mag)	Weapon Type	Dive/ Climb Angle	Release Altitude (FT AGL)	Release Speed (KTAS)	Aircraft (Type)
20-3 LGB TGT	233-263	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	233-263	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	233-263	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	233-263	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	233-263	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
B-20 IMPACT ARE	000-359	MK-82LGB MK-84LGB	0 to +70	100-10K	250-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	061-241	MK-82LGB MK-84LGB	0 to -5	200-5000	340-720	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	331-241	MK-82LGB MK-84LGB	-5 to -45	200-5000	300-650	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	000-359	MK-82LGB MK-84LGB	0 to -25	5K-10K	357-668	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	061-151	MK-82LGB MK-84LGB	-25 to -70	5K-10K	350-980	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	000-359	MK-82LGB MK-84LGB	0 to -5	10K-30K	365-784	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14
	000-359	MK-82LGB MK-84LGB	-5 to -70	10K-30K	420-774	TA-4/A-6/A-7/F-4 FA-18/T-45/AV-8B/F-14

Figure 13, Continued.

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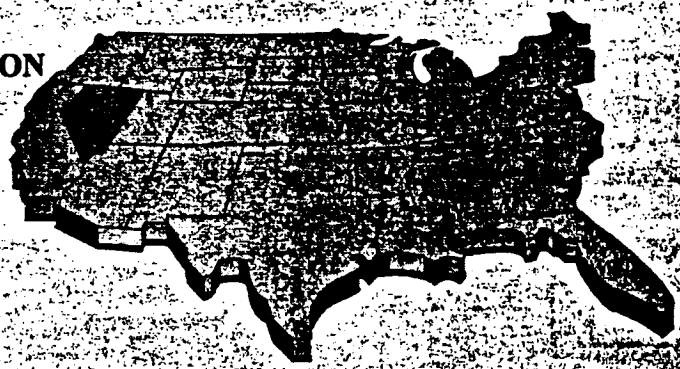

APPENDIX E

B-16 RAICUZ AND NOISE STUDY

APPENDIX E B-16 RAICUZ AND NOISE STUDY

This appendix includes the Executive Summary from the *Final Range Air Installation Compatible Use Zone (RAICUZ) Study for B-16*, released in 1997, and the *Aircraft Noise Study for the Proposed B-16 Range Complex, Naval Air Station Fallon, Nevada*, released in 1996.

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NAVAL AIR STATION FALLON, NEVADA

RANGE B-16

RANGE AICUZ UPDATE - 1997

Engineering Field Activity West
Naval Facilities Engineering Command

February 1997

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This report describes the findings of the Range Air Installation Compatible Use Zone (RAICUZ) program update for Naval Air Station (NAS) Fallon Training Range Bravo 16 (Range B-16). This RAICUZ Update is based on a new Noise Study (completed May 1996) and development of new Range Safety Zones. Since the previous RAICUZ study at Range B-16 was conducted in 1982, a number of factors have occurred that have made updating the Range B-16 RAICUZ imperative to NAS Fallon, including:

- New Aircraft—The performance characteristics of different aircraft, as well as new operational procedures at Range B-16, resulted in changes in RAICUZ determination.
- Changes in Department of Defense (DOD) Land Use Compatibility Guidelines—OPNAVINST 11010.36A expanded and clarified the land use guidelines used in 1982.
- Establishment of Department of Navy Range Planning Program and interim range planning guidelines.
- Proposed alteration of Restricted Airspace in the vicinity of Range B-16.
- Alteration in flight tracks and changes in flight track utilization—In 1982, aircraft operations and flight tracks originated north of Range B-16, but now originate south of the range.
- Development of the area near Range B-16—New subdivision of land and residential development has taken place in the vicinity of the range since 1982.

This RAICUZ Update has been prepared under the directives of the DOD that established the Air Installation Compatible Use Zone (AICUZ) program to investigate the problems of urbanization and associated encroachment on military installations and to formulate courses of action which would encourage harmonious land uses in these areas. The RAICUZ program uses AICUZ criteria and interim range planning guidelines for describing impacts related to aerial weapons training ranges.

The AICUZ and RAICUZ programs, by providing tools to promote compatible development around military installations, has the following objectives:

- protect the health, safety, and welfare of civilian and military personnel by discouraging land development that is incompatible with aircraft operations
- protect the Navy investments in air installations and ranges and maintenance of operational capabilities of these installations and ranges
- provide development guidelines and programs for the use of planning jurisdictions in the vicinity of the airfield and facilitate the resolution of land use incompatibilities adjacent to the boundaries of military installations and ranges

- inform the general public about the Navy AICUZ and RAICUZ programs to minimize noise impacts and aircraft accident potential near military air installations and ranges

1.2 MISSION AND OPERATION LEVELS

Training Range B-16 is part of the NAS Fallon Range Training Complex (FRTC). The FRTC primarily serves as a bombing and air warfare training center for Navy and Marine Corps air bases in the western United States and consists of several Military Operating Areas (MOAs) and Air Traffic Control Assigned Airspace. Range B-16 is used for practice in the basic techniques of air-to-ground bombing including special weapons delivery and conventional bombing using inert/training ordnance.

Daily range utilization data were collected over a 12-month period in 1994, representing existing conditions at Range B-16. This information included date, number and types of aircraft, scheduled and actual times on the range, number and types of ordnance, and if the flight was scored, the type of maneuver. Using these assumptions, a total of 10,898 operations were counted and used to represent current conditions.

The types of maneuvers performed at Range B-16 include High Dive, Low Dive, High Pop-Ups, Low Pop-Ups, Radar, and Lay-down. The most common aircraft type utilizing Range B-16 is the F/A-18, which conducted 89 percent of the total operations. Other aircraft utilizing the range include the A-6 Intruder, EA-6B Prowler, S-3 Viking, F-14 Tomcat, A-10 Thunderbolt, F-15 Eagle, and the E/F-111 Raven.

1.3 RAICUZ METHODOLOGY

Criteria and guidelines for the Range B-16 RAICUZ were supplied by standard AICUZ references with some adaptations as indicated. A training range complex differs from an airfield in the nature of flight operations. Range flight operations, such as high-speed and low-altitude maneuvers, and ordnance delivery, demand a different emphasis on safety than airfield flight training. Sound levels generated on the range may be typically high in decibels, but brief in duration, unlike the longer-term and more repetitive sound events at air stations. Standards for airfield land use compatibility, therefore, are adjusted to meet the specific character of range operations. The general methodology of the study, however, follows the guidelines established for AICUZ studies. The RAICUZ development process considers areas of noise impacts and safety consideration represented by noise-level contours and range safety zones.

Standard computer modeling techniques were used as the basis for the noise assessment (Wyle 1996). The noise metric used in the noise analysis performed at Range B-16 is the day-night average sound level L_{dn}, or DNL. The day-night average metric accounts for the heightened intrusiveness of noise events occurring during the nighttime (defined as 2200 to 0700) by penalizing nighttime events as if they were equal to 10 daytime events. For the development of noise contours, these total operations were then split into the number of operations on an "average busy day" over a period of one year. An average busy day occurs when any day's total operations are at least 50 percent of the annual average daily operations (total operations divided by 365 days). Noise levels are represented by contour lines and are derived from the combination of the flight patterns and operation level information.

The results of the study were used to produce three zones of averaged noise levels: Noise Zone 1 (less than 65 L_{dn}); Noise Zone 2 (65 to 75 L_{dn}); and Noise Zone 3 (greater than 75 L_{dn}). The number and location of noise complaints attributed to Range B-16 operations are considered in an effort to validate the impact of air operations on the surrounding communities. During the years 1993, 1994, and 1995, approximately 120 complaints about aircraft noise were received at NAS Fallon.

In addition to noise, the other major element in the RAICUZ development process is the consideration of safety. Safety zones are developed in response to consideration for safety of flight and persons on the ground relative to the locations of dropped ordnance, arming weapons systems, and airspace for aircraft maneuvering. For Range B-16, RSZs were established based on interim guidance from the Department of the Navy's Range Planning Office. Three Range Safety Zones (RSZs) were developed. The RSZ A, is centered on the targets and represents the weapons impact area. The Navy's HAZARD methodology was used to evaluate impact areas based on aircraft tactics and ordnance delivery parameters. RSZ B is the area of armed overflight, and RSZ C is the minimum restricted airspace required for aircraft to maneuver on the range.

RAICUZ subzones are developed by combining Noise Zones with RSZs. The noise contours and the RSZs are superimposed, resulting in the potential for up to nine RAICUZ subzones. RAICUZ subzones apply to specific areas of land and describe impacts upon those lands from environmental noise and safety hazards related to military aviation activity. The suitability of land uses within these RAICUZ areas requires special attention by federal, state, and local agencies in cooperation with the Navy. Attention is needed to protect the health, safety, and welfare of residents and other occupants while maintaining the mission capability of the installation.

Compatible use objectives are derived from the land use suitability matrix for noise zones and range safety zones. Guidelines for the types of land uses that are acceptable within noise-impacted areas and within range safety zones have been developed by the federal government. OPNAV Instruction 11010.36A provides the primary guidance for recommendation of land uses which are considered to be compatible with varying levels of noise exposure. In addition, the interim RAICUZ guidance from the Navy's Range Planning Office provides recommendations for land uses within range safety zones. By comparing the existing land use and zoning as identified in this RAICUZ Update, with the compatibility matrices, land use incompatibilities are identified

1.4 COMPARISON OF 1982 RAICUZ AND 1997 RAICUZ UPDATE

Since the 1982 RAICUZ, the average levels of noise exposure has decreased substantially. In 1997, Noise Zone 2 encompasses just over half of the area that it did in 1982. In 1997, the majority of lands within Noise Zone 2 are immediately to the west of the targets primarily over Range B-16. In addition, the noise exposure levels above 75 L_{dn} have decreased dramatically as well, and instead of being located in a linear pattern from Sheckler Reservoir to the Range B-16 as they were in 1982, the noise contours extend south-southwest from the range to within two miles of the Walker Indian Reservation.

For Range Safety Zones, RSZ A has decreased slightly in size since 1982, while both RSZ B and RSZ C have decreased dramatically in size since the last RAICUZ. RSZ C, in particular, has decreased from

over 167,000 acres to less than 30,000 acres, and is limited to the restricted airspace in the immediate vicinity of the range.

1.5 LAND USE ANALYSIS

The majority of lands to the east of the RAICUZ footprint are undeveloped rangeland, devoted to agriculture, or are part of the rapidly growing Fallon area. Found within this large expanse of agriculture are agriculturally oriented residential and industrial uses. Small lot (e.g., one acre) and large lot (10 or more acres) subdivisions permeate the area to the east and northeast of the range. North of the range, lands are primarily undeveloped and are used for undeveloped recreation opportunities. The majority of land south of Range B-16 is public, administered by the Bureau of Land Management (BLM) or Bureau of Reclamation (BUREC), or is part of the Walker River Indian Reservation. In general, the only land use identified in these areas is that associated with livestock grazing, including water tanks and corrals.

According to Churchill County zoning classifications, the majority of the land to the east and northeast of Range B-16 is zoned Rural Resource (RR), which has a residential density of one unit per 20 acres. The other most prevalent land use designations include A-2 and A-3 which are primarily agricultural in nature but allow residential densities of one unit per 5 acres and one unit per 10 acres, respectively. Because most of the lands south and west of the range are under public ownership, land use zoning does not apply to these areas. No commercial or industrial zoned lands were identified within the RAICUZ footprint.

For the most part, planned land use is similar to existing land use patterns. The vast majority of land within the study area developed for this RAICUZ Update is under public ownership and will likely remain undeveloped and utilized for livestock grazing. Land to the east of Range B-16 is planned for agriculture and low density residential uses. Within the RAICUZ boundaries, land subdivision east of the Range is occurring at an increasing rate, with the trend toward one to ten acre parcels.

1.6 FINDINGS

The major findings of the 1997 RAICUZ Update analysis include:

- Average noise levels exceeding 65 L_{dn} (Noise Zones 2 and 3) which are not contained within the range are primarily over undeveloped lands used for grazing, administered by federal agencies.
- RSZ A is entirely within Range B-16, and portions of RSZ B and RSZ C are located outside the range on undeveloped, federal land.
- Land uses within the RAICUZ are primarily undeveloped, agricultural, rural residential in nature; therefore, relatively few incompatibilities can be expected.
- There are no land use incompatibilities identified as a result of noise or from safety concerns related to RSZ A or RSZ B.

- Land use areas of concern based on RSZs include all privately owned lands within RSZ C.
- Residential development pressure is increasing, especially east and northeast of Range B-16 in subdivisions of 5 to 10 acre parcels.
- No residences are now located within Noise Zones 1, 2, or 3 or within RSZ A or B.
- Within RSZ C, 12 residential units were identified during this study resulting in an estimated 31 people residing within this area.
- As a result of shifting the aircraft training operations to the south of the range, the number of noise complaints resulting from training operations at Range B-16 would decrease.

1.7 IMPLEMENTATION STRATEGIES

The purpose of an RAICUZ Implementation Program is to achieve and maintain, to the extent possible, compatible land uses in the vicinity of an air installation. For Range B-16 at NAS Fallon, the primary objective of the RAICUZ is to preserve the existing land uses which are primarily agriculture and open spaces. For those areas identified as potentially incompatible, the objective is to acknowledge this potential and to ensure that the land use does not develop into a more significant problem.

A wide variety of general implementation strategies oriented toward all levels of government and the private sector are available for encouraging compatible land uses within the Range B-16 RAICUZ. A discussion is provided in the report to achieve a comprehensive explanation of the programs and techniques applicable to Range B-16, including:

- operational alternatives
- land exchange, lease, easement, and fee title acquisition
- maintenance of the noise level response program
- monitoring of land uses and close cooperation with local agencies to prevent incompatible developments
- providing accurate measurements of noise and aircraft potential
- providing informational programs for the public and local authorities

Strategies for the local government jurisdictions are also examined and recommended, including the development of:

- planning and zoning ordinances
- building codes
- truth-in-sales and rental ordinances

- transfer of development rights
- public relations and education programs

wyle laboratories

REPORT

WYLE RESEARCH REPORT
WR 96-18

AIRCRAFT NOISE STUDY FOR THE PROPOSED B-16 RANGE COMPLEX, NAVAL AIR STATION FALLON, NEVADA

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August 1996

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1.0 INTRODUCTION

The Naval Facilities Engineering Command conducts aircraft noise surveys at various Naval and Marine Corps Ranges throughout the United States. The noise exposure contours developed during these studies are incorporated into Range Air Installations Compatible Use Zones (RAICUZ) or other environmental studies for each station. These environmental documents are in turn used to promote the compatibility of Navy and Marine Corps activities with neighboring land uses. This report presents the results of the noise survey for the proposed realignment of the B-16 Range Complex near Naval Air Station (NAS) Fallon, Nevada.

This report serves as a follow-on document to Reference 1 (Wyle Research Report WR 95-32) which presented the noise survey results for the existing configuration of the B-16 Range Complex (Restricted Area R-4803). As the Navy proposes to realign R-4803 from a north-to-south orientation to a south-to-north orientation, it is the purpose of this report is to estimate the aircraft noise exposure, in terms of Day-Night Average Sound Level (DNL), for existing bombing training operations utilizing the proposed B-16 Range Complex. The primary aircraft type using B-16 is the F/A-18 Hornet.

Section 1.1 summarizes the noise metrics used throughout this report, and Section 1.2 briefly describes the computerized noise exposure model used to compute the impacts due to aircraft noise. Section 2.0 provides a brief description of the existing and proposed R-4803 and its relationship to NAS Fallon, and Section 3.0 addresses proposed aircraft operations and noise exposure.

1.1 Noise Metrics

Noise represents one of the most prominent environmental issues associated with aircraft operations. Although many other sources of noise are present in today's communities, aircraft noise is readily identifiable. An assessment of aircraft noise requires a general understanding of how sound is measured and how it affects people and the natural environment. Appendix A provides a detailed discussion of noise and its effects on people and the environment. For convenience, this section provides a brief overview of noise metrics and their use.

The noise environment around an airfield or in special use airspace can be described in terms of the time-average sound level generated by the aircraft operating at that facility or location. These operations consist of the flight activities conducted during an average day at airfields where operations generally adhere to a fixed schedule (most commercial airports), or during a typical "busy day" at airfields or ranges where operations vary from day to day or between weekdays and weekends (most military airfields and airspaces).

The State of Nevada's noise measure used for assessing aircraft noise exposure is the Day-Night Average Sound Level (abbreviated DNL), in units of the decibel (dB). DNL is an average sound level generated by all aviation-related operations during an average 24-hour period, with the sound levels of nighttime noise events emphasized by adding a 10 dB weighting. Nighttime is defined as the period from 2200 to 0700 hours the following morning. The weighting accounts for the generally lower background sound levels and greater community sensitivity to noises during these hours.

Individual, single noise events are described in terms of the Sound Exposure Level (abbreviated SEL or L_{AE}), in units of decibels. SEL takes into account the amplitude of a sound and the length of time during which each noise event occurs. It thus provides a direct comparison of the relative intrusiveness among single noise events of different intensities and durations. Appendix A provides a more complete discussion of SEL.

Both SEL and DNL employ A-weighted sound levels. "A-weighted" denotes the adjustment of the frequency content of a noise event to represent the way in which the average human ear responds to that sound energy.

1.2 Computerized Noise Exposure Models

Analyses of aircraft noise exposures and compatible land uses around Department of the Navy facilities are normally accomplished using a group of computer-based programs for airfield analyses called NOISEMAP.[2,3] The NOISEMAP suite of computer programs was developed by the U.S. Air Force which serves as the lead Department of Defense (DoD) agency for aircraft noise modeling.

The NOISEMAP suite of computer programs consists of BASEOPS, Master Control Module (MCM) Version 6.4, OMEGA10, OMEGA11, NOISEMAP itself, NMPLOT, and NOISEFILE. NOISEFILE 6.4 is a noise database for many models of aircraft. The BASEOPS program, Version 5.0, allows for entry of runway coordinates, airfield information, flight tracks, flight profiles (powers, altitudes relative to the airfield elevation, and speeds) along each track by each aircraft, numbers of flight operations, run-up coordinates, run-up profiles, and run-up operations. The OMEGA10 program extrapolates/interpolates the SELs for each model of aircraft from the NOISEFILE database, taking into consideration the specified speeds, engine thrust settings, and environmental conditions appropriate to each type of flight operation. The OMEGA11 program calculates maximum A-weighted sound levels for each model of aircraft taking into consideration the engine thrust settings and environmental conditions appropriate to run-up operations. The MCM program provides a user interface for running the OMEGA programs, creating a NOISEMAP input (NMI) file and executing the core NOISEMAP program. The core NOISEMAP program, Version 6.4, incorporates the number of daytime and nighttime operations, flight paths, and profiles of the aircraft to calculate DNL at many points on the ground around the facility. The NMPLOT program, Version 3.01, draws contours of equal DNL for overlay onto land-use maps. For AICUZ studies, as a minimum, DNL contours of 60, 65, 70, 75, and 80 dB are developed. Results of these computer programs and noise impact guidelines provide a relative measure of noise effects around air facilities.

NOISEMAP is most accurate for comparing "before-and-after" noise effects which would result from proposed airfield changes or alternative noise control actions, when the calculations are made in a consistent manner. It allows noise predictions for such proposed actions without the actual implementation and noise monitoring of those actions. Of course, DNL may be measured directly around an airfield rather than calculated. Calculated sound levels are often supplemented by on-site measurements, where useful. NOISEMAP also has the flexibility of calculating sound levels at any specified point so that noise impacts at representative locations around an airfield can be obtained.

Although NOISEMAP is best suited for modeling airfield operations, it can also be used to model range operations since the ground tracks for practice bombing runs are somewhat similar to Touch-and-Go or Field Carrier Landing Practice patterns experienced at airfields.

2.0 DESCRIPTION OF THE EXISTING AND PROPOSED B-16 RANGE COMPLEX

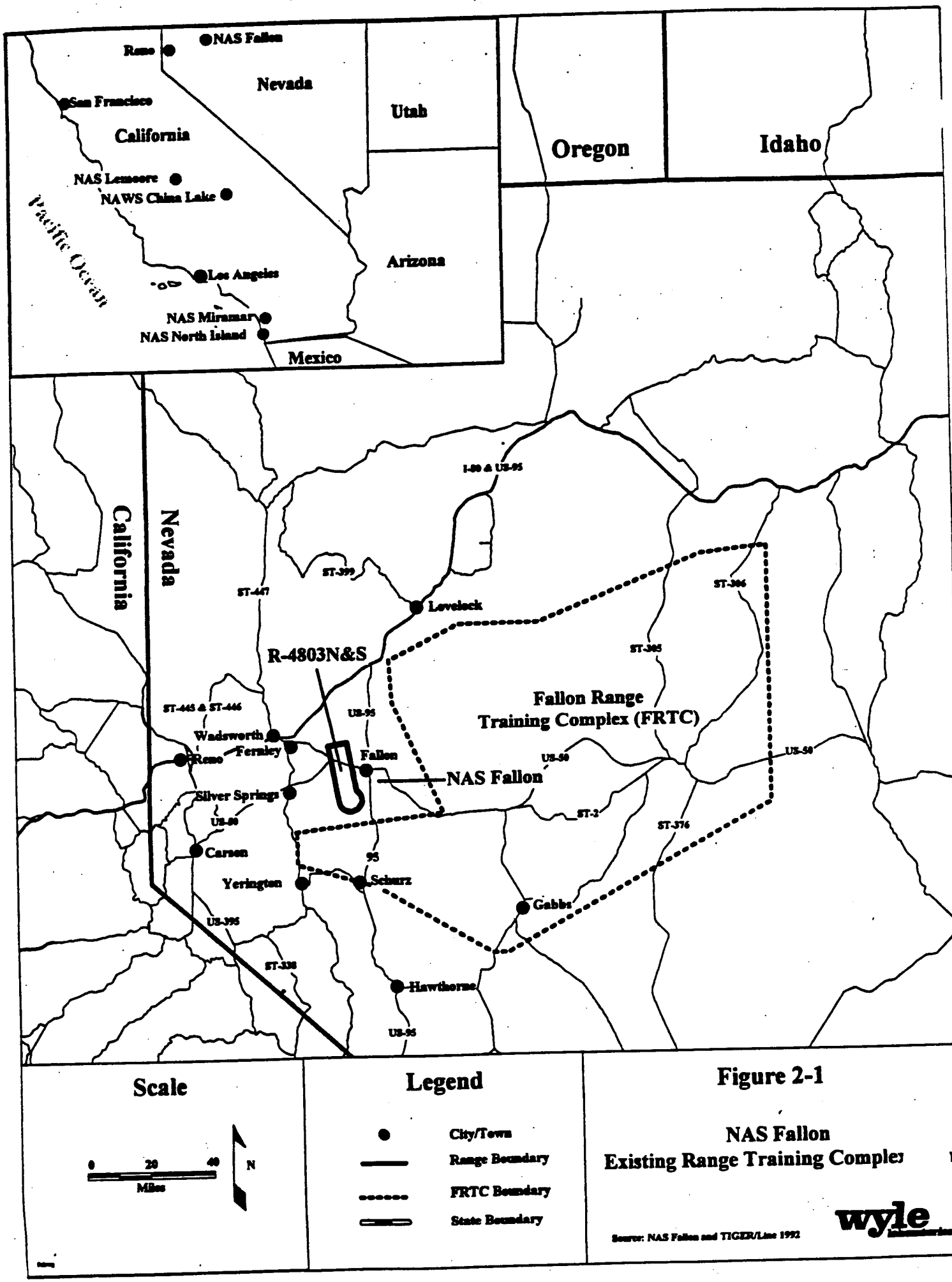
Section 2.1 describes the existing range complex, and Section 2.2 describes the proposed complex.

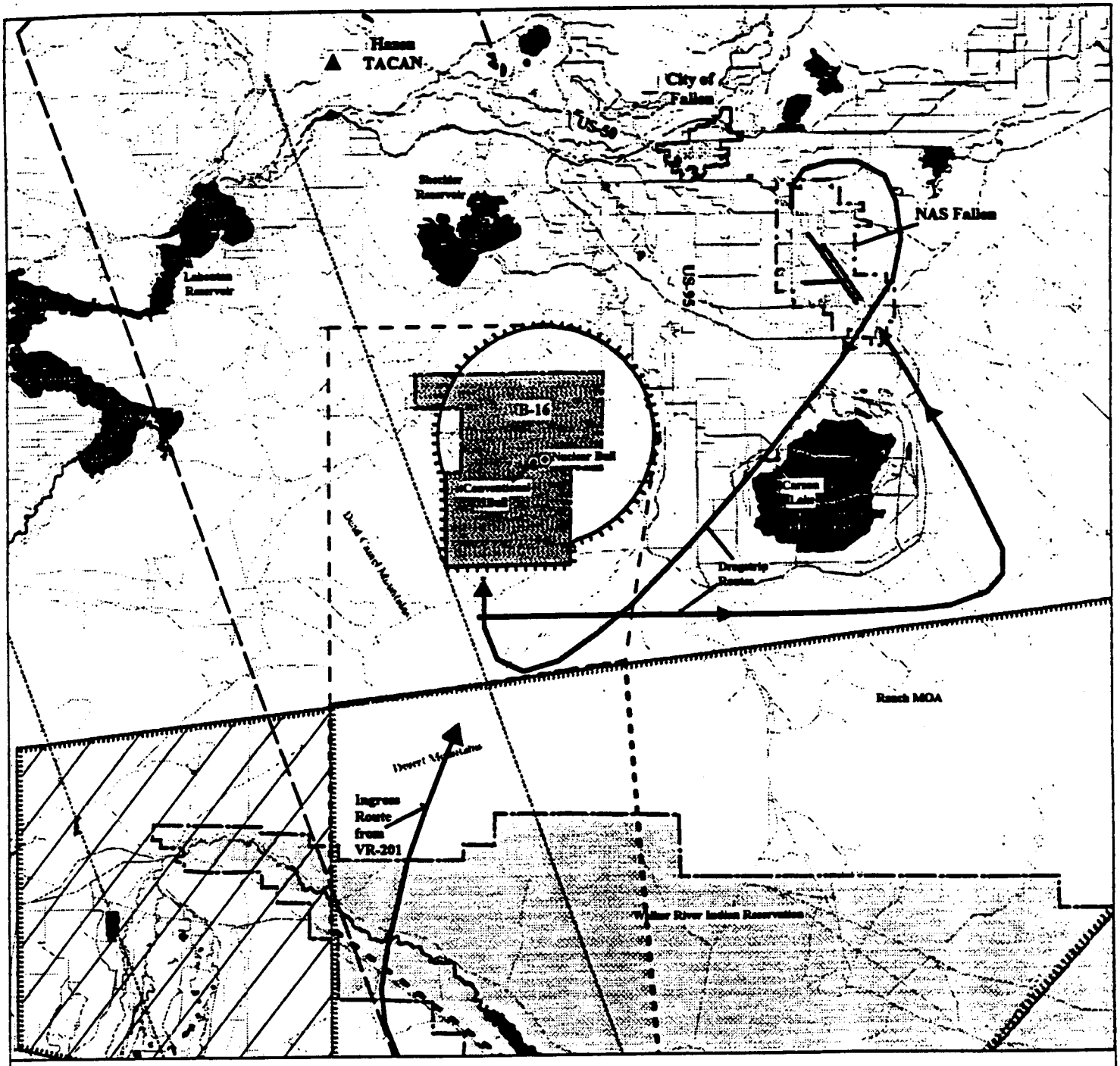
2.1 Existing B-16 Range Complex

The B-16 Range Complex, denoted as Restricted Area R-4803, is part of the much larger NAS Fallon Range Training Complex (FRTC). The FRTC primarily serves as a bombing and air warfare training center for all Navy and Marine Corps air bases in the United States and consists of several Military Operating Areas (MOAs) and an Air Traffic Control Assigned Airspace (ATCAA).[4] The existing MOAs contain Tactical Aircrew Combat Training System (TACTS) areas, an Electronic Warfare (EW) area, and three other training ranges besides B-16. As depicted in the regional map of Figure 2-1, NAS Fallon and the FRTC is located about 60 miles east of the City of Reno, Nevada. The existing Restricted Area R-4803 is approximately 6 miles west of NAS Fallon and about 8 miles southwest of the City of Fallon. Fallon is the principal city and county seat of Churchill County which contains the existing R-4803. U.S. Highways 50 and 95 are located to the north and east of the range, respectively, intersecting in the City of Fallon.

The B-16 range consists of Weapons Impact Scoring Set (WISS) scored nuclear and conventional bull's-eye targets (bulls). The government controls about 17,640 acres (28 square miles) in the southern end of the R-4803 (R-4803S) near the bulls as shown in Figure 2-2.[5] The elevation of the targets is about 3,900 ft MSL and the magnetic declination (at the Air Station) as of March 1991 is 16.0° East.[6] All maps in this report depict a north arrow pointing to true north. The local terrain is relatively flat, with a slight slope up to the low-lying Dead Camel Mountains, which bound the southwestern edge of the range.[4]

The B-16 Range Complex is open daily from 0715 to 2330 hours (local). Only inert ordnance can be used on B-16. The NAS Fallon Range Users Manual[7] lists five types of inert (dummy) ordnance allowed on the range, of which the low-drag MK76/BDU33 and high-drag MK106/BDU48 are the most prevalent. For conventional


NAS Fallon
Reno
Nevada
San Francisco
Utah
California
Oregon
Idaho
NAS Lemoore
NAWS China Lake
Pacific Ocean
Arizona
Los Angeles
NAS Miramar
NAS North Island
Mexico
I-80 & US-95
California
Nevada
ST-399
ST-447
Lovelock
ST-306
R-4803N&S
ST-305
Fallon Range
Training Complex (FRTC)
ST-445 & ST-446
US-95
Wadsworth
Fernley
Reno
Fallon
US-50
NAS Fallon
Silver Springs
ST-2
US-50
ST-376
Carson
95
Yerington
Schurz
Gabbs
US-395
ST-338
Hawthorne
US-95
Scale
0
20
40
Miles
N
Legend
City/Town
Range Boundary
FRTC Boundary
State Boundary
Figure 2-1
NAS Fallon
Existing Range Training Complex
Source: NAS Fallon and TIGER/Line 1992
wyle



Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- Proposed Ranch MOA Deletion
- MTR VR-201 centerline
- MTR Width
- Ingress\Egress Routes

Scale

0 2.5 5
Miles

N

Figure 2-2

B-16 Range Complex Airspace of Interest

Source: NAS Fallon, TIGER\Line, Reference 8

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deliveries, no more than six aircraft are permitted on the range at one time. Activity currently includes Navy and Marine Corps and infrequent Air Force aircraft users of primarily the conventional target to practice the basic techniques of aerial bombing. The noise- and operations-dominant aircraft is the F/A-18 Hornet.

2.2 Proposed B-16 Range Complex

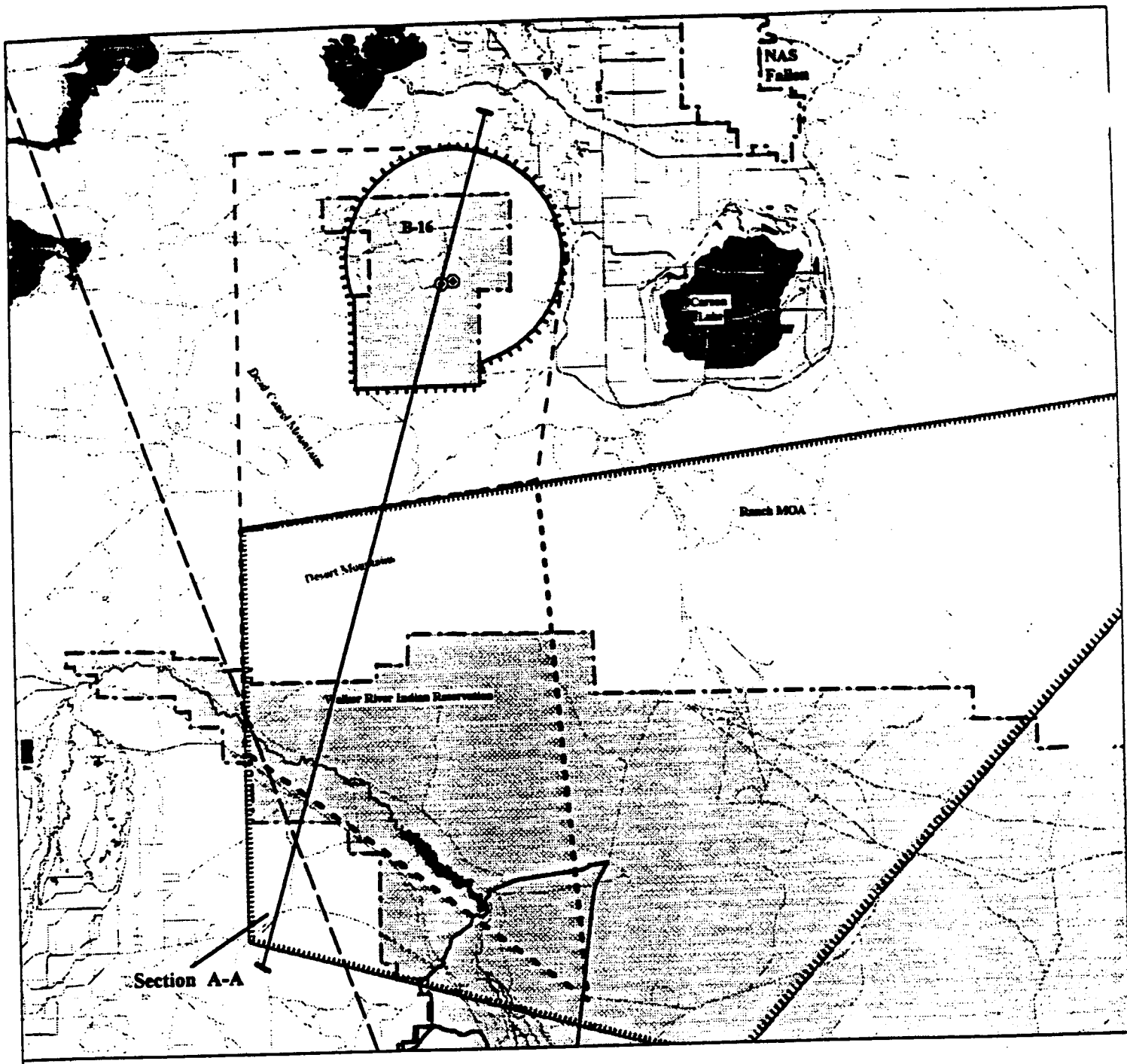
The proposed B-16 Range Complex, as described by NAS Fallon, would entail a change in the primary flow direction of aircraft utilizing the Range from a north-to-south flow with a run-in heading of 150° relative to magnetic north to a south-to-north flow with a run-in heading of 360° relative to magnetic north. This proposed flow direction would allow the reduction of Restricted Area R-4803 and the Ranch MOA and would require the addition of three new MOAs. Figure 2-2 shows a map of the proposed B-16 Range Complex and the airspace of interest. R-4803 would only consist of the circular region of the existing R-4803 South. Over R-4803 would be the proposed Churchill Low and Churchill High One MOAs which would extend southward to the northern boundary of the Ranch MOA. The Range would be served by Military Training Route (MTR) Visual Route (VR) 201, and from NAS Fallon, aircraft would ingress and egress the Range via the "Dragstrip" routes shown in Figure 2-2.

The airspace contained within the Churchill Low MOA would extend from 500 feet above ground level (AGL) to 9,000 feet above Mean Sea Level (MSL). The airspace contained within the Churchill High One MOA would extend from 9,000 feet MSL to 18,000 feet MSL. The proposed Churchill High Two MOA, which would overlie an existing portion of the Ranch MOA (500 feet AGL to 9,000 feet MSL) and the Walker River Indian Reservation, would extend from 9,000 feet MSL to 13,000 feet MSL. As shown in Figure 2-2, the portion of the Ranch MOA west of the western boundary of the proposed Churchill High Two MOA would be deleted as this airspace is under-utilized. As published in Reference 8, VR-201 has a width of 12 nautical miles (nm) and an altitude allowance of 200 feet AGL to 9,000 feet MSL. The MTR and its width are depicted in Figure 2-2.

For clarity, Figure 2-3 only shows the proposed and existing airspace of interest at an increased scale of 20,000 feet per inch. The line marked Section A–A lies along the proposed run-in line to the conventional bull.

Figure 2-4 depicts the airspace profile at cross-section marked A–A in Figure 2-3 as defined in the above paragraph. Since the ordinate of Figure 2-3 is in feet MSL, the ground terrain is shown by the bold line with the floors of the Ranch and Churchill Low MOAs shown approximately 500 feet above the terrain as dotted lines. The airspace of the R-4803 extends to 18,000 feet MSL along with the Churchill High One MOA to allow for the Pop-Up maneuvers.

The lateral extents of other property boundaries such as the Walker River Indian Reservation and the B-16 Range is shown near the abscissa of Figure 2-3 for the cross-section A–A of Figure 2-2. The Desert Mountains with a maximum elevation of about 5,600 feet MSL along the target run-in line lie along the northern border of the Walker River Indian Reservation.



Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 centerline

Scale

0 2.5 5
Miles

N

Source: NAS Fallon, TIGER/Line, Reference 8

Figure 2-3

B-16 Range Complex Vicinity Map

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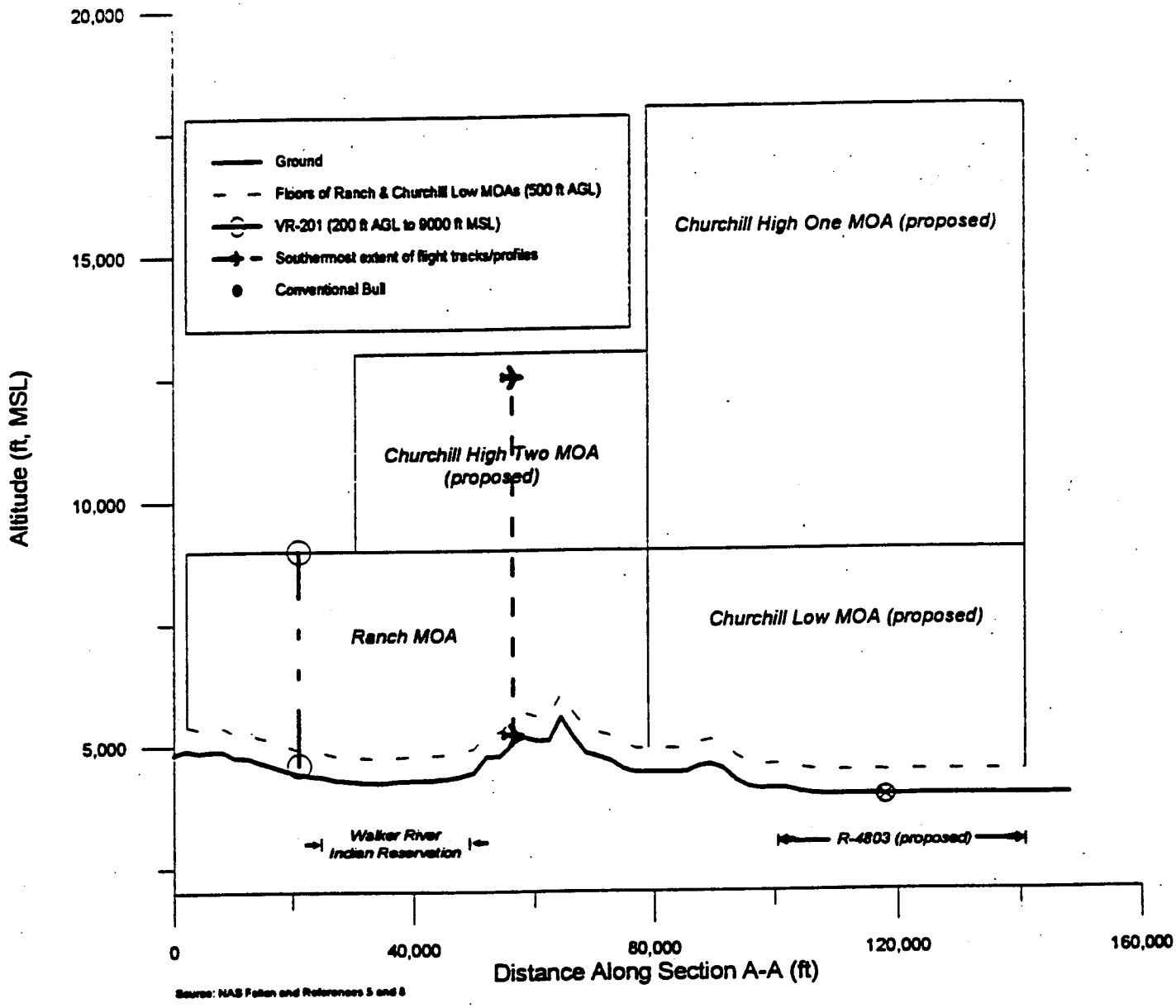


Figure 2-4. Airspace Profile at Section A–A of Figure 2-3 (Airspace of Interest).

3.0 PROPOSED AIRCRAFT OPERATIONS AND NOISE EXPOSURE

Section 3.1 discusses reported and modeled average busy-day flight operations by aircraft type. Section 3.2 discusses flight track utilization by time period and by aircraft type. Section 3.3 presents individual aircraft flight profiles and noise data. Section 3.4 discusses the average busy-day DNL contours for proposed conditions.

3.1 Flight Operations

For the purposes of this report it was assumed that the existing average busy-day flight operations by aircraft type, as derived in Reference 1, would apply to the realigned Range Complex. Reference 1 chose calendar year (CY) 1994 to represent existing conditions for the B-16 Range Complex for which a total of 10,898 operations were counted. These operations occurred on 169 days. Based on the range data, the B-16 Range Complex experienced 151 busy-days during 1994 for which there were 10,732 total operations.

Reproduced from Reference 1, Table 3-1 shows a list of the annual operations by aircraft type and by operation type for just the busy days. Because the F/A-18 performed an overwhelming majority of the operations and because the F/A-18 is acoustically dominant over the other aircraft, it was the only aircraft modeled.

3.2 Flight Track Utilization

Access to the B-16 Range Complex would be from either (a) the MTR VR-201 or (b) the so-called "Dragstrip" routes to/from NAS Fallon, shown in Figure 2-2. It was estimated by the NAS that 95 percent of the B-16 traffic would use the Dragstrip routes and 5 percent would utilize VR-201. Table 3-2 shows the counts of the number of F/A-18 aircraft which would utilize VR-201 and the Dragstrip routes by maneuver type. Table 3-2 was derived from the same range data which was used to compile Table 3-1.

Table 3-2

Ingress/Egress Utilization for B-16 Range for Busy-Days During CY94

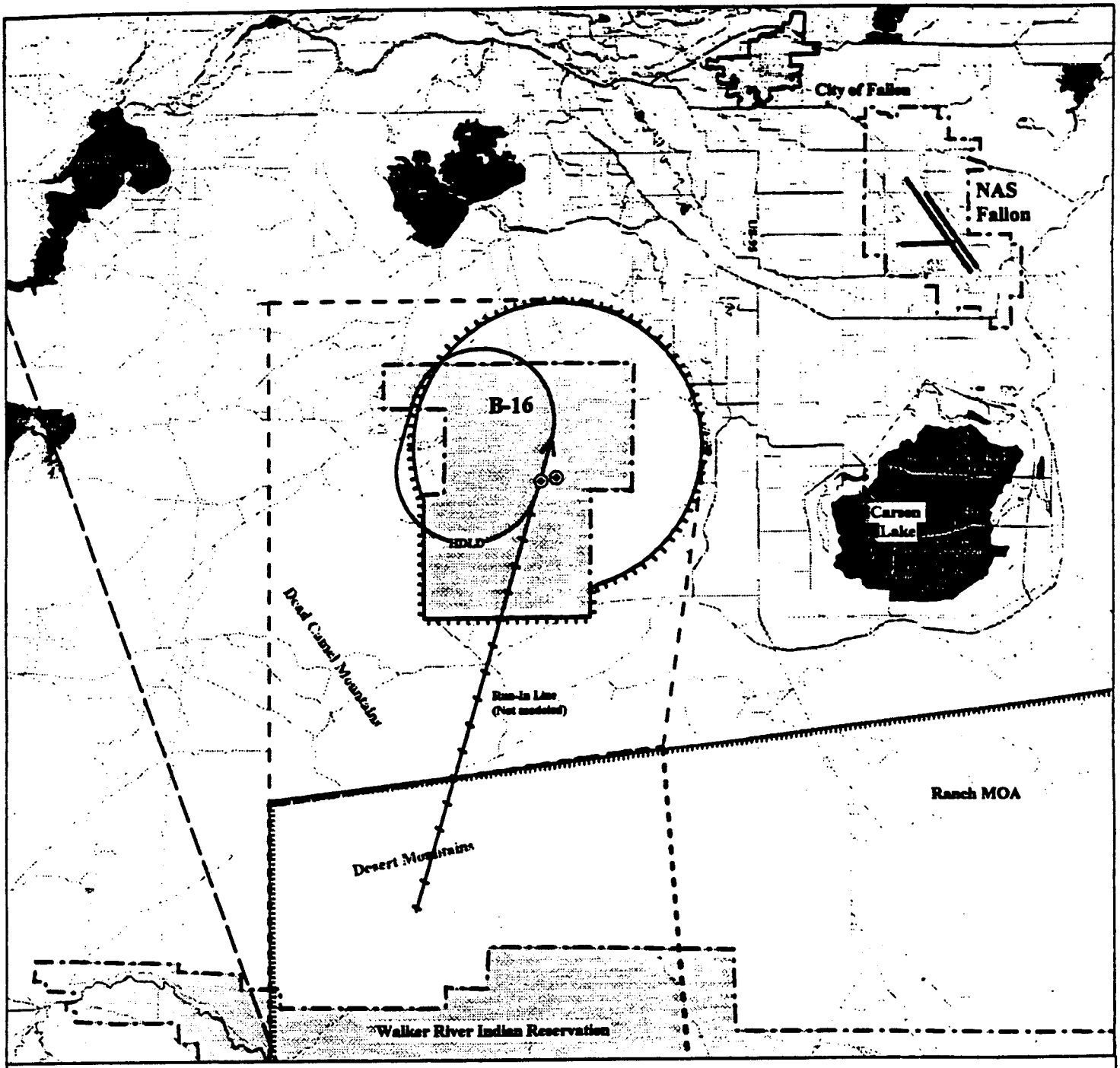
Maneuver	Annual Sorties From:					
	Dragstrip Route			VR-201		
	Day	Night	Total	Day	Night	Total
High Dive	549	9	558	29	0	29
Low Dive	228	1	229	12	0	12
High Pop	120	0	120	6	0	6
Low Pop	139	0	139	7	0	7
Radar Pattern	111	0	111	6	0	6
Laydown	52	0	52	3	0	3
TOTAL	1,199	10	1,209	63	0	63

Note: 95 percent Dragstrip and 5 percent VR-201.

For bombing training flight operations, the noise model requires those operations to be assigned to flight tracks which typify the various bombing training maneuvers. Reference 1 served as a foundation for the modeled flight tracks. The major modification to the flight tracks in Reference 1 is the change in run-in heading from 150° magnetic to 360° magnetic. NAS Fallon made further adjustments to all modeled flight tracks, except for the High Dive and Low Dive patterns. The modeled flight tracks are shown in Figures 3-1 through 3-5 and the changes are described in the following paragraph.

Relative to Reference 1:

1. The length of the run-in (and downwind leg) for High Pop-Up flight tracks, shown in Figure 3-2, was increased by about 2 nm for a resultant distance of 10 nm. The left/right breaks were maintained at a distance of approximately 5 nm from the target.



Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- HDLD — Flight Track

Scale

0 2000 4000
Feet

N

Figure 3-1

High Dive and Low Dive Flight Track HDLD

Source: NAS Fallon

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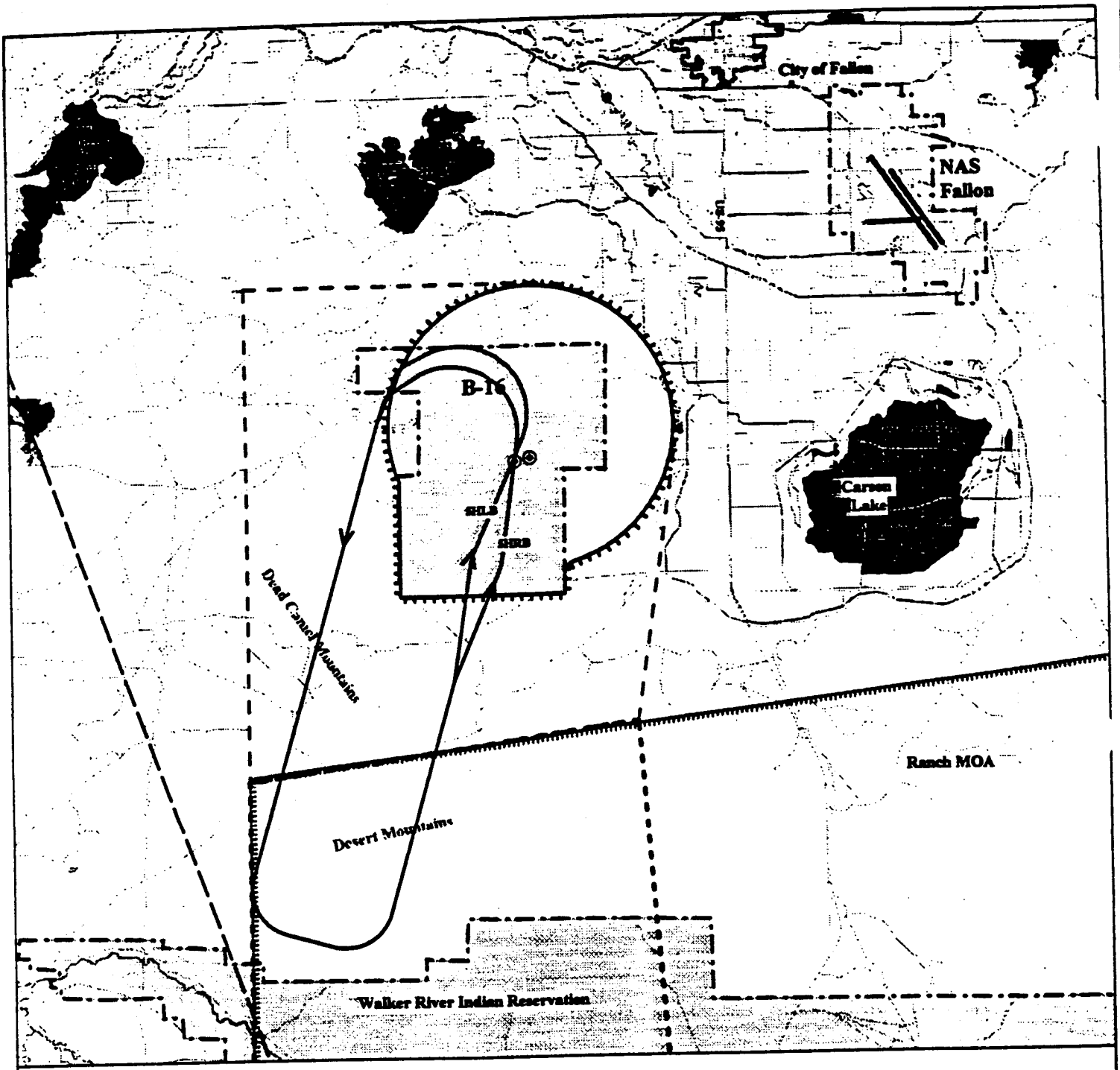

Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- —HDLD— Flight Track

Scale

0 2000 4000
Feet

N

Source: NAS Fallon

Figure 3-2

High Pop-Up
Flight Tracks 5HLB and 5HRB

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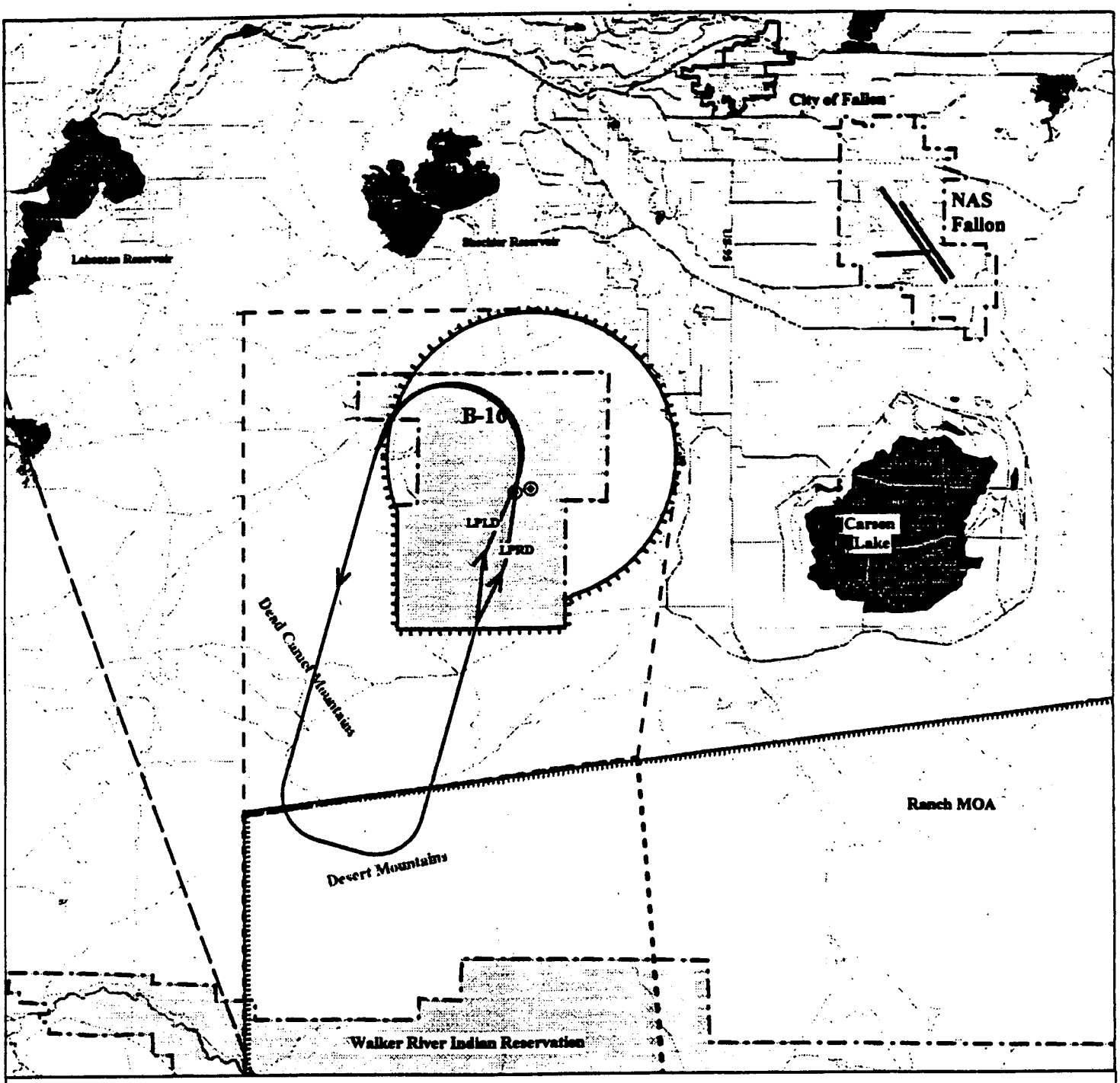

Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- —LPLD— Flight Track

Scale

0 2000 4000
Feet

N

Source: NAS Fallon

Figure 3-3

Low Pop-Up
Flight Tracks LPLD and LPRD

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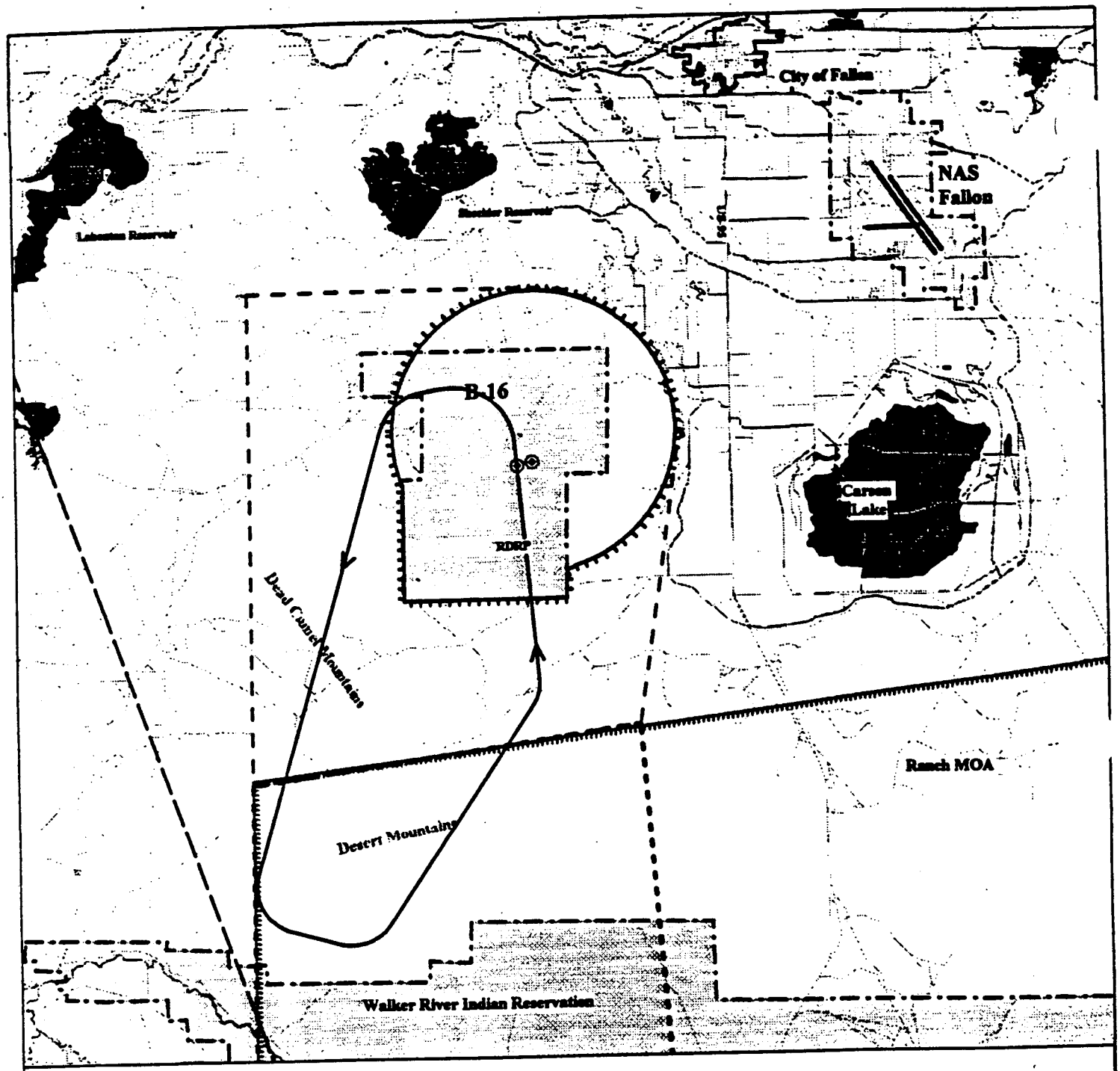

Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- RDRP — Flight Track

Scale

0 2000 4000
Feet

N

Source: NAS Fallon

Figure 3-4

Radar Pattern
Flight Track RDRP

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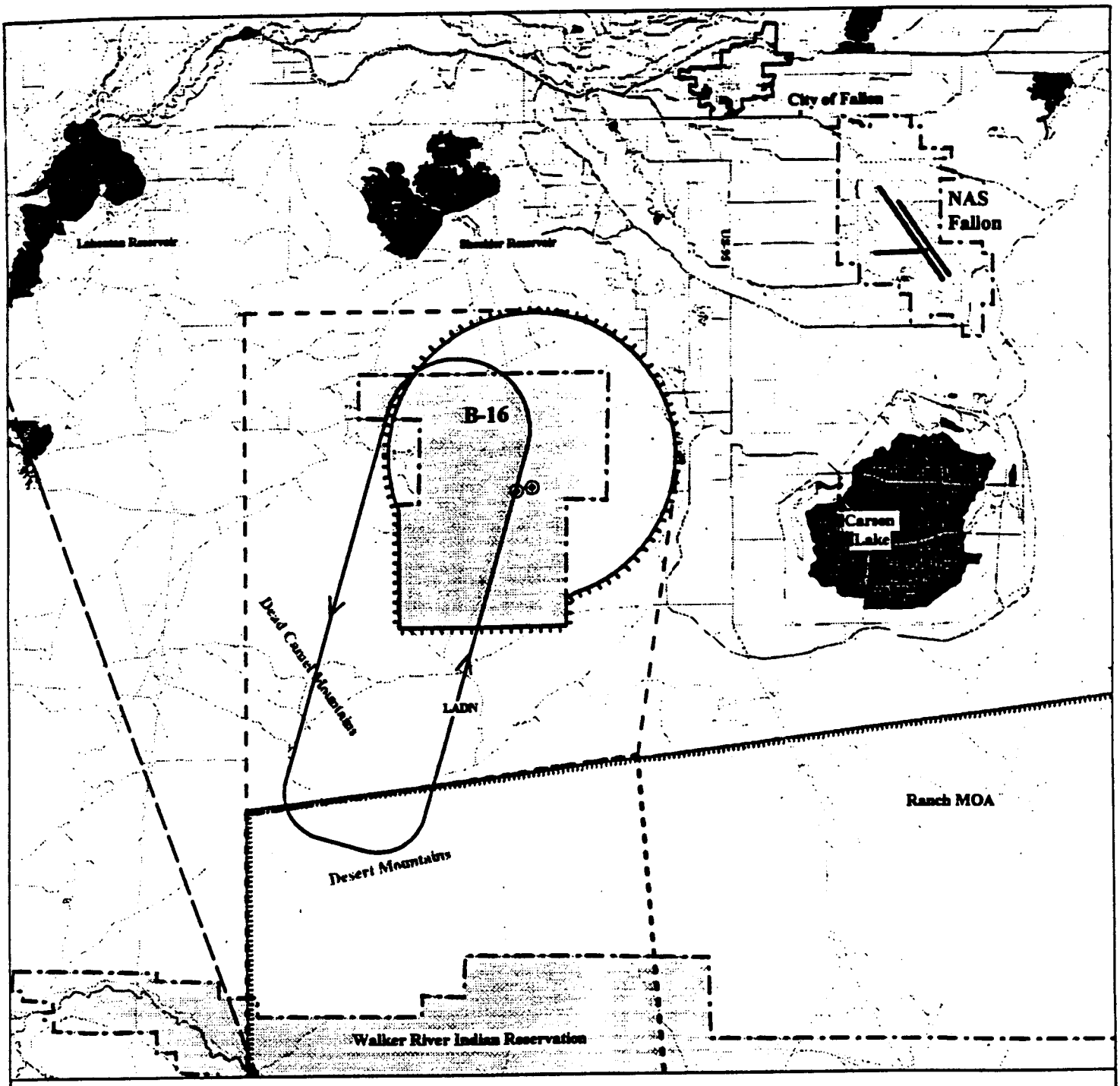


Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- —LADN— Flight Track

Scale

0 2000 4000
Feet

N

Source: NAS Fallon

Figure 3-5

Laydown
Flight Track LADN

wyle laboratories

2. The length of the run-in (and downwind leg) for Low Pop-Up flight tracks, shown in Figure 3-3, was decreased by about 1 nm for a resultant distance of 7 nm. The left/right breaks were maintained at a distance of approximately 3 nm from the target.

3. The length of the downwind leg for the Radar Pattern flight tracks, shown in Figure 3-4, was increased by about 1 nm for a resultant distance of 10 nm.

4. The length of the run-in (and downwind leg) for the Laydown Pattern flight track, shown in Figure 3-5, was decreased by about 1 nm for a resultant distance of 7 nm.

Also reproduced from Reference 1, Table 3-3 specifies the flight track utilization for the modeled deliveries in terms of average busy-day operations by flight track for daytime (0700–2200 hours) and nighttime (2200–0700 hours) periods.

Table 3-3

Flight Track Utilization for B-16 Range

Maneuver	Track	Track %	Average Busy-Day Operations		
			Day	Night	Total
High Dive	HDLD	---	31.00	0.19	31.19
Low Dive	HDLD	---	10.50	0.01	10.51
High Pop	5HLB	50%	3.89	0.00	3.89
	5HRB	50%	3.89	0.00	3.89
Low Pop	LPLD	50%	3.28	0.00	3.28
	LPRD	50%	3.28	0.00	3.28
Radar Pattern	RDRP	---	5.09	0.00	5.09
Laydown	LADN	---	2.48	0.00	2.48
		TOTAL	63.41	0.20	63.61

3.3 Aircraft Flight Profiles and Noise Data

In order for the noise exposure to be predicted for the ingress/egress routes, NAS Fallon categorized the maneuver types into typical altitudes at which F/A-18 aircraft would run-in and approach the target for the initial pass of the target. Low Dive, Low Pop, High Pop, and Laydown maneuvers would run-in at approximately 1,200 feet AGL. High Dives would run-in at about 3,500 feet AGL, and the Radar maneuver would perform an initial run-in at approximately 7,500 feet AGL. Representative F/A-18 power setting and airspeed during ingress/egress would be about 89% engine core RPM (%NC) and 300 kts, respectively. The initial run-in, shown in Figure 2-2, would begin from either near the exit point of VR-201 or near the intersection of the Dragstrip departure route with the run-in heading of the target.

For initial run-in to the target via VR-201 (5 percent of the traffic at the altitudes previously discussed), the noise exposure is estimated to be below 55 dB DNL with the highest SEL predicted to be 102 dB.

Ingress of the Range Complex via the Dragstrip route would be primarily at 10,500 feet MSL (about 6,600 feet AGL) which, after departure from NAS Fallon, would be attained by the time the aircraft pass the southern boundary of the NAS. For initial run-in to the target via the Dragstrip departure (95 percent of the traffic), the noise exposure is estimated to be below 55 dB DNL with the highest SEL predicted to be 74 dB. However, if the aircraft only attain 5,000 feet AGL, their noise exposure is estimated to be below 55 dB DNL (maximum SEL of 87 dB) as they fly towards the B-16 Range Complex on the Dragstrip route.

Egress of the Range Complex via the Dragstrip route would be primarily at 9,500 feet MSL. Again, the noise exposure is estimated to be below 55 dB DNL (maximum SEL of 76 dB) for the typical egress altitude of 9,500 feet MSL and would also be below 55 dB DNL if the aircraft descend to 5,000 feet AGL during the egress.

As the noise exposure contributions from aircraft operations on the ingress/egress routes would be insignificant as compared to the noise exposure contributions of the modeled bombing practice operations, the ingress/egress routes were eliminated from further modeling.

Proposed flight profiles (aircraft power settings, altitudes above the elevation of the target, and airspeeds on each modeled flight track) for the F/A-18 are shown in Appendix B. The profiles are similar to the existing conditions[1] but have been reviewed and adjusted by NAS Fallon. The primary changes are described in the following paragraph.

Relative to Reference 1:

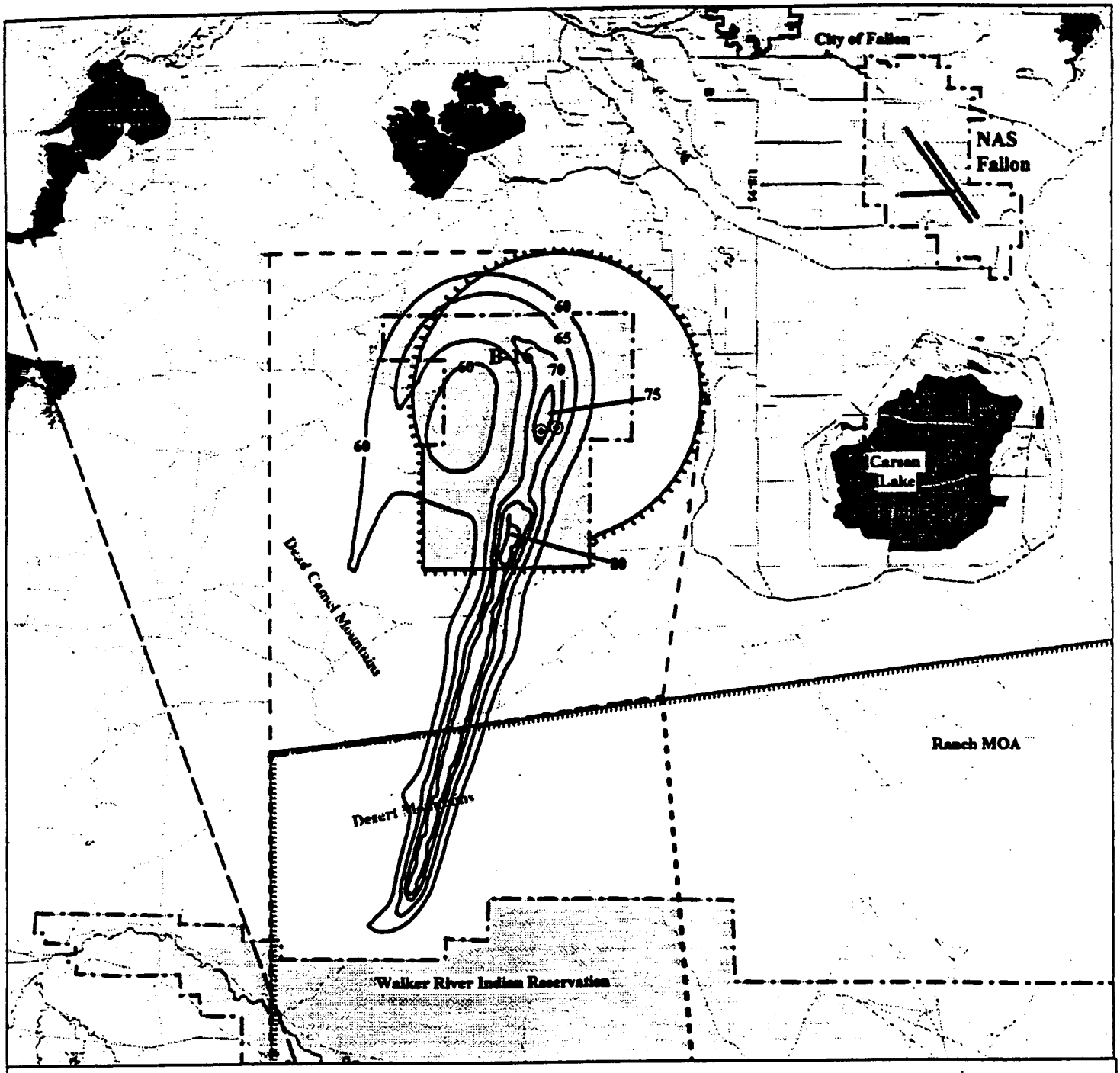
1. The altitudes on the base leg and run-in before the left/right breaks on the High Pop-Up were decreased by 300–500 feet. Figures B-3 and B-4 show the modeled flight profiles.
2. The altitudes on the run-in, both before and during the left/right breaks, on the Low Pop-Up were decreased by 300–10,000 feet. Figures B-5 and B-6 show the modeled flight profiles.
3. The altitude of the Radar Pattern was decreased by 500 feet. Figure B-7 shows the modeled profile.
4. The altitudes on the base leg of the Laydown Pattern were decreased by 500 feet. Figure B-8 shows the modeled flight profile.

Reference noise data for the F/A-18 was measured in October 1995 after the publication of Reference 1. The newly measured data was used to update the NOISEFILE database and was used to model operations at the B-16 Range Complex. The reference noise data used in Reference 1 was up to about 5 dB higher than the newly measured data.

Since weather is an important factor in the propagation of noise, NOISEMAP requires the daily average temperatures and relative humidities for each month to determine the appropriate values to acoustically represent the given year. The values for entry into NOISEMAP of 69°F and 34%RH from Reference 1 were used for this report.

3.4 Noise Exposure for Proposed Conditions

Using the data described in Sections 3.1 through 3.3, NOISEMAP Version 6.4 was employed to calculate and plot the 60 dB through 80 dB DNL contours for the average busy-day. These contours are shown in Figure 3-6. Note that the computations resulted in no DNLs above 85 dB.



Legend

- NAS Fallon, Range B-16 and Walker River Indian Reservation
- Water
- Proposed Churchill Low and Churchill High One MOA
- Proposed Churchill High Two MOA
- Proposed R-4803
- Existing Ranch MOA
- MTR VR-201 Centerline
- 60 DNL Contour

Scale

0 2000 4000
Feet

N

Figure 3-6

B-16 Range Complex
Average Busy-Day DNL Contours
for Proposed Conditions

Source: DOD, NOISEMAP 6.4

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The scope of this project included the estimation of the number of acres within the DNL contour bands. Table 3-4 shows the "non-Navy" areas impacted between 5 dB contour bands. The term "non-Navy" refers to areas within the noise contour but beyond the Navy-owned property shown in Figure 3-6. The proposed 60–65 dB DNL contour band (using 1994 operations data) includes a non-Navy area of 7,175 acres. Likewise, the proposed 65–70 dB DNL contour band was calculated to be 2,652 acres.

Figure 3-6 shows that the width of the 60 dB DNL contour along the run-in line would be about 2 statute miles and extend 9.5 miles southward. This noise exposure to the south would terminate just north of the Walker River Indian Reservation northern boundary. The 60 dB DNL contour would not extend beyond the northernmost portion of the boundary of Restricted Area R-4803. The 60 dB DNL contour along the downwind legs of the bombing practice maneuvers extends approximately 2 miles west of the B-16 boundary and as far south as the Dead Camel Mountains.

Table 3-4

Estimated Acreage Within
DNL Contour Bands for Proposed Conditions*

Band of DNL (dB)	Area (Acres)
60–65	7,175
65–70	2,652
70–75	1,115
75–80	1,268
80–85	0

* Pertaining to non-Navy land area

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3. Mohlman, H.T., "Computer Programs for Producing Single-Event Aircraft Noise Data for Specific Engine Power and Meteorological Conditions for Use With USAF Community Noise Model (NOISEMAP)", AFAMRL-TR-83-020, April 1983.

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5. Fallon Quadrangle, Nevada 1:100,000-scale series (planimetric), Surface Management Status, 1978.

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7. Fallon Range Users Manual NASFINST 3752.1F, 30 November 1994.

8. DOD Flight Information Publication AP/1B, Area Planning Military Training Routes, North and South America, 25 April 1996.

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FALLON

APPENDIX F

BIOLOGICAL RESOURCES

APPENDIX F BIOLOGICAL RESOURCES

TABLE F-1
PLANT SPECIES IN THE REGION OF THE PROPOSED LAND WITHDRAWAL

Common Name	Scientific Name
sand verbena	*Abronia turbinata*
desert needlegrass	*Achnatherum speciosa*
Thurber's needlegrass	*Achnatherum thurberianum*
wheatgrass	*Agropyron* spp.
Iodinebush, picklebush	*Allenrolfea occidentalis*
fiddleneck	*Amsinckia tesselata*
Indian hemp, dogbane	*Apocynum cannabinum*
low sagebrush	*Artemesia arbuscula*
bud sagebrush	*Artemesia spinescens*
basin big sagebrush	*Artemesia tridentata* var. *tridentata*
Wyoming big sagebrush	*Artemesia tridentata* var. *wyomingensis*
mountain big sagebrush	*Artemesia vaseyana*
narrowleaf milkweed	*Asclepias fascicularis*
showy milkweed	*Asclepias speciosa*
asparagus	*Asparagus officinalis* ssp. *officinalis*
aster	*Aster lanceolatus* ssp. *hesperius*
milkvetch	*Astragalus diphysus*
violet milkvetch	*Astragalus iodanthus* var. *iodanthus*
four winged saltbush	*Atriplex canescens*
shadscale	*Atriplex confertifolia*
quail bush/big-salt bush	*Atriplex lentiformis*
Nuttall saltbush	*Atriplex nuttalli*
arrowscale	*Atriplex phyllostegia*
torrey saltbush	*Atriplex torreyi*
wedgescale saltbush	*Atriplex truncata*
water-hyssop	*Bacopa eisenii*
fivehook bassia	*Bassia hyssopifolia*
King's eyelash grass	*Blepharidachne kingii*
field mustard	*Brassica campestris*
foxtail chess	*Bromus rubens*
cheatgrass	*Bromus tectorum*
suncups	*Camissonia claviformis* ssp. *integrior*
evening primrose	*Camissonia parvula*
white-top	*Cardaria draba*
sedge	*Carex* spp.
hairy wild cabbage	*Caulanthanus pilosus*
Russian knapweed	*Centaurea repens*
winterfat	*Ceratoides lanata* var. *lanata*
Steve's duskymaiden	*Chaenactis stevioides* var. *stevioides*
morning brides	*Chaenactis xantiana*
lambsquarters	*Chenopodium album*
strawberry blite	*Chenopodium foliosum*
goosefoot	*Chenopodium glaucum* ssp. *salinum*
rubber rabbitbrush	*Chrysothamnus nauseosus*
rabbitbrush	*Chrysothamnus* sp.
green rabbitbrush	*Chrysothamnus viscidiflorus* ssp. *puberulus*

Common Name	Scientific Name
bull thistle	*Circium vulgare*
yellow beeplant	*Cleome lutea*
Canada horseweed	*Conyza canadensis*
matted cryptantha	*Cryptantha circumscissa*
cryptantha	*Cryptantha micrantha*
winged cryptantha	*Cryptantha pterocarya*
spring parsley	*Cymopterus corrugatus*
chufa fatsedge	*Cyperus esculentus*
Sierra tansy mustard	*Descurainia californica*
tansy mustard	*Descurainia paradisa*
pinnate tansy mustard	*Descurainia pinnata* ssp. *paradisa*
flixweed	*Descurainia sophia*
desert saltgrass/inland saltgrass	*Distichilis spicata* var. *stricta*
millet	*Echinochloa crusgalli*
Russian olive	*Elaeagnus angustifolius*
common spike rush	*Eleocharis palustris*
dwarf spike rush	*Eleocharis parishii*
Great Basin wild rye	*Elymus cinereus*
beardless wild rye	*Elymus triticoides*
green ephedra	*Ephedra nevadensis*
hairy willow weed	*Epilobium ciliatum*
common horsetail	*Equisetum arvense*
smooth horsetail	*Equisetum laevigatum*
phlox	*Eriastrum wilcoxii*
buckwheat	*Eriogonum angulosum*
cushion eriogonum	*Eriogonum ovalifolium*
buckwheat	*Eriogonum pusillum*
wicker buckwheat	*Eriogonum vimeneum*
red-stemmed filartee	*Erodium cicutarium*
spurge	*Euphorbia ocellata* var. *arenicola*
goldenrod	*Euthania occidentalis*
Great Basin gilia	*Gilia leptomeria*
carved seed	*Glyptopleura marginata*
spiny hop-sage	*Grayia spinosa*
halogeton	*Halogeton glomeratus*
common sunflower	*Helianthus annuus*
desert sunflower	*Helianthus deserticola*
salt heliotrope	*Heliotropum currassivicum*
Galleta grass	*Hilaria jamesii*
cheesebush	*Hymenoclea fasciculata*
many branched gilia	*Ipomopsis polycladon*
poverty weed	*Iva axillaris*
wire rush	*Juncus balticus*
common kochia	*Kochia scoparia*
prickly lettuce	*Lactuca serriola*
tall whitetop	*Lepidium latifolium*
pepperweed	*Lepidium nitidum*
bird's-foot trefoil	*Lotus tenuis*
lupine	*Lupinus pusillus* var. *intermontanus*
boxthorn	*Lycium shockleyi*
bugleweed	*Lycopus asper*

Common Name	Scientific Name
prairie pink	*Lygodesmia grandiflora*
smooth desert dandelion	*Malacothrix glabrata*
sow thistle	*Malacothrix sonchoides*
wild mint	*Mentha arvensis*
white-stemmed stick-leaf	*Mentzelia albicaulis*
common monkey flower	*Mimulus guttatus*
four-o'clock	*Mirabilis alipes*
scratch grass	*Muhlenbergia*
ground nama	*Nama aretioides*
narrow-leafed nama	*Nama depressum*
alkali weed	*Nitrophila occidentalis*
birdcage evening primrose	*Oenothera deltoides* var. *piperi*
mohave prickly pear	*Opuntia erinacea*
prickly pear	*Opuntia pulchella*
Nevada oryctes	*Oryctes nevadensis*
Indian ricegrass	*Oryzopsis hymenoides*
sand penstemon	*Penstemon acuminatus* var. *latebracteatus*
common phacelia	*Phacelia bicolor* var. *bicolor*
popcorn flower	*Plagiobothrys kingii* var. *harkenessii*
buckhorn plantain	*Plantago lanceolata*
Nevada bluegrass	*Poa nevadensis*
Sandberg bluegrass	*Poa sandbergii*
common knotweed	*Polygonum arenastrum*
knotweed	*Polygonum argyrocoleon*
willow weed	*Polygonum lapathifolium*
spotted knotweed/lady's thumb	*Polygonum persicaria*
kochia, gray molly	*Polygonum* sp.
rabbit's foot grass	*Polypogon monspeliensis*
freemont cottonwood	*Populus fremontii* ssp. *fremontii*
common purslane	*Portulaca oleracea*
Indigo bush, false dahlea	*Psorothamnus polydenius*
seaside buttercup	*Ranunculus cymbylaria* ssp. *saximontanus*
gooseberry	*Ribes* sp.
wild rose	*Rosa woodsii*
curly dock	*Rumex crispus*
sand dock	*Rumex venosus*
samphire, pickleweed	*Salicornia europaea*
narrow-leaved willow	*Salix exigua*
sandbar willow	*Salix hindsianda*
red willow	*Salix laevigata*
salsola	*Salsola tragus*
Russian thistle	*Salsola kali tenuifolia*
Bailey greasewood	*Sarcobatus vermiculatus* var. *baileyi*
black greasewood	*Sarcobatus vermiculatus*
silver buffaloberry	*Shepherdia argentea*
squirrel tail	*Elymus elymoides*
nightshade	*Solanum dulcamara*
salt marsh sand spurrey	*Spergularia marina*
desert globemallow/apricot mellow	*Sphaeralcea ambigua ssp. monticola*
alkali sacaton	*Sporobolus airoides*
longbeak streptanthella	*Streptanthella longirostris*

Common Name	Scientific Name
horned sea-bite	*Suaeda calceoliformis*
bush seepweed	*Suaeda moquinii*
seepweed, desert blite	*Suaeda torreyana*
snowberry	*Symphoricarpos* sp.
tamarisk	*Tamarix pentranda*
tamarisk	*Tamarix ramossisima*
common dandelion	*Taraxacum officinale*
littleleaf horsebrush	*Tetradymia glabrata*
spiny horsebrush	*Tetradymia spinosa*
hairy horsebrush	*Tetradymia tetrameras*
borage	*Tiquilia nuttallii*
goat's beard	*Tragopogon dubius*
strawberry clover	*Trifolium fragiferum*
variegated clover	*Trifolium variegatum*
smallflower sand verbena	*Tripterocalyx crux-maltae*
siberian elm	*Ulmus pumilla*
stinging nettle	*Urtica dioica*
speedwell	*Veronica peregrina*
Idaho fescue	*Vulpia idahoensis*
six-weeks fescue	*Vulpia octoflora*
cocklebur	*Xanthium strumarium*

Source: USFWS 1995

TABLE F-2
ANIMAL SPECIES IN THE REGION OF THE PROPOSED LAND WITHDRAWAL

Common Name	Scientific Name
Fish	
Sacramento perch	*Archoplites interruptus*
goldfish	*Carassius auratus*
Asiatic (or common) carp	*Cyprinus carpio*
mosquitofish	*Gambusia affinis*
white catfish	*Ictalurus catus*
black bullhead	*Ictalurus melas*
brown bullhead	*Ictalurus nebulosus*
channel catfish	*Ictalurus punctatus*
green sunfish	*Lepomis cyanellus*
bluegill	*Lepomis macrochirus*
smallmouth blackbass	*Micropterus dolomieui*
largemouth black bass	*Micropterus salmoides*
white bass	*Morone chrysops*
striped bass	*Morone saxatilis*
rainbow trout	*Oncorhynchus mykiss*
Sacramento blackfish	*Orthodon microlepidotus*
yellow perch	*Percan flavescens*
fathead minnow	*Pimephales promelas*
white crappie	*Pomoxis annularis*
black crappie	*Pomoxis nigromaculatus*
Lahontan speckled dace	*Rhinichthys osculus robustus*
Lahontan red shiner	*Richardsonius egregius*
brown trout	*Salmo trutta*
brook trout	*Salvelinus fontinalus*
walleye	*Stizostedion vitreum*
Amphibians and Reptiles	
western toad	*Bufo boreas*
zebra-tailed lizard	*Callisuarus draconoides*
rubber boa	*Charina bottae*
western whiptail	*Cnemidophorus tigris*
Great Basin rattlesnake	*Crotalus viridis lutosus*
common collared lizard	*Crotaphytus collaris*
long-nosed leopard lizard	*Gambelia wislizenii*
Pacific treefrog	*Hyla regilla*
night snake	*Hypsiglena torquata*
striped whipsnake	*Masticophis taeniatus*
desert horned lizard	*Phrynosoma platyrhinos*
gopher snake	*Pituophis melanoleucus*
northern leopard frog	*Rana pipens*
long-nosed snake	*Rhinocheilus lecontei*
western patch-nosed snake	*Salvadora hexalepis*
Great Basin spadefoot	*Scaphiopus intermontanus*
sagebrush lizard	*Sceloperus graciosus*
desert spiny lizard	*Sceloperus magister*
western fence lizard	*Sceloperus occidentalis*
western terrestrial garter snake	*Thamnophis elegans*

Common Name	Scientific Name
side-blotched lizard	*Uta stansburiana*
Birds	
Cooper's hawk	*Accipiter cooperii*
northern goshawk	*Accipiter gentilis*
sharp-shinned hawk	*Accipiter striatus*
spotted sandpiper	*Actitis macularia*
Clarks' grebe	*Aechmophorus clarkii*
western grebe	*Aechmophorus occidentalis*
northern saw-whet owl	*Aegolius acadicus*
red-winged blackbird	*Agelaius phoeniceus*
tricolored blackbird	*Agelaius tricolor*
chukar	*Alectoris chukar*
sage sparrow	*Amphispiza belli*
black-throated sparrow	*Amphispiza bilineata*
northern pintail	*Anas acuta*
American widgeon	*Anas americana*
northern shoveler	*Anas clypeata*
green-winged teal	*Anas crecca*
cinnamon teal	*Anas cyanoptera*
blue-winged teal	*Anas discors*
mallard	*Anas platyrhynchos*
gadwall	*Anas strepera*
American pipit	*Anthus rubescens*
scrub jay	*Aphelocoma coerulescens*
golden eagle	*Aquila chrysaetos*
black-chinned hummingbird	*Archilochus alexandri*
great blue heron	*Ardea herodias*
great blue heron	*Ardea herodias*
short-eared owl	*Asio flammeus*
long-eared owl	*Asio otus*
western burrowing owl	*Athene cunicularia*
lesser scaup	*Aythya affinis*
redhead	*Aythya americana*
canvasback	*Aythya valisineria*
cedar waxwing	*Bombycilla cedrorum*
Bohemian waxwing	*Bombycilla garrulus*
American bittern	*Botaurus lentiginosus*
Canada goose	*Branta canadensis*
great horned owl	*Bubo virginianus*
cattle egret	*Bubuleus ibis*
bufflehead	*Bucephala albeola*
common goldeneye	*Bucephala clangula*
red-tailed hawk	*Buteo jamaicensis*
rough-legged hawk	*Buteo lagopus*
ferruginous hawk	*Buteo regalis*
Swainson's hawk	*Buteo swainsoni*
California quail	*Callipepla californica*
pine siskin	*Carduelis pinus*
American goldfinch	*Carduelis tristis*
Cassin's finch	*Carpodacus cassinii*

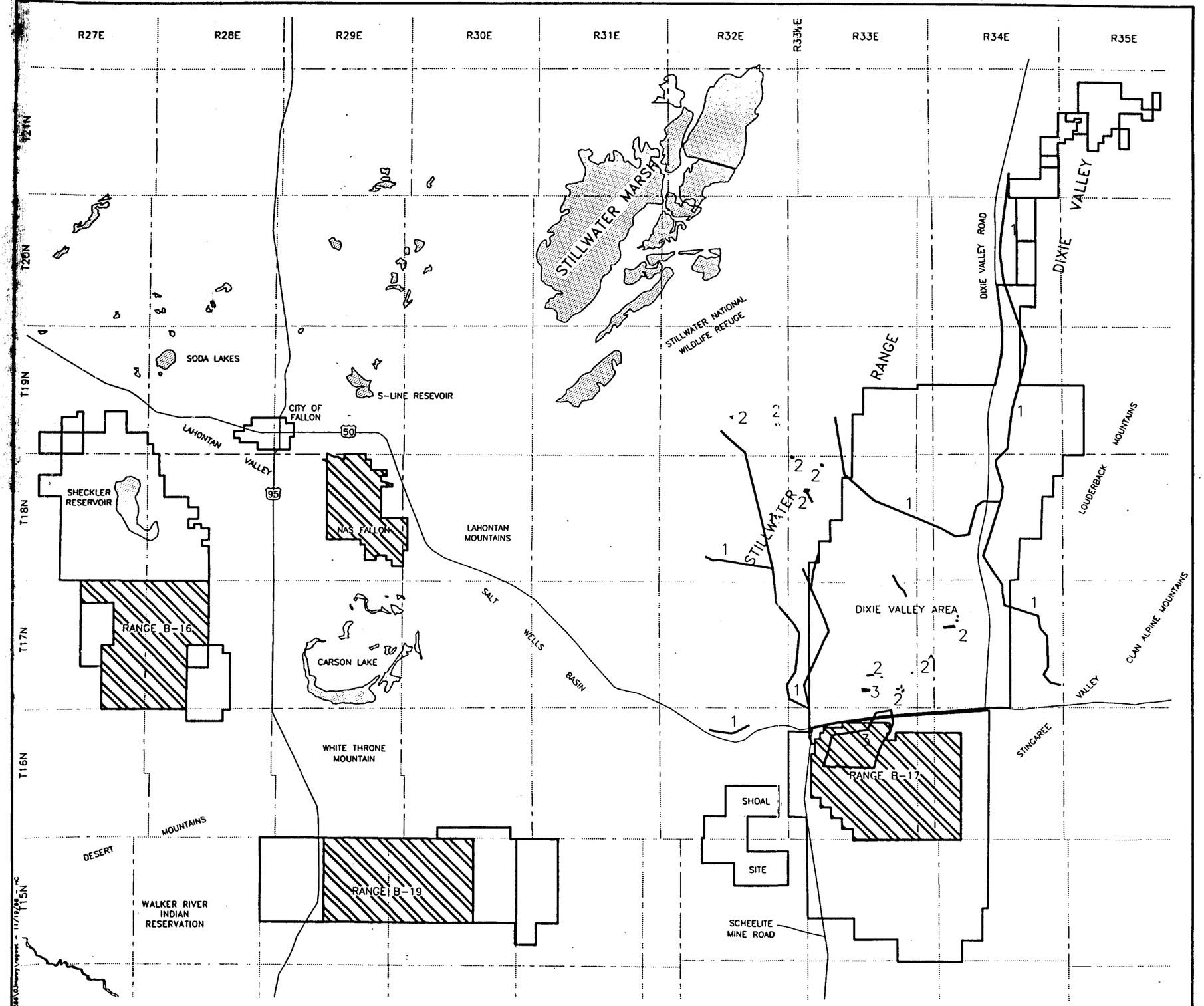
Common Name	Scientific Name
house finch	*Carpodacus mexicanus*
great egret	*Casmerodius albus*
turkey vulture	*Cathartes aura*
hermit thrush	*Catharus guttatus*
canyon wren	*Catherpes mexicanus*
sage grouse	*Centrocercus urophasianus*
brown creeper	*Certhia americana*
belted kingfisher	*Ceryle alcyon*
Western snowy plover	*Charadrius alexandrius*
killdeer	*Charadrius vociferus*
snow goose	*Chen caerulescens*
black tern	*Chlidonias niger*
lark sparrow	*Chondestes grammacus*
common nighthawk	*Chordeiles minor*
American dipper	*Cinclus mexicanus*
northern harrier	*Circus cyaneus*
evening grosbeak	*Coccothraustes vespertinus*
northern flicker	*Colaptes auratus*
rock dove	*Columba livia*
western wood-pewee	*Contopus sordidulus*
American crow	*Corvus brachyrhynchos*
common raven	*Corvus corax*
tundra swan	*Cygnus columbianus*
blue grouse	*Dendragapus obscurus*
yellow-rumped warbler	*Dendroica coronata*
black-throated gray warbler	*Dendroica nigrescens*
yellow warbler	*Dendroica petechia*
snowy egret	*Egretta thula*
willow flycatcher	*Empidonax traillii*
horned lark	*Eremophila alpestris*
Brewer's blackbird	*Euphagus cyanocephalus*
merlin	*Falco columbarius*
prairie falcon	*Falco mexicanus*
peregrine falcon	*Falco peregrinus*
American kestrel	*Falco sparverius*
American coot	*Fulica americana*
common snipe	*Gallinago gallinago*
common moor hens	*Gallinula chloropus*
common yellowthroat	*Geothlypis trichas*
northern pygmy owl	*Glaucidium gnoma*
blue grosbeak	*Guiraca caerulea*
pinyon jay	*Gymnorhinus cyanocephalus*
bald eagle	*Haliaeetus leucocephalus*
black-necked stilt	*Himantopus mexicanus*
cliff swallow	*Hirundo pyrrhonota*
barn swallow	*Hirundo rustica*
yellow-breasted chat	*Icteria virens*
northern oriole	*Icterus galbula*
least bittern	*Ixobrychus exilis hesperis*
dark-eyed junco	*Junco hyemalis*
northern shrike	*Lanius excubitor*

Common Name	Scientific Name
loggerhead shrike	*Lanius ludovicianus*
herring gull	*Larus argentatus*
California gull	*Larus californicus*
ring-billed gull	*Larus delawarensis*
rosy finch	*Leucosticte arctoa*
long-billed dowitcher	*Limnodromus scolopaceus*
red crossbill	*Loxia curvirostra*
Lewis' woodpecker	*Melanerpes lewis*
song sparrow	*Melospiza melodia*
common merganser	*Mergus merganser*
northern mockingbird	*Mimus polyglottos*
brown-headed cowbird	*Molothrus ater*
Townsend's solitaire	*Myadestes townsendi*
ash-throated flycatcher	*Myiarchus cinerascens*
Clark's nutcracker	*Nucifraga columbiana*
long-billed curlew	*Numenius americanus*
black-crowned night heron	*Nycticorax nycticorax*
MacGillivray's warbler	*Oporornis tolmiei*
mountain quail	*Oreortyx pictus*
sage thrasher	*Oreoscoptes montanus*
flammulated owl	*Otus flammeolus*
western screech owl	*Otus kennicottii*
ruddy duck	*Oxyura jamaicensis*
osprey	*Pandion haliaetus*
mountain chickadee	*Parus gambeli*
plain titmouse	*Parus inornatus*
house sparrow	*Passer domesticus*
savannah sparrow	*Passerculus sandwichensis*
Lazuli bunting	*Passerina ameona*
American white pelican	*Pelecanus erythrorhynchos*
double-crested cormorant	*Phalacrocorax auritus*
common poorwill	*Phalaenoptilus nuttallii*
Wilson's phalarope	*Phalaropus tricolor*
black-headed grosbeak	*Pheucticus melanocephalus*
black-billed magpie	*Pica pica*
hairy woodpecker	*Picoides villosus*
rufous-sided towhee	*Pipilo erythrophthalmus*
western tanager	*Piranga ludoviciana*
white-faced ibis	*Plegadis chihi*
eared grebe	*Podiceps nigricollis*
vesper sparrow	*Pooecetes gramineus*
sora	*Porzana carolina*
bushtit	*Psaltriparus minimus*
great-tailed grackle	*Quiscalus mexicanus*
common grackle	*Quiscalus quiscula*
Virginia rail	*Rallus limicola*
American avocet	*Recurvirostra americana*
ruby-crowned kinglet	*Regulus calendula*
golden-crowned kinglet	*Regulus satrapa*
bank swallow	*Riparia riparia*
rock wren	*Salpinctes obsoletus*

Common Name	Scientific Name
Say's phoebe	*Sayornis saya*
mountain bluebird	*Sialia currucoides*
western bluebird	*Sialia mexicana*
red-breasted nuthatch	*Sitta canadensis*
white-breasted nuthatch	*Sitta carolinensis*
red-naped sapsucker	*Sphyrapicus nuchalis*
Williamson's sapsucker	*Sphyrapicus thyroideus*
Brewer's sparrow	*Spizella breweri*
chipping sparrow	*Spizella passerina*
northern rough-winged swallow	*Stelgidopteryx serripennis*
Forster's tern	*Sterna forsteri*
western meadowlark	*Sturnella neglecta*
European starling	*Sturnus vulgaris*
tree swallow	*Tachycineta bicolor*
violet-green swallow	*Tachycineta thalassina*
Bewick's wren	*Thryomanes bewickii*
house wren	*Troglodytes aedon*
American robin	*Turdus migratorius*
western kingbird	*Tyrannus verticalis*
barn owl	*Tyto alba*
warbling vireo	*Vireo gilvus*
solitary vireo	*Vireo solitarius*
yellow-headed blackbird	*Xanthocephalus xanthocephalus*
mourning dove	*Zenaida macroura*
white-crowned sparrow	*Zonotrichia leucophrys*
Mammals	
whitetail antelope squirrel	*Ammospermophilus leucurus*
pronghorn	*Antilocapra americana*
pallid bat	*Antrozous pallidus*
pygmy rabbit	*Brachylagus idahoensis*
coyote	*Canis latrans*
beaver	*Castor canadensis*
golden-mantled squirrel	*Citellus lateralis*
Townsend's ground squirrel	*Citellus townsendi*
Merriam kangaroo rat	*Dipodomys merriami*
Great Basin kangaroo rat	*Dipodomys microps*
Ord kangaroo rat	*Dipodomys ordi*
panamint kangaroo rat	*Dipodomys panamintinus*
porcupine	*Erethizon dorsatum*
least chipmunk	*Eutamia minimus*
mountain lion	*Felis concolor*
sagebrush vole	*Lagurus curtatus*
silver-haired bat	*Lasionycteris noctivagans*
bobcat	*Lynx rufus*
yellowbelly marmot	*Marmota flaviventris*
striped skunk	*Mephitis mephitis*
dark kangaroo mouse	*Microdipodops megacephalus*
longtail vole	*Microtus longicaudus*
shorttail weasel	*Mustela erminea*
longtail weasel	*Mustela frenata*

Common Name	Scientific Name
California myotis	*Myotis californicus*
long-eared myotis	*Myotis evotis*
little brown myotis	*Myotis lucifugus*
small-footed myotis	*Myotis subulatus*
fringed myotis	*Myotis thysanodes*
cave myotis	*Myotis velifer*
long-legged myotis	*Myotis volans*
Yuma myotis	*Myotis yumanensis*
bushytail woodrat	*Neotoma cinerea*
desert woodrat	*Neotoma lepida*
mule deer	*Odocoileus hemionus*
muskrat	*Ondatra zibethica*
northern grasshopper mouse	*Onychomys leucogaster*
southern grasshopper mouse	*Onychomys torridus*
bighorn sheep	*Ovis canadensis*
longtail pocket mouse	*Perognathus formosus*
little pocket mouse	*Perognathus longimembris*
Great Basin pocket mouse	*Perognathus parvus*
canyon mouse	*Peromyscus crinitus*
deer mouse	*Peromyscus maniculatus*
pinyon mouse	*Peromyscus truei*
western pipistrel	*Pipistrellus hesperus*
Townsend's big-eared bat	*Plecotus townsendi*
raccoon	*Procyon lotor*
western harvest mouse	*Reithrodontomys megalotis*
Merriam shrew	*Sorex merriami*
vagrant shrew	*Sorex vagrans*
spotted skunk	*Spilogale putorius*
desert cottontail	*Sylvilagus auduboni*
blacktail jackrabbit	*Sylvilagus californicus*
mountain cottontail	*Sylvilagus nuttalli*
badger	*Taxidea taxus*
valley pocket gopher	*Thomomys bottae*
northern pocket gopher	*Thomomys talpoides*
red fox	*Vulpes fulva*
desert kit fox	*Vulpes macrotis*

Source: Erikson undated; U.S. Navy 1982a; BLM undated b; Bardwell 1987; Burt 1964; Stebbins 1985; National Geographic Society 1992; USFWS 1995



LEGEND:

- NAS Fallon and Ranges
- Wetlands
  - 1 = Riverine
  - 2 = Palustrine
  - 3 = Lacustrine

N

0 2.5 5

1" = 5MI. (APPROXIMATE)

Wetlands in the vicinity of NAS Fallon include several lakes, ponds, and streams.

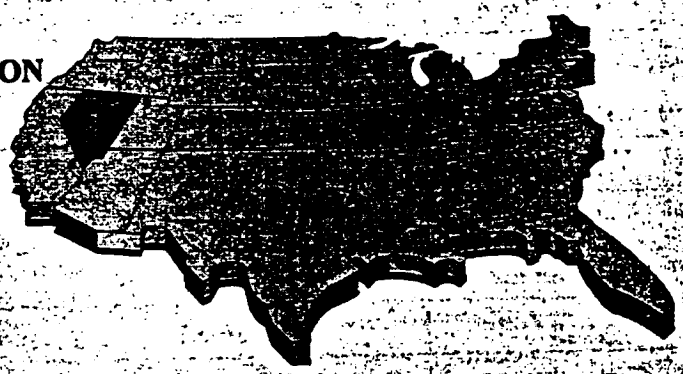
Regional Wetlands

NAS Fallon, Nevada

Figure F-1

Source: USFWS 1995

NAS
FALLON



APPENDIX G

ARCHEOLOGICAL SITES AND SURVEYS

APPENDIX G ARCHEOLOGICAL SITES AND SURVEYS

TABLE G-1
ARCHEOLOGICAL SITES LOCATED WITHIN NAS FALLON AND THE FRTC

Area	Site Number[a]	Investigation[b]	NRHP Status/ CRES Rating[c]	Bibliographic Reference
NAS	Ch-109/UC Ch-82/03-586	SC?	S0	UNK
NAS	Ch-911	UNK	S4?	Letter from Brooks
NAS	03-1829	OV	UNK	Townley 1977; Pendleton *et al.* 1982
NAS	03-1870	OV	UNK	Paher 1970; Harris 1973; Pendleton *et al.* 1982
NAS	Ch-1403 through -1411	SC	S2?	Busby *et al.* 1989
NAS	Ch-1412	SC	S3?	Busby *et al.* 1989
NAS	Ch-1413 through -1432	SC	S4	Busby *et al.* 1989
NAS	Ch-1433 through -1445	SC	Not rated	Busby *et al.* 1989
NAS	Ch-1775	T	–	Busby *et al.* 1992
NAS	Ch-1778 through -1781	S	–	Busby *et al.* 1992
NAS	Ch-1751, -1752	S	–	Stornetta 1991
NAS	I91-1	S	–	Busby *et al.* 1991
NAS	I91-2	S	–	Busby *et al.* 1991
B-16	Ch-84	AR	S0	Heizer & Baumhoff 1962; Napton 1971
B-16	Ch-101/UC Ch-72/03-578	AR	S4	Destroyed
B-16	Ch-964/03-3279	S	UNK	Pope 1983
B-16	I-1 through I-8	S	–	Stornetta 1992
B-16	Ch-1786, -1787	S	–	Stornetta 1992
B-19	Ch-110/UC Ch-83/03-587	SC	S0	Bennyhoff & Heizer 1958
B-19	Ch-112/UC Ch-83?/UC Ch-85/ 03-2197	AR	UNK	
B-19	Ch-943	S	UNK	May contain Ch-110 & -112
B-19	Ch-1015	S,IC	UNK	
B-19	03-1814	OV	UNK	Bailey & Phoenix 1944; Pendleton *et al.* 1982
B-19	03-3581	S,IC	UNK	

TABLE G-1
ARCHEOLOGICAL SITES LOCATED WITHIN NAS FALLON AND THE FRTC

Area	Site Number[a]	Investigation[b]	NRHP Status/ CRES Rating[c]	Bibliographic Reference
B-19	712-11,13,20,23,25 through 29, 30 through 33,35,37	3	–	TetraTech/ARS 1992b
B-19	712-6 through 10,12,14 through 19,21,22,24,36, 38-40	3	–	TetraTech/ARS 1992b
B-19	I-9, I-10	S	–	Stornetta 1992
B-17	CrNV-31-4454 through -4456	S	S3	Self 1993
B-17	Ch-197/03-1099	S	UNK	Rusco 1975
B-17	Ch-199/03-1283	S	UNK	Rusco 1975
B-17	Ch-606/03-1212	S,IC	S4	
B-17	Ch-1004/03-1166	S	UNK	Hatoff 1978
B-17	Ch-1005/03-1213	S	UNK	Hatoff 1979
B-17	03-1825	OV	UNK	Mordy & McCaughey 1968; Paher 1970; Shamberger 1974; Pendleton *et al.* 1982
B-17	03-1826	OV	UNK	Shamberger 1974; Pendleton *et al.* 1982
B-17	03-1827	OV	UNK	Pendleton *et al.* 1982
B-17	03-1844	OV	UNK	Shamberger 1974; Pendleton *et al.* 1982
B-17	03-1850	OV	UNK	Shamberger 1974; Willden & Speed 1974; Pendleton *et al.* 1982
B-17	03-1871	OV	UNK	Shamberger 1974; Pendleton *et al.* 1982
B-17	03-1889	OV	UNK	Shamberger 1974; Pendleton *et al.* 1982
B-17	03-3207	S	UNK	Hatoff 1982
B-17	03-3516	S	UNK	Botti 1985
B-17	03-3530	S	UNK	Hatoff 1985
B-17	03-3565	S,IC	UNK	Sutton 1985
B-17	03-3742/IMR 608-1	S	UNK	Juell 1987
B-17	03-3744 through -3747/ IMR 608-3 through -6	S	UNK	Juell 1987
B-17	None (Nevada Fairview Mine)	M	UNK	Hardesty, NSM, BLM maps

TABLE G-1
ARCHEOLOGICAL SITES LOCATED WITHIN NAS FALLON AND THE FRTC

Area	Site Number[a]	Investigation[b]	NRHP Status/ CRES Rating[c]	Bibliographic Reference
B-17	None (Donneyville Road)	M	UNK	Hardesty, NSM, BLM maps
B-17	None (Nevada Crown Mine)	M	UNK	Hardesty, NSM, BLM maps
B-17	None (3 rock shelters)	M	UNK	Hardesty, NSM, BLM maps
B-17	CRNV-3993	S	S4?	IMR 1988
B-17	Ch-1402	S	S4?	Reno 1989
B-17	712-1 through -3	S	-	TetraTech/ARS 1992a
B-17	712-4	S	-	TetraTech/ARS 1992b
B-17	712-5	3	-	TetraTech/ARS 1992b

(a) Site Number: Nevada State Museum (NSM) project numbers are written: 1-# or 18-#, where a "1" refers to Churchill County, and an 18 to Lyon County. Bureau of Land Management (BLM) project numbers are prefixed with a Cr3-. The "P" enclosed within parentheses at the end of the number refers to a positive result, i.e., one or more sites were located. UNK = Unknown.

(b) Investigation: AR = amateur report only, no know professional visitation or collections. DC = diagnostic collected. E = excavation. IC = isolate, collected. M = map location only. OV = overview only. RR = rock art record. SC = survey with collection. S = survey without collection. T = testing.

(c) NRHP Status/CRES Rating: S0 = insufficient data for evaluation. S1 = site has a clear potential for public instruction or for yielding scientific information of importance on the national, state or local level; has important connections with major historical events or personages; and/or possesses cultural value for segments of the modern population. Most aboriginal sites in this category are in relatively good condition and are either rare or unique (e.g. Early Man) or are large and particularly well-representative of their types (BLM 1985:14-15). S2 = criteria for S1 rating are only minimally met. Site is generally in good condition and additional work could lead to a reassessment. S2 sites are usually not unique or very rare, lack important historical association and are not particularly well-representative of their types. Aboriginal camps or villages which are large but do not have great antiquity and have only limited depth potential are suitable for this rating. Typical S2 historic sites include recently abandoned ranches, small mining camps, cemeteries, railbeds, roads and trails (BLM 1985:15). S3 = Sites with little depth, few or lacking features, and if old, are small, or if large, are comparatively recent and diffuse (BLM 1985:15). Site may have been damaged but some research potential remains. Sites not rated as S1 or S2 but which are wholly or partially intact will be given an S3 rating. Common S3 sites include: seasonal camps, hunting and gathering activity areas, isolated lithic or ceramic artifacts, chipping areas, lithic workshops and quarries, historic dumps, isolated historic buildings and other structures, and small mining operations. S4 = site has been destroyed as a result of vandalism, illicit collection, commercial development, or archeological collection or excavation. CRES ratings were derived from Pendleton *et al.* (1982).

TABLE G-2
CULTURAL RESOURCES SURVEYS CONDUCTED AT NAS FALLON

Area	NSM Number/Project Name	Sites/ Isolates	Reference
NAS	1-226	0/0	Crew 1984
NAS	1-89	2/0	Johnson 1982
NAS	Overview and Class III "Mainside"	0/0	Busby *et al.* 1989
NAS	Navy Family Housing Project	0/0	Busby *et al.* 1991
NAS	NV-030-91-08	1/1	Stornetta 1991
NAS	Test Drive Area: Tracked Vehicles	5/2	Busby & Harmon 1991
NAS	Stillwater Technical Report No. 1	0/0	Creger 1991
NAS	Optic Cable NAS Fallon Boundary	0/0	Intermountain Rsch 1987
16/20	1-32/Red Mountain Common Use Area	0/0	Buder & Bennett 1976
16/20	Range Debris Holding Areas	0/0	Hause 1990
B-16	1-105/Churchill County Sanitary Landfill	1/0	Pope 1983
16/19	Fencelines at Bravo 16 and 19	3/10	Stornetta 1992
B-16	Geothermal Test Holes	0/0	Hatoff & Ruhstaller 1977
19/20	1-49/Powerline ROW, N-16376	3/0	Hatoff & Ruhstaller 1977
B-19	1-133/Rolling A Well (JDR 6181)	0/0	Mabe 1981a
B-19	1-136/South Bass Flat Stock Water Store	0/0	Mabe 1981b
B-16	UNK	0/0	Hause 1990
B-16 B-17	Training Ranges B-17 & B-19 Ground Training Areas	712-4 to 714-40	TetraTech 1992b (Marken *et al.*)
B-17	Fenceline at B-17 Training Range	3/0	Self 1993
B-17	1-62/11-Mile-La Plata Fence (JDR 5124)	0/0	Abbett 1977
B-17	Laser Designator	0/0	Creger 1991
B-17	4 Proposed Electrical Warfare Range Installation	0/1	Stornetta 1988
B-17	Electrical Warfare Site #70 Instrument Route	1/0	Self 1991
B-17	206 Missile Landing Area	0/1	Self 1989
B-17	Targets on Range Bravo-17	1/0	Reno 1989
B-17	1-207/Bell Canyon Guzzler No. 3	0/0	Bardwell 1980a
B-17	1-210/GZ Canyon Guzzler No. 1	0/0	Bardwell 1980b

TABLE G-2
CULTURAL RESOURCES SURVEYS CONDUCTED AT NAS FALLON

Area	NSM Number/Project Name	Sites/ Isolates	Reference
B-17	1-119/Fairview Guzzler	0/0	Bardwell 1981a
B-17	1-121 Slate Mine Guzzler	0/0	Bardwell 1981b
B-17	1-55/Geothermal Resource Exploration	0/0	Bennett 1977
B-17	U.S. Energy Corp. Roys Point to Dixie Valley	1/4	Botti 1985
B-17	1-94/4 Pits from 8 Miles East of Salt Wells	2/1	Bunch 1982a
B-17	1-149/U.S. 50 Betterment	0/0	Bunch *et al.* 1982b
B-17	1-40/Geothermal Resource Exploration 030-31	0/0	Hatoff 1977
B-17	1-234/Lizard Study Plot Fence - Dixie Valley	1/0	Hatoff 1978
B-17	1-196/Hunt Energy NOI N3-07-79	0/0	Hatoff 1979a
B-17	1-237/LaBeau-Navy Fence	1/0	Hatoff 1979b
B-17	1-213/Proposed Material Sale, Bell Canyon	0/0	Hatoff 1980
B-17	Electronics Warfare, Frenchman	1/0	Hatoff 1982
B-17	1-159/Frenchman Flat Electronic Warfare	0/0	Hatoff 1983
B-17	1-169/North Well Holding Field (JDR-6334)	0/0	Hatoff 1984
B-17	Frenchman Pasture Fence (JDR 6358)	0/1	Hatoff 1985
B-17	Chalk Mountain Pipeline Extension (JDR 6453)	0/0	Hatoff 1987
B-17	1-202/Bell Canyon Guzzler No. 1	0/0	Jacquet & Bardwell 1979
B-17	Electronic Warfare Range, etc.	7/1	Juell 1987
B-17	1-223/Frenchman Stn Storage & Facilities	0/0	Mabe 1980
B-17	1-123/Bell Canyon Drift Fence (JDR 6164)	0/0	Mabe 1981a
B-17	1-124/East Frenchman Stock Water Storage	0/0	Mabe 1981b
B-17	1-144/Black Knob Pipeline No. 2 (JDR 6199)	0/0	O'Brien 1982
B-17	1-150/Electronic Warfare Range Site	0/0	Pope 1982
B-17	Right-of-Way Reservation, N-45136	0/0	Pope 1987
B-17	1-197/SCS-BLM Soil Test Pits, Fairview Valley	0/0	Ratzlaff 1980
B-17	1-5-1/Material Site Exploration Site Ch 197	N/A	Rusco 1975a
B-17	1-5-2,75/Dixie Valley ROW	2/0	Rusco 1975b
B-17	Oxbow Geothermal Dixie Valley Alternate Route	1/3	Sutton 1985

TABLE G-2
CULTURAL RESOURCES SURVEYS CONDUCTED AT NAS FALLON

Area	NSM Number/Project Name	Sites/ Isolates	Reference
B-17	Proposed Mock Airfield Complex	0/3	TetraTech 1992a
B-17	1-225/23 Proposed Geothermal Wells	0/0	Toll 1980
B-17	Oxbow R/W Realignment	0/0	Juell 1987a
B-17	EW Range Improvements	3/0	Intermountain Rsch 1987
DVA	US 50 Betterment	0/0	Seldomridge 1986
DVA	Grimes Point to Sand Spring	0/0	Matranga 1982
DVA	US 50 Betterment Labou Flat	0/0	Matranga 1980
DVA	SW Frenchman Stock Water	0/0	Mabe 1984
DVA	Bell Mountain Mine	0/0	Armentrout 1981
DVA	Oxbow Geothermal Staging Areas	1/0	Simmons 1987
DVA	EW Threat Simulators	0/0	Drews 1985
DVA	Oxbow Access Roads	0/0	Pierce 1987

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
4636	11 - 5	1994	Prehistoric	Lithic Scatter	Eligible
4637	11 - 6	1994	Prehistoric	Lithic Scatter	Not Eligible
4638	11 - 7	1994	Prehistoric	Lithic Scatter	Not Eligible
4639	11 - 8	1994	Prehistoric	Lithic Scatter	Not Eligible
4640	19-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4641	22-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4642	23-1	1994	Historic	Historical Mining	Not Eligible
4643	24-1	1994	Historic	Historical Scatter	Not Eligible
4644	24-2	1994	Prehistoric	Lithic Scatter	Not Eligible
4645	24-3	1994	Prehistoric	Lithic/Groundstone Scatter w/features	Eligible
4646	24-4	1994	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4647	24-5	1994	Prehistoric	Lithic Scatter	Not Eligible
4648	24-6	1994	Prehistoric	Lithic Scatter	Not Eligible
4649	24-7	1994	Prehistoric		Eligible
4650	24-8	1994	Prehistoric	Lithic Scatter	Not Eligible
4651	25-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4652	25-2	1994	Prehistoric	Lithic/Groundstone Scatter/Quarry	Not Eligible
4653	25-3	1994	Historic	Lithic Scatter/Quarry	Not Eligible
4654	25-4	1994	Prehistoric	Lithic Scatter	Not Eligible
4655	25-5	1994	Prehistoric/	Lithic/Groundstone Scatter	Eligible
4656	25-6	1994	Prehistoric	Lithic Scatter	Not Eligible
4657	25-7	1994	Prehistoric	Lithic Scatter	Not Eligible
4658	25-8	1994	Prehistoric	Lithic Scatter	Not Eligible
4659	25-9	1994	Prehistoric	Lithic Scatter	Not Eligible
4660	25-10	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible
4661	25-11	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
3532	7-1*	1994	Prehistoric	Hist. Habitation and Lithic/ Groundstone	Not Eligible
4613	3-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4614	3-2	1994	Prehistoric	Lithic Scatter	Not Eligible
4615	3-3	1994	Prehistoric	Lithic Scatter	Not Eligible
4616	3-4	1994	Prehistoric	Lithic Scatter	Not Eligible
4617	3-5	1994	Prehistoric	Lithic Scatter	Not Eligible
4618	4-1	1994	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4619	4-2	1994	Prehistoric	Lithic/Groundstone Scatter w/features	Not Eligible
4620	4-3	1994	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4621	4-4	1994	Prehistoric	Groundstone Scatter	Not Eligible
4622	4-5	1994	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4623	4-6*	1994	Prehistoric	Lithic/Groundstone Scatter w/features	Eligible
4624	5 - 1	1994	Prehistoric	Lithic/Groundstone Scatter w/features	Not Eligible
4625	5-2	1994	Prehistoric	Lithic Scatter	Not Eligible
4626	5-3	1994	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4627	5-4	1994	Prehistoric	Lithic/Groundstone Scatter w/features	Not Eligible
4628	4-5	1994	Prehistoric	Lithic Scatter	Not Eligible
4629	5-6	1994	Prehistoric	Lithic Scatter	Not Eligible
4630	43-2	1994	Historic	Historical Mining	Not Eligible
4631	10 - 1	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible
4632	11 - 1	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible
4633	11 - 2	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible
4634	11 - 3	1994	Prehistoric	Lithic Scatter	Not Eligible
4635	11 - 4	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
4662	25-12	1994	Prehistoric	Lithic Scatter/Quarry	Not Eligible
4663	26-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4664	28-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4665	28-2	1994	Prehistoric	Lithic Scatter	Eligible
4666	30-1	1994	Prehistoric	Lithic Scatter	Not Eligible
4667	30-2	1994	Prehistoric	Lithic Scatter	Not Eligible
4668	30-3	1994	Prehistoric	Lithic Scatter	Not Eligible
4669	30-4	1994	Prehistoric	Lithic Scatter	Not Eligible
4670	34-1	1994	Historic	Historical Habitation Site	Not Eligible
4671	39-1	1994	Historic	Historical Scatter	Not Eligible
4672	39-2	1994	Prehistoric	Lithic Scatter	Not Eligible
4673	41-1	1994	Historic	Historical Mining	Not Eligible
4674	43-1	1994	Historic	Historical Mining	Not Eligible
4712	1-1	1993	Prehistoric	Lithic Scatter	Not Eligible
4713	1-2	1993	Prehistoric	Isolate	Not Eligible
4714	1-3	1993	Prehistoric	Isolate	Not Eligible
4715	1-4	1993	Prehistoric	Isolate	Not Eligible
4716	1-5	1993	Prehistoric	Lithic Scatter	Not Eligible
4717	2-1	1993	Prehistoric	Lithic Scatter	Not Eligible
4718	2-2	1993	Prehistoric	Lithic Scatter	Not Eligible
4719	2-3	1993	Prehistoric	Lithic Scatter	Not Eligible
4720	3-1	1993	Prehistoric	Lithic/Groundstone Scatter w/features	Eligible
4721	3-2	1993	Prehistoric	Lithic/Groundstone Scatter w/features	Eligible
4722	3-3	1993	Prehistoric	Lithic/Groundstone Scatter	Eligible
4723	8-1	1993	Prehistoric	Lithic/Groundstone Scatter	Not Eligible
4724	8-2	1993	Prehistoric	Isolate	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
4725	10-1	1993	Prehistoric	Isolate	Not Eligible
4726	11-1	1993	Prehistoric	Lithic Scatter	Not Eligible
4727	11-2	1993	Prehistoric	Isolate	Not Eligible
4728	11-3	1993	Prehistoric	Lithic Scatter	Not Eligible
4729	11-4	1993	Prehistoric	Lithic Scatter	Not Eligible
4730	11-5	1993	Prehistoric	Lithic Scatter	Not Eligible
4731	12-1	1993	Prehistoric	Lithic Scatter	Not Eligible
4732	23-2	1994	Historic	Historical Mining	Not Eligible
	1-IF1	1993	Historic	Isolate	Not Eligible
	1-IF2	1993	Prehistoric	Isolate	Not Eligible
	2-IF1	1993	Prehistoric	Isolate	Not Eligible
	2-IF2	1993	Prehistoric	Isolate	Not Eligible
	2-IF3	1993	Prehistoric	Isolate	Not Eligible
	2-IF4	1993	Prehistoric	Isolate	Not Eligible
	2-IF5	1993	Prehistoric	Isolate	Not Eligible
	3-IF1	1993	Prehistoric	Isolate	Not Eligible
	3-IF2	1993	Prehistoric	Isolate	Not Eligible
	3-IF3		Prehistoric	Isolate	Not Eligible
	3-IF4	1993	Prehistoric	Isolate	Not Eligible
	3-IF5	1993	Prehistoric	Isolate	Not Eligible
	3-IF6	1993	Prehistoric	Isolate	Not Eligible
	3-IF7	1993	Prehistoric	Isolate	Not Eligible
	3-IF8		Prehistoric	Isolate	Not Eligible
	3-IF9		Prehistoric	Isolate	Not Eligible
	3-IF10		Prehistoric	Isolate	Not Eligible
	3-IF11		Prehistoric	Isolate	Not Eligible
	3-IF12		Prehistoric	Isolate	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
	3-IF13		Prehistoric	Isolate	Not Eligible
	3-IF14		Prehistoric	Isolate	Not Eligible
	4-IF1		Prehistoric	Isolate	Not Eligible
	4-IF2		Prehistoric	Isolate	Not Eligible
	4-IF3		Prehistoric	Isola te	Not Eligible
	4-IF4		Prehistoric	Isolate	Not Eligible
	4-IF5		Prehistoric	Isolate	Not Eligible
	4-IF6		Prehistoric	Isolate	Not Eligible
	4-IF7	1993	Prehistoric	Isolate	Not Eligible
	4-IF8		Prehistoric	Isolate	Not Eligible
	4-IF9		Prehistoric	Isolate	Not Eligible
	4-IF10		Prehistoric	Isolate	Not Eligible
	5-IF1		Prehistoric	Isolate	Not Eligible
	5-IF2		Prehistoric	Isolate	Not Eligible
	5-IF3		Prehistoric	Isolate	Not Eligible
	5-IF4		Prehistoric	Isolate	Not Eligible
	5-IF5		Prehistoric	Isolate	Not Eligible
	5-IF6		Prehistoric	Isolate	Not Eligible
	6-IF1	1993	Prehistoric	Isolate	Not Eligible
	7-IF1	1993	Prehistoric	Isolate	Not Eligible
	7-IF2	1993	Prehistoric	Isolate	Not Eligible
	7-IF3	1993	Prehistoric	Isolate	Not Eligible
	7-IF4	1993	Prehistoric	Isolate	Not Eligible
	8-IF1	1993	Prehistoric	Isolate	Not Eligible
	8-IF2	1993	Prehistoric	Isolate	Not Eligible
	8-IF3	1993	Prehistoric	Isolate	Not Eligible
	10-IF1	1993	Prehistoric	Isolate	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS) ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
	10-IF2	1993	Prehistoric	Isolate	Not Eligible
	10-IF3	1993	Prehistoric	Isolate	Not Eligible
	10-IF4	1993	Prehistoric	Isolate	Not Eligible
	10-IF5	1993	Prehistoric	Isolate	Not Eligible
	10-IF6	1993	Prehistoric	Isolate	Not Eligible
	10-IF7	1993	Prehistoric	Isolate	Not Eligible
	10-IF8	1993	Prehistoric	Isolate	Not Eligible
	10-IF9	1993	Prehistoric	Isolate	Not Eligible
	11-IF1		Prehistoric	Isolate	Not Eligible
	11-IF2	1993	Prehistoric	Isolate	Not Eligible
	11-IF3	1993	Prehistoric	Isolate	Not Eligible
	11-IF4	1993	Prehistoric	Isolate	Not Eligible
	11-IF5	1993	Prehistoric	Isolate	Not Eligible
	11-IF6		Prehistoric	Isolate	Not Eligible
	11-IF7		Prehistoric	Isolate	Not Eligible
	11-IF9		Prehistoric	Isolate	Not Eligible
	11-IF10		Prehistoric	Isolate	Not Eligible
	11-IF11		Historic	Isolate	Not Eligible
	12-IF1	1993	Prehistoric	Isolate	Not Eligible
	12-IF2	1993	Prehistoric	Isolate	Not Eligible
	12-IF3	1993	Prehistoric	Isolate	Not Eligible
	13-IF1	1993	Prehistoric	Isolate	Not Eligible
	13-IF2	1993	Prehistoric	Isolate	Not Eligible
	16-IF1	1994	Prehistoric	Isolate	Not Eligible
	16-IF2	1994	Prehistoric	Isolate	Not Eligible
	19-IF1		Prehistoric	Isolate	Not Eligible
	22-IF1		Historic	Isolate	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV 81-	Temp. Field No.				
	22-IF2		Prehistoric	Isolate	Not Eligible
	22-IF3		Prehistoric	Isolate	Not Eligible
	23-IF1		Prehistoric	Isolate	Not Eligible
	23-IF2		Historic	Isolate	Not Eligible
	24-IF1		Prehistoric	Isolate	Not Eligible
	24-IF2		Prehistoric	Isolate	Not Eligible
	24-IF3		Prehistoric	Isolate	Not Eligible
	24-IF4		Prehistoric	Isolate	Not Eligible
	24-IF5		Prehistoric	Isolate	Not Eligible
	24-IF6		Prehistoric	Isolate	Not Eligible
	24-IF7		Historic	Isolate	Not Eligible
	24-IF8		Prehistoric	Isolate	Not Eligible
	24-IF9		Prehistoric	Isolate	Not Eligible
	24-IF10		Prehistoric	Isolate	Not Eligible
	24-IF11		Prehistoric	Isolate	Not Eligible
	24-IF12		Prehistoric	Isolate	Not Eligible
	25-IF1		Historic	Isolate	Not Eligible
	25-IF2		Historic	Isolate	Not Eligible
	27-IF1		Prehistoric	Isolate	Not Eligible
	28-IF1		Prehistoric	Isolate	Not Eligible
	29-IF1		Prehistoric	Isolate	Not Eligible
	29-IF2		Historic	Isolate	Not Eligible
	30-IF1		Prehistoric	Isolate	Not Eligible
	30-IF2		Prehistoric	Isolate	Not Eligible
	30-IF3		Prehistoric	Isolate	Not Eligible
	30-IF4		Prehistoric	Isolate	Not Eligible
	30-IF5		Prehistoric	Isolate	Not Eligible

TABLE G-3
LIST OF SITES IN SAMPLED AREAS OF TOEDOKADO TERRITORY (ON NAVY LANDS)
ARCHEOLOGICAL SITE PREDICTION MODEL

Site Number		Survey Year	Site Class	Site Description	National Register Status
BLM CrNV-81-	Temp. Field No.				
	31-IF1		Prehistoric	Isolate	Not Eligible
	31-IF2		Historic	Isolate	Not Eligible
	34-IF1		Prehistoric	Isolate	Not Eligible
	34-IF2		Historic	Isolate	Not Eligible
	34-IF3		Prehistoric	Isolate	Not Eligible
	34-IF4		Historic	Isolate	Not Eligible
	37-IF1		Prehistoric	Isolate	Not Eligible
	37-IF2		Historic	Isolate	Not Eligible
	38-IF1		Historic	Isolate	Not Eligible
	38-IF2		Historic	Isolate	Not Eligible
	39-IF1		Historic	Isolate	Not Eligible
	39-IF2		Historic	Isolate	Not Eligible
	39-IF3		Historic	Isolate	Not Eligible
	39-IF4		Historic	Isolate	Not Eligible
	41-IF1		Historic	Isolate	Not Eligible
	42-IF1	1994	Prehistoric	Isolate	Not Eligible
	42-IF2	1994	Historic	Isolate	Not Eligible
	42-IF3	1994	Historic	Isolate	Not Eligible
	42-IF4	1994	Historic	Isolate	Not Eligible
	42-IF5	1994	Historic	Isolate	Not Eligible
	42-IF6	1994	Historic	Isolate	Not Eligible
	42-IF7	1994	Historic	Isolate	Not Eligible
	43-IF1		Prehistoric	Isolate	Not Eligible
	43-IF2		Prehistoric	Isolate	Not Eligible
	44-IF1	1994	Prehistoric	Isolate	Not Eligible
	44-IF2	1994	Prehistoric	Isolate	Not Eligible

Source: Intermountain Research 1995, 1997
* site previously recorded

NAS
FALLON

APPENDIX H

MINING CLAIMS

APPENDIX H MINING CLAIMS

In Nevada, all patented and unpatented mining claims must be filed with the Bureau of Land Management State Office in Reno and the county in which the claim was made. The BLM State Office maintains a database of mining claims that includes the claim name, the current status of the claim, its location date, and its location by township, range, section, and subdivision. Information on the current number and location of patented and unpatented mining claims was obtained from this database.

Data on township, range, section, and subdivision were compared to the withdrawal area to determine which claims fell within the proposed land withdrawal footprint. The location date was used to determine which claims were located after the lands were closed to mineral entry. An assessment was performed to determine whether claims are located on land segregated in 1982 or land segregated in 1992. Finally, the claim was compared to the proposed withdrawal area to determine its location in reference to the ranges and Category A and B lands. Table H-1 lists the patented claims and Table H-2 list the unpatented claims located in the withdrawal area. The general locations of the patented and unpatented claims thought to be active in the entire withdrawal area are shown on Figure H-1.

TABLE H-1. PATENTED MINING CLAIMS

Township	Range	Section	Claim Name	Patent Number	M.S. Number	Location/ Category
Alternatives I, II, and III						
15N	34E	7,18	Bluff Gold Coin Gold Coin 1 Gold Coin 2 Fraction	289653	3914	B-17/ Category A
16N	34E	17	Detroit Tiger	47231	2745	B-17/ Category A
16N	34E	17	Florence #3 Blue Bell Little Fellow	47230	2668	B-17/ Category A
16N	34E	17	Ohio Ohio No. 1	83149	3206	B-17/ Category A
16N	34E	17	Great Falls	149254	3752	B-17/ Category A
16N	34E	16	Lookout No. 2	90643	3383	B-17/ Category A
Alternatives I and III						
19N	34E	32	Golden Dawn No. 2 Golden Dawn No. 3	17330	3671	Dixie Valley/ Category B
Alternative I						
19N	34E	36	Bumble Bee Grey Horse Grey Horse 1 Grey Horse 2 Triangle Fraction Kingstone	252474	3425	Dixie Valley/ Category B
19N	34E(35E)	36(31)	Spider Wasp Tony Pah Long Nel Last Chance	29199	3064	Dixie Valley/ Category B
19N	34E(35E)	36(31)	Silver Tip Valley View Pan Handle Yellow Jacket	104739	3398	Dixie Valley/ Category B
19N	34E(35E)	25,36(30)	Navadan Little Witch	104739	3398	Dixie Valley/ Category B
19N	34E(35E)	25(30)	Lost Chord King Midas King Midas 1 King Midas 2 King Midas 3	263382	3885	Dixie Valley/ Category B
19N	34E(35E)	25(30)	Great Eastern 1 Great Eastern 3 Great Eastern 4	32958	3122	Dixie Valley/ Category B

Source: Nevada State Office of the Bureau of Land Management, Reno, Mining Claim Database

TABLE H-2. UNPATENTED MINING CLAIMS

Township	Range	Section	Subdivision	Serial Number	Claim Name	Location Date	Segregation Date	Status	Location/ Category
19N	35E	30	SE	71571	Treasure Hill #1064	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30(31)	SE(NE)	71572	Treasure Hill #1065	5/16/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	31	NE	75282	Treasure Hill #1066	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	31	NE	75283	Treasure Hill #1067	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30(31)	SE(NE,SE)	71573	Treasure Hill #1068	5/16/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30	SE	71575	Treasure Hill #1070	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	31	NE	75284	Treasure Hill #1072	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	31	NE	75285	Treasure Hill #1073	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30(31)	SE(NE)	75286	Treasure Hill #1074	5/16/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30	SE	75287	Treasure Hill #1075	6/7/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30	SE,SW	75288	Treasure Hill #1076	6/7/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30(31)	SE,SW(NE,NW)	75289	Treasure Hill #1077	5/16/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	31	NE,NW	75290	Treasure Hill #1078	6/6/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30	SW	75294	Treasure Hill #1082	6/7/79	9/20/82	Rental paid 1997	DV/B[1]
19N	35E	30	SW	75295	Treasure Hill #1083	6/7/79	9/20/82	Rental paid 1997	DV/B[1]
19N	34E	25(30)	SE(SW)	75301	Treasure Hill #1097	6/7/79	9/20/82	Rental paid 1997	DV/B[2]
17N	27E	11	NW,SW	100065	Wildhorse #2	8/28/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11	NW	100066	Wildhorse #3	8/28/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11	NW	100067	Wildhorse #4	8/28/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	10(11)	NE,SE(NW,SW)	100071	Wildhorse #8	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	10(11)	SE(NW,SW)	100072	Wildhorse #9	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	10(11)	SE(NW,SW)	100073	Wildhorse #10	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11	SW	100074	Wildhorse #11	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11	SW	100075	Wildhorse #12	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11(14)	SW(NW)	100076	Wildhorse #13	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14	NW	100077	Wildhorse #14	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14	NW,SW	100078	Wildhorse #15	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14	SW	100079	Wildhorse #16	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14(15)	NW,SW(NE,SE)	100080	Wildhorse #17	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14(15)	SW(SE)	100081	Wildhorse #18	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	15	SE	100082	Wildhorse #19	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	14	SW	100083	Wildhorse #20	10/24/52	9/20/82	Small miner certification filed in 1996	B-16/B[1]
17N	27E	11	NW,NE,SW	100064	Wildhorse #1	8/28/52	9/20/82	Small miner certification filed in 1996	B-16/A[1]

Township	Range	Section	Subdivision	Serial Number	Claim Name	Location Date	Segregation Date	Status	Location/ Category
17N	27E	11	ALL	100068	Wildhorse #5	8/28/52	9/20/82	Small miner certification filed in 1996	B-16/A[1]
15N	34E	31	SE	66425	Lucky Four #1	3/1/70	9/20/82	Small miner certification filed in 1996	B-17/A
16N	34E	16	NW	628404	Red Baron	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	NE,NW	628405	Black Hawk	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	NW	628406	Inca	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	NW	628408	Red Baron #1	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	NE,NW	628409	Peggy	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628414	Silver Bow #4	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628416	Aztec #2	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628417	Aztec #3	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628418	Silver Hill	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628419	Maya #1	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628420	Maya #2	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628421	Nancy	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628422	Lode King	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628423	Hard Rock	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	16	SW	628424	Jan	7/29/91	9/8/92	Deferment granted 1996; deferment request 1997	B-17/A
16N	34E	8	SE	628399	Toltec #1	7/29/91	9/8/92	Deferment requested 1996	B-17/A
16N	34E	8(9)	SE(SW)	628400	Toltec #2	7/29/91	9/8/92	Deferment requested 1996	B-17/A
16N	34E	9	SW	628401	Pick Handle	7/29/91	9/8/92	Deferment requested 1996	B-17/A

Source: Nevada State Office of the Bureau of Land Management, Reno, Mining Claim Database
Notes: Data in parentheses indicates claims located in more than one section or subdivision.
DV = Dixie Valley
[1]This claim is located on land to be withdrawn under Alternative I only.
[2]This claim is located on land to be withdrawn under Alternatives I and III only.
The Payne and Baughman claims being contested have been declared null and void.

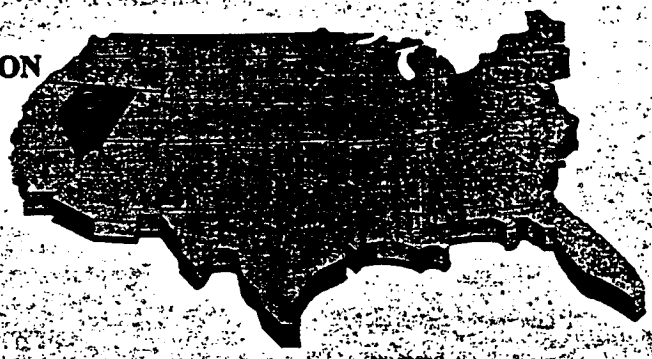
TABLE H-2. UNPATENTED MINING CLAIMS

Serial Number	Claim Name	Owner
71571	Treasure Hill #1064	Clark Wood
71572	Treasure Hill #1065	Covecrest Properties
75282	Treasure Hill #1066	Lynn Erickson
75283	Treasure Hill #1067	Lynn Erickson
71573	Treasure Hill #1068	William Jackson
71575	Treasure Hill #1070	Lynn Erickson
75284	Treasure Hill #1072	Jan Prahm
75285	Treasure Hill #1073	Lynn Erickson
75286	Treasure Hill #1074	Lynn Erickson
75287	Treasure Hill #1075	Lynn Erickson
75288	Treasure Hill #1076	Lynn Erickson
75289	Treasure Hill #1077	Lynn Erickson
75290	Treasure Hill #1078	Lynn Erickson
75294	Treasure Hill #1082	Lynn Erickson
75295	Treasure Hill #1083	Lynn Erickson (I think)
75301	Treasure Hill #1097	Lynn Erickson (I think)
100065	Wildhorse #2	Stephen Campbell
100066	Wildhorse #3	Stephen Campbell
100067	Wildhorse #4	Stephen Campbell
100071	Wildhorse #8	Stephen Campbell
100072	Wildhorse #9	Stephen Campbell
100073	Wildhorse #10	Stephen Campbell
100074	Wildhorse #11	Stephen Campbell
100075	Wildhorse #12	Stephen Campbell
100076	Wildhorse #13	Stephen Campbell
100077	Wildhorse #14	Stephen Campbell
100078	Wildhorse #15	Stephen Campbell
100079	Wildhorse #16	Stephen Campbell
100080	Wildhorse #17	Stephen Campbell
100081	Wildhorse #18	Stephen Campbell
100082	Wildhorse #19	Stephen Campbell
100083	Wildhorse #20	Stephen Campbell
100064	Wildhorse #1	Stephen Campbell
100068	Wildhorse #5	Stephen Campbell
66425	Lucky Four #1	Clive Gurr
628404	Red Baron	Nick Holden/BB McMahen
628405	Black Hawk	Nick Holden/BB McMahen
628406	Inca	Nick Holden/BB McMahen
628408	Red Baron #1	Nick Holden/BB McMahen
628409	Peggy	Nick Holden/BB McMahen
628414	Silver Bow #4	Nick Holden/BB McMahen
628416	Aztec #2	Nick Holden/BB McMahen
628417	Aztec #3	Nick Holden/BB McMahen
628418	Silver Hill	Nick Holden/BB McMahen
628419	Maya #1	Nick Holden/BB McMahen
628420	Maya #2	Nick Holden/BB McMahen

Serial Number	Claim Name	Owner
628421	Nancy	Nick Holden/BB McMahen
628422	Lode King	Nick Holden/BB McMahen
628423	Hard Rock	Nick Holden/BB McMahen
628424	Jan	Nick Holden/BB McMahen
628399	Toltec #1	Nick Holden/BB McMahen
628400	Toltec #2	Nick Holden/BB McMahen
628401	Pick Handle	Nick Holden/BB McMahen

Many of the Treasure Hill properties are owned by different groups of people. Lynn Erickson's name is the most common.
The Payne and Baughman claims being contested have been declared null and void.

NAS
FALLON

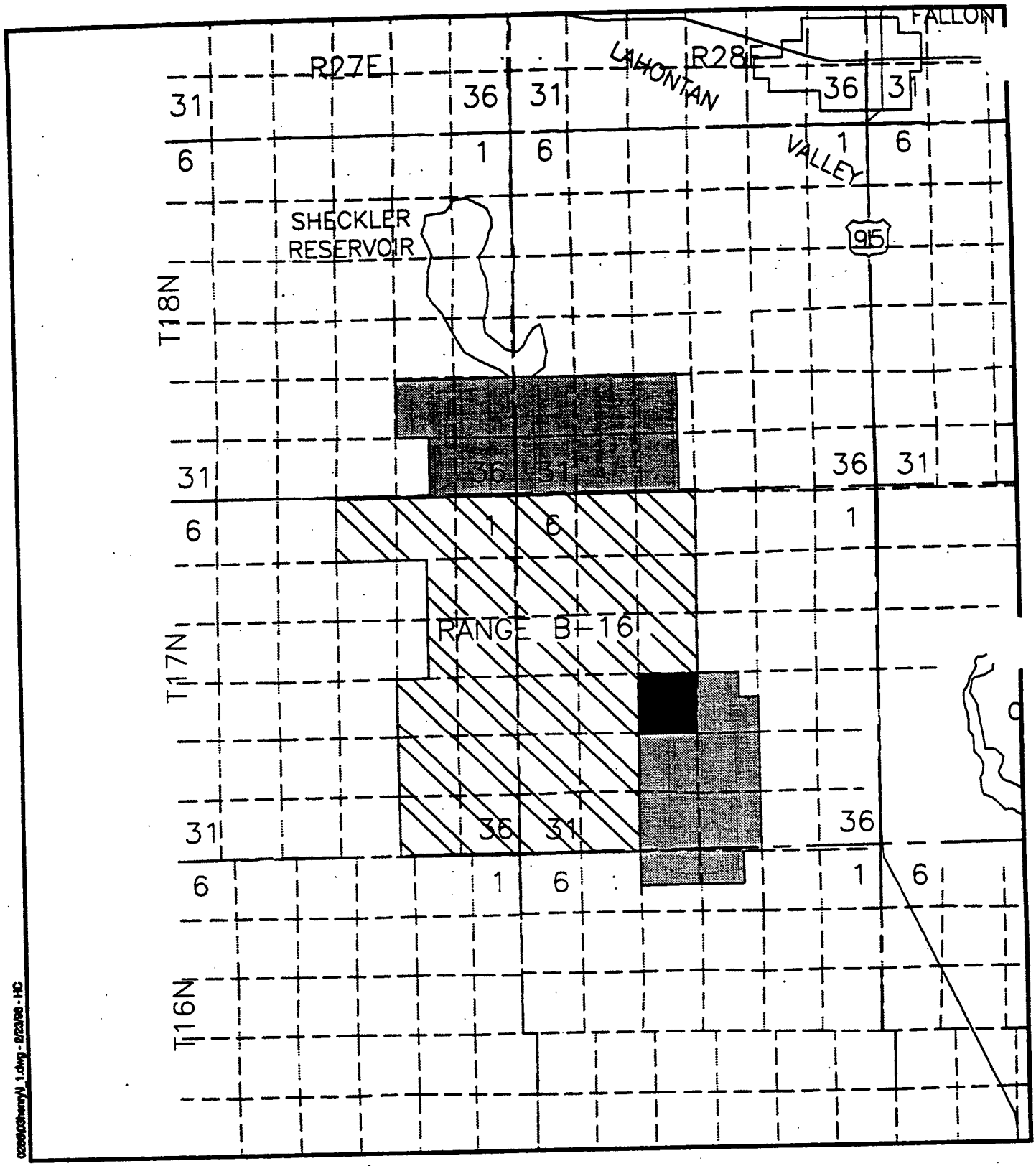


APPENDIX I

DETAILED MAPS

APPENDIX I DETAILED MAPS

Appendix I provides more detailed graphics of the withdrawal footprint for the five areas proposed for withdrawal—the B-16 withdrawal area, the B-17 withdrawal area, the B-19 withdrawal area, the Dixie Valley withdrawal area, and the shoal site withdrawal area.



The preferred alternative would withdraw approximately 10,400 acres. About 640 acres would be managed as Category A land.

Legend:

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Existing Range B-16
- Section Boundaries

N

0 1 2

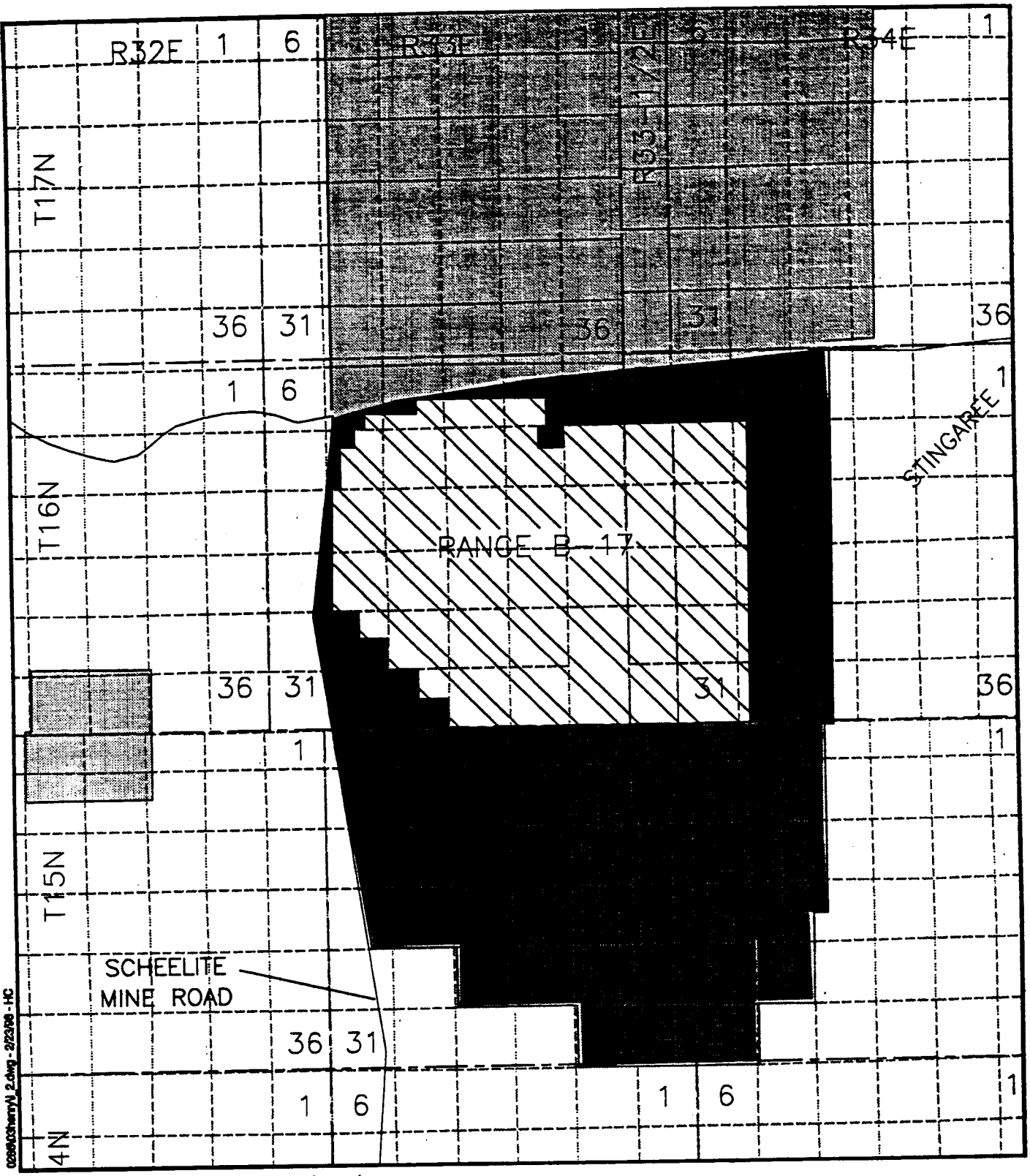
Approximate 1" = 1 mi.

Source: US Navy, 1996

B-16 Withdrawal Area

NAS Fallon, Nevada

Figure I-1



The preferred alternative would withdraw approximately 33,400 acres. About 33,300 acres would be managed as Category A land.

Legend:

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Existing Range B-17
- Section Boundaries

N

0 1 2

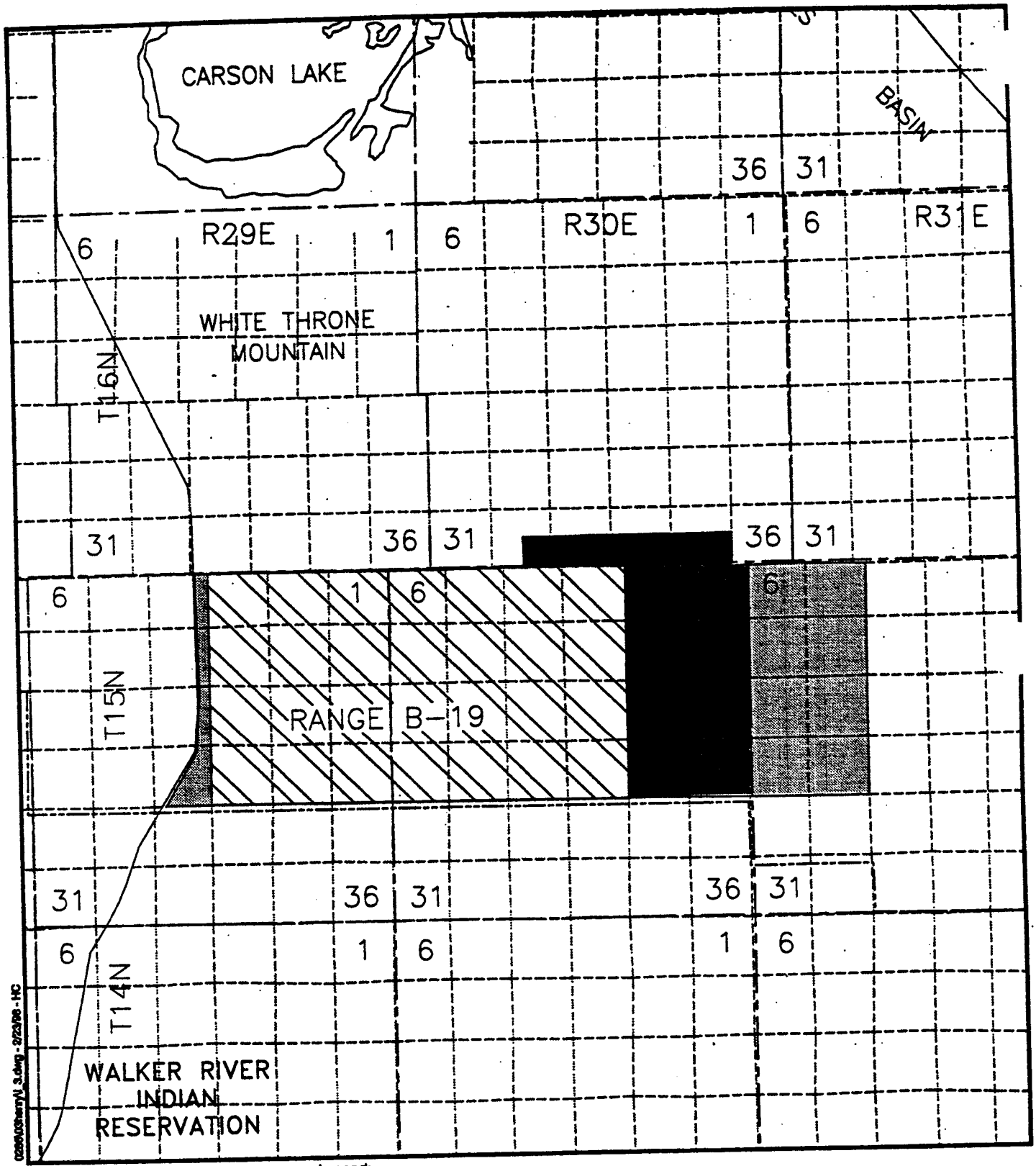
Approximate 1" = 1 mi.

Source: US Navy, 1996

B-17 Withdrawal Area

NAS Fallon, Nevada

Figure I-2



The preferred alternative would withdraw approximately 12,200 acres. About 6,400 acres would be managed as Category A land.

Legend:

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Walker River Indian Reservation Boundary
- Existing Range B-19
- Section Boundaries

N

0 1 2

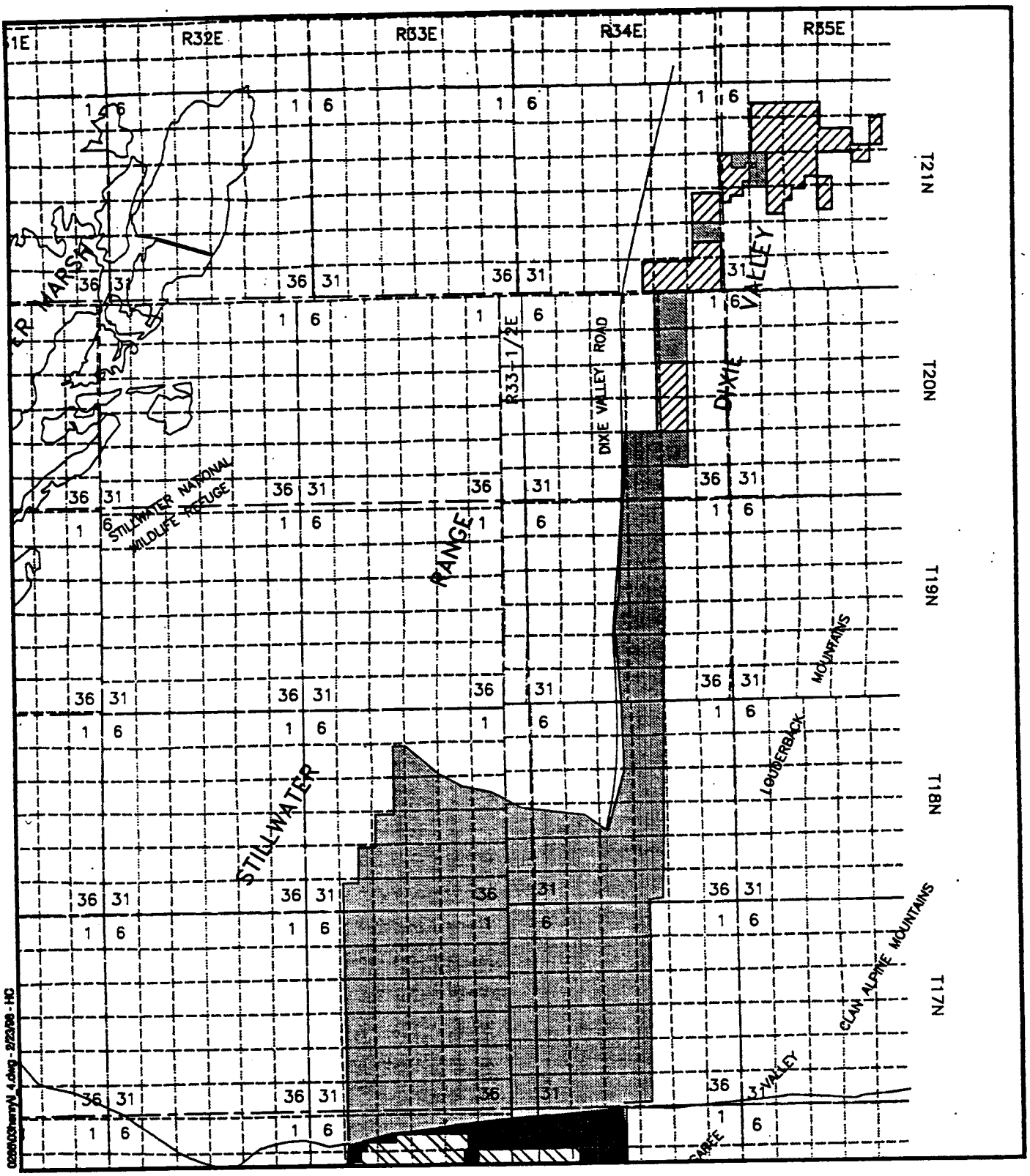
Approximate 1" = 1 mi.

Source: US Navy, 1996

B-19 Withdrawal Area

NAS Fallon, Nevada

Figure I-3



The preferred alternative would withdraw approximately 68,600 acres. All lands would remain open to public access and managed as Category B land.

Legend:

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Section Boundaries

0 1.5 3

Approximate 1" = 1 mi.

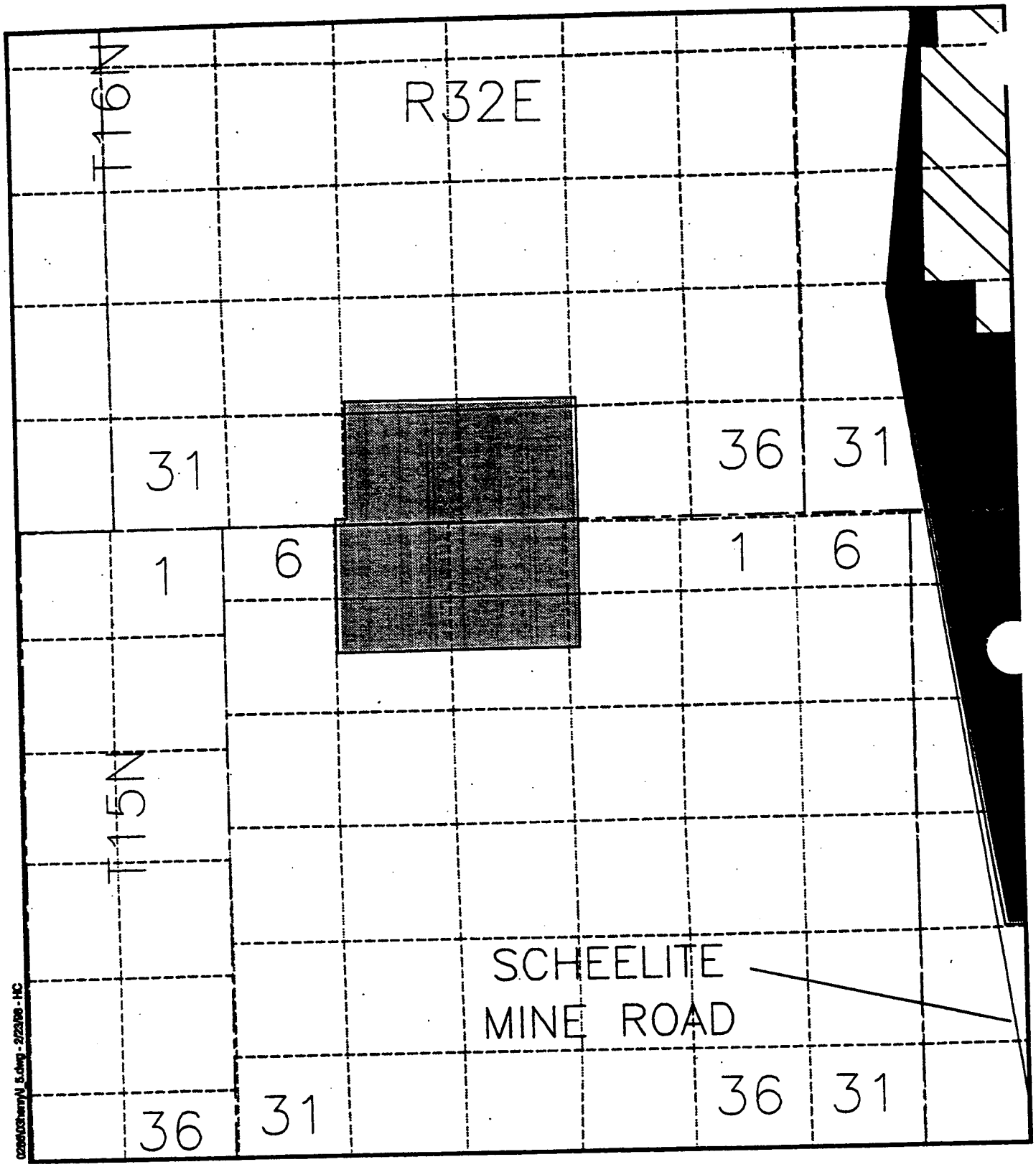
N

Source: US Navy, 1996

Dixie Valley Withdrawal Area

NAS Fallon, Nevada

Figure I-4



The preferred alternative would withdraw approximately 2,765 acres. All land would remain open to public access and managed as Category B land.

Legend:

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Section Boundaries

N

0 0.5 1

Approximate 1" = 1 mi.

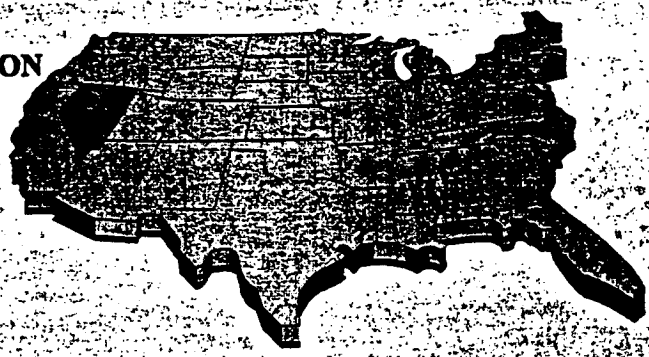
Source: US Navy, 1996

Shoal Withdrawal Area

NAS Fallon, Nevada

Figure I-5

NAS
FALLON



APPENDIX J

RESOURCE MANAGEMENT PLAN

APPENDIX J RESOURCE MANAGEMENT PLAN

Appendix J includes the plan, described in Section 2.3.2 of the EIS and analyzed in Chapter 4 of the EIS, that will govern the management of the areas proposed for withdrawal.

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RESOURCE MANAGEMENT PLAN

March 31, 1998

Prepared for

Engineering Field Activity West
Naval Facilities Engineering Command
San Bruno, CA 94066

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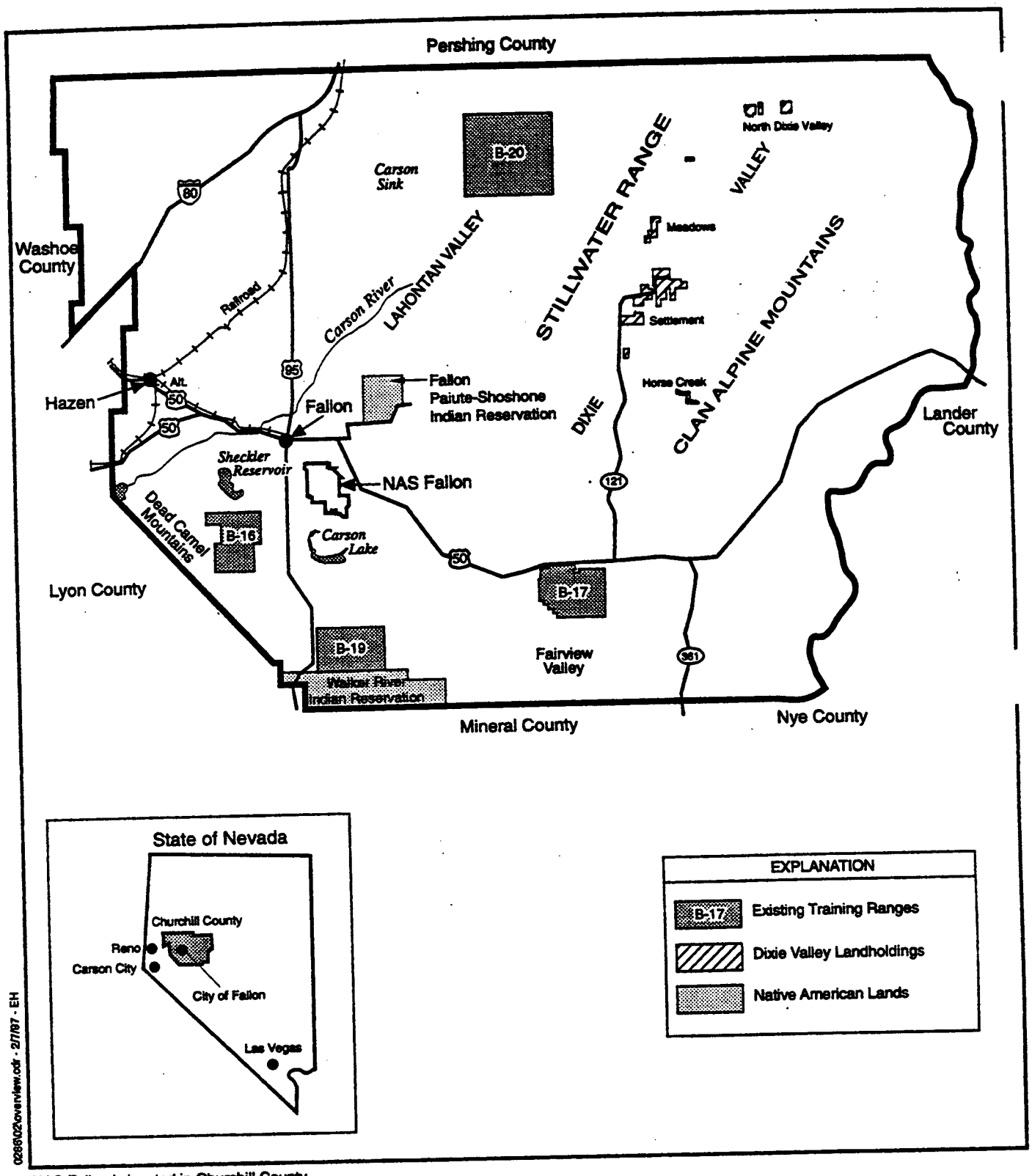
RESOURCE MANAGEMENT PLAN (RMP) FOR WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES, NAS FALLON

INTRODUCTION

This Resource Management Plan (RMP) directs the management of the natural and cultural resources for the lands proposed for withdrawal for range safety and training purposes within the Naval Air Station (NAS) Fallon Range Training Complex (FRTC), Churchill County, Nevada (see Figures 1 and 2). The purpose of the withdrawal is to enable realistic operational and strategic training and to provide public safety buffers.

The RMP covers approximately 127,365 acres (51,545 hectares) of lands proposed for withdrawal that are located adjacent to existing withdrawn lands used as training ranges within the FRTC. All lands proposed for withdrawal are currently administered by other federal agencies. The majority of the lands proposed for withdrawal are administered by the Bureau of Land Management (BLM), Carson District, Carson City, Nevada; the remaining lands include about 10,000 acres (4,050 hectares) administered by the Bureau of Reclamation (BUREC) north of Training Range B-16 and approximately 2,765 acres (1200 hectares) administered by the Department of Energy (DOE) southwest of Training Range B-17 (Figure 3).

The withdrawal encompasses land around the NAS Fallon Training Ranges B-16, B-17, B-19, the Shoal site (west of B-17), and the Dixie Valley area (Figure 2). All lands known to be contaminated or having the potential to be contaminated with live ordnance in the project area are included in the withdrawal. A breakdown of the purposes for withdrawal by area is provided in Table 1.



NAS Fallon is located in Churchill County, Nevada. In addition to the air station, the Navy administers four training ranges and owns lands in the Dixie Valley.

N

0 10 20 30

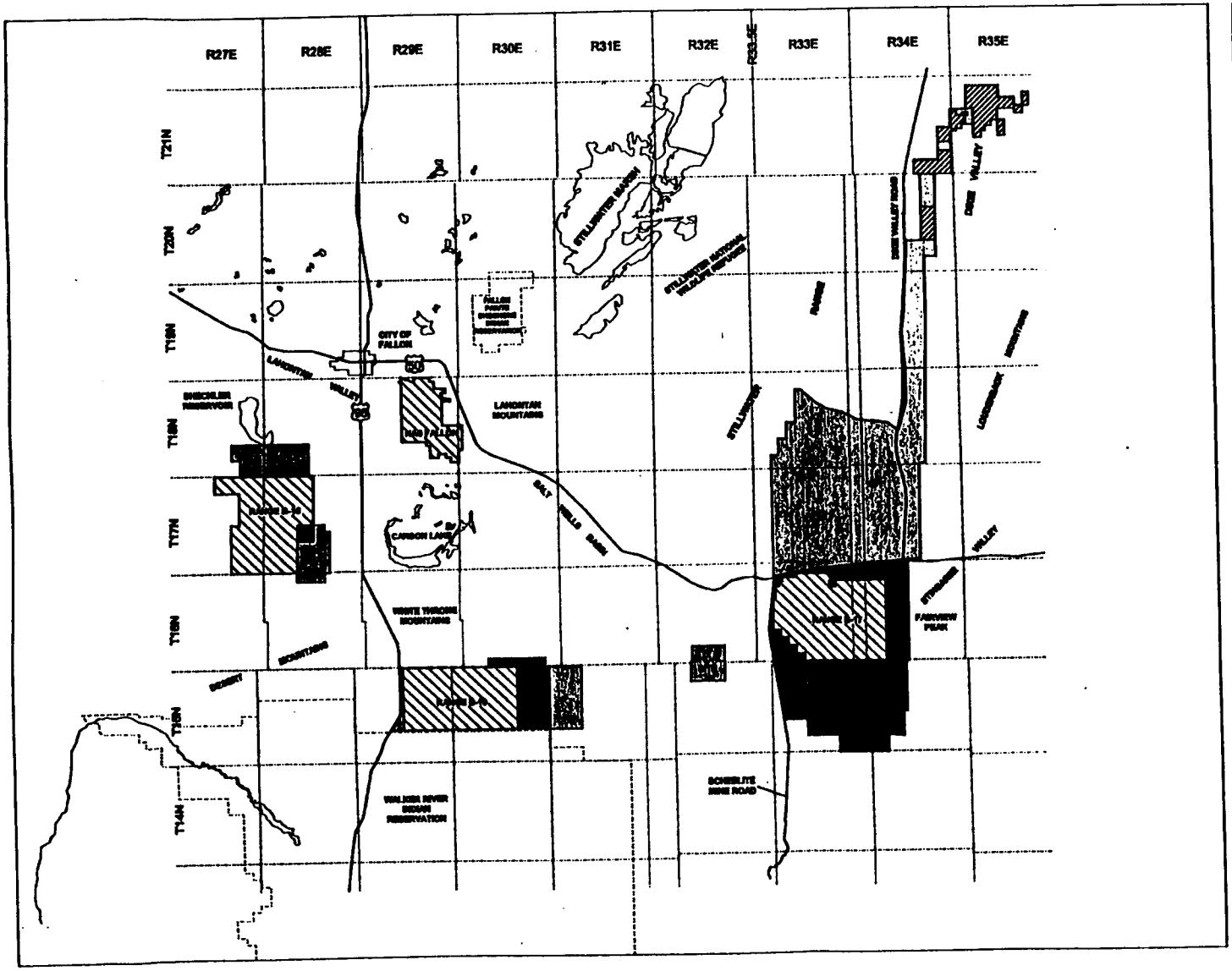
Approximate Scale in Miles

Location of NAS Fallon and the Training Ranges

NAS Fallon, Nev

Figure 1

Source: Department of the Navy, 1997, and Tetratech, 1997



LEGEND

- Category A Land (Restricted Use)
- Category B Land (Regulated Development)
- Navy-owned Land in Dixie Valley
- NAS Fallon and Ranges
- Boundary of Indian Reservation

N

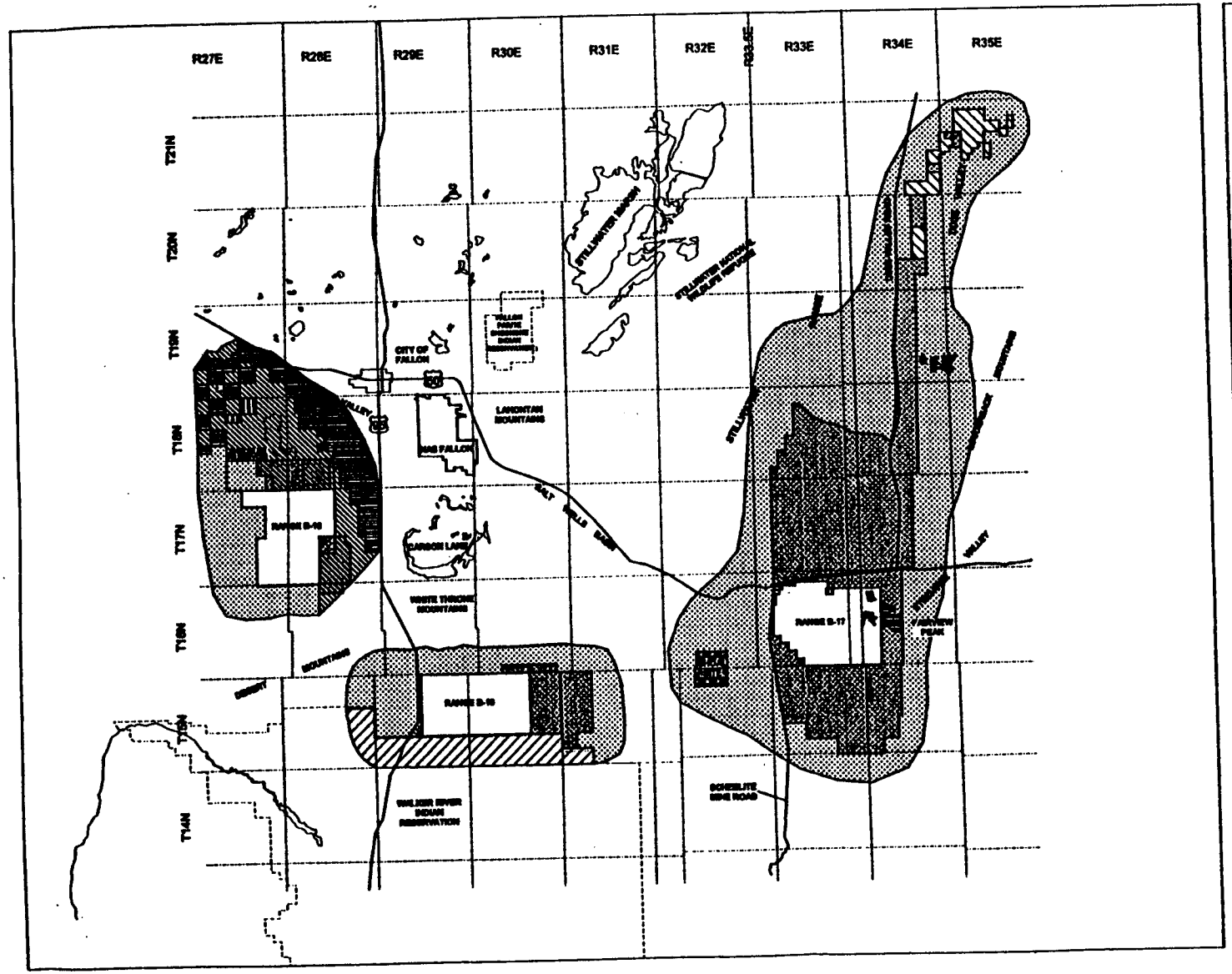
0 5 10 Miles

Location of Category A and B Lands

NAS Fallon, Nevada

Figure 2

Source: Department of the Navy 1997



LEGEND

- Public land managed by Bureau of Land Management
- Public land withdrawn by Bureau of Reclamation
- Public land withdrawn by Department of Energy
- Walker River Indian Reservation
- Private land and non-federal public land
- Bureau of Reclamation acquired lands
- Navy-owned land in Dixie Valley
- Proposed Withdrawal Areas
- Ranges

N

0 5 10 Miles

All of the proposed withdrawal lands are administered by the BLM, BUREC, or DOE.

Land Ownership Status Surrounding Proposed Withdrawal Areas

NAS Fallon, Nevada

Figure 3

Source: Department of the Navy 1997

Table 1. Purpose for Withdrawal by Area

Range	Land Area (acres)	Land Use Category	Purpose and Use of Withdrawal
B-16 North	6,160	B	Integrated air and ground training, inert off-range ordnance
B-16 East	640	A	HAZARD footprint, inert off-range ordnance, integrated air and ground training
	3,600	B	Integrated air and ground training
B-17	33,400	A	HAZARD footprint, off-range ordnance, EW/visual cueing, integrated air and ground training
B-19 North/East	6,240	A	Off-range ordnance, HAZARD footprint, integrated air and ground training, EW/visual cueing
	5,120	B	Integrated air and ground training, EW/visual cueing
B-19 West	840	B	Integrated air and ground training
Shoal Site	2,765	B	Integrated air and ground training
Dixie Valley Area	62,500	B	EW/TACTS/visual cueing, integrated air and ground training
Panhandle	6,100		Integrated air and ground training, EW/TACTS/ visual cueing, connected to Navy land holdings in Dixie Valley

Source: U.S. Navy (1997).

The withdrawn lands would be placed in one of two land use categories:

- Category A, Exclusive Navy Use – Potential Ordnance Hazard; or
- Category B, Navy and Public Use – Limited Land Use Conflicts

This distribution is based on the same operational conditions and needs and safety considerations that led to the withdrawal proposal. For each proposed land use category, public access and reasonably foreseeable land management procedures are described. The land use categories, along with the access characteristics, land use implications, and management procedures for each, are discussed below.

Category A includes approximately 40,280 acres (16,300 hectares) of land east of B-16; north, south, and east of B-17; and north and east of B-19. Category A lands will be managed by the Navy and closed to public uses. Exceptions can be granted under special circumstances by the Commanding Officer, NAS Fallon. Management of Category A lands would be conducted by the Navy in accordance with existing laws, policy, and practices. The actual target impact areas at the ranges will not change or expand to include these lands. The purpose of Category A lands is to enhance public safety by segregating lands where ordnance has been found through off-range sweeps and by identifying potential ordnance impact areas associated with air-to-ground training.

Public Access/Recreation. Public access to Category A lands would not be permitted. All public access would be denied for safety reasons by fencing existing access roads and by posting signs. No recreational uses, organized or otherwise, would be permitted. Public access currently is closed on 24,464 acres (9,820 hectares) of land containing off-range ordnance under a BLM emergency closure action. Category B lands would remain open to use as described below.

Future Development/Structures. Category A lands would be closed to future development. Any Navy-proposed development would be subject to all environmental laws and regulations, including NEPA and guidelines of NAS Fallon's Cultural Resource Management Plan (CRMP) and Programmatic Agreement (PA) with the State Historic Preservation Officer (SHPO) and Advisory Council on Historical Preservation (ACHP). Any non-Navy proposals (agency or public), such as wildlife guzzlers, would continue to be subject to all environmental laws and regulations, in addition to approval by the Navy.

Livestock Grazing. No grazing would be permitted on Category A lands. Existing permits would be revoked by BLM after the land was withdrawn.

Mining. Category A lands would be closed to all mining and mineral exploration including locatable, leasable, and salable minerals. Mining new or existing claims would not be allowed. No leasing or development salable minerals would be permitted on Category A lands.

Cultural Resources/Natural Resources. No field investigations for cultural or natural resources would be allowed on Category A lands unless an ordnance sweep could be completed prior to field work. NAS Fallon maintains a CRMP and a PA with the Advisory Council on Historic Preservation (ACHP) and the Nevada SHPO that describes compliance requirements for the

Navy's management of cultural resources, including Section 106 of the National Historic Preservation Act (NHPA). Navy actions will undergo the appropriate NHPA Section 106 review and consultation for cultural resources. Endangered Species Act (ESA) review and Section 7 consultation will be conducted if a Navy action may affect threatened or endangered species.

Category B, approximately 87,000 acres (35,210 hectares), includes all remaining lands proposed for withdrawal (Figure 2). BLM would manage Category B lands in conjunction with the Navy, BUREC, and DOE, as applicable. Category B lands generally will remain open to public use. Category B lands would allow the Navy to meet the major training requirements, including integrated air and ground training, and siting of EW, TACTS, and visual cueing device sites.

BLM would continue to maintain jurisdiction over recreation, grazing, mining, and mineral, gas, and oil leases and utility corridors. This is consistent with public comments expressed at hearings on the DEIS for Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station (NAS) Fallon, Nevada, at which a strong interest in BLM management of the withdrawn lands was expressed. To ensure public safety and meet training requirements, the Navy would retain the right to review and approve activities, such as site development and organized recreation actions.

Although Category B lands would retain present access characteristics for public use, some controls, such as height restrictions, to new development would be applied. The Navy would conduct integrated air and ground training activities, such as combat search and rescue operations and close air support events, on some Category B lands. EW, TACTS, and portable visual cueing devices also would continue to be placed within these lands, mostly in the Dixie Valley, Fairview Valley, and east of B-19. Some land uses would be restricted on a limited basis if they affect operations or safety.

Current management practices for resources, including recreation, grazing, and mining, would continue on Category B lands. For activities currently requiring permits, such as site development and organized recreational events, the Navy would review and have the authority to approve actions to ensure conformance with public safety or Navy training activities. Management practices for each resource area are detailed below.

Public Access and Recreation. Public access for recreational uses of Category B lands would be consistent with current BLM regulations and land use plan decisions, including off-road vehicle (ORV) use designations. Any organized activities currently subject to BLM, BUREC, or DOE permitting procedures, such as off-road vehicle races, would require Navy approval.

Proposed Navy EW and TACTS sites would not be fenced if they are in remote locations but would be fenced to exclude the public in more accessible areas. EW, TACTS, and visual cueing device sites would not be chosen if they contain existing mining claims or ROWs. Organized recreational activities, such as off-road vehicle races, would not be permitted on developed sites. Abandoned sites would become available for organized recreational activity, in accordance with the surrounding land management categories.

Future Development/Structures. Category B lands are included in the proposed withdrawal primarily as a means for the Navy to provide training scenarios and to ensure operational safety. New developments would be subject to the requirements of the resource management plan. The Navy would obtain the right to approve new or modified developments. New structures or modifications to existing structures generally would be subject to a height limitation of 50 feet, though individual proposals such as those related to existing rights-of-way and utility corridors would be reviewed on a case-by-case basis. The Navy will waive height limits in cases where exceeding 50 feet is necessary for a short-term development, such as for an oil well, and where such a waiver does not pose a safety hazard to aircrews. Permanent nonconforming structures also might be allowed in some areas if, in the judgment of the Navy, such structures were compatible with Navy training uses.

Livestock Grazing. Livestock grazing on Category B lands would continue to be managed under current applicable laws, including the Taylor Grazing Act of 1934, the FLPMA of 1976, and the Public Rangelands Improvement Act of 1978. Grazing would continue, and existing grazing permits would be unchanged by withdrawal enactment. There would be no access restrictions to existing cow camps and range improvements. BLM would continue to have jurisdiction over grazing permits.

Livestock grazing on EW, TACTS, and visual cueing device sites would continue to be managed in accordance with current applicable laws. Grazing could continue on unfenced developed sites, but cattle would be excluded from fenced sites. Cow camps or other range improvements would be avoided when establishing developed sites, and these sites would be placed away from livestock water sources. Since most developed sites would be small, generally less than one acre, restricting on-site grazing is not expected to affect forage availability or the value of grazing allotments.

Mining. Mining would be permitted on most Category B lands under existing mining laws (Mining Act of 1872, Mineral Lands Leasing Act of 1920, as amended, Mineral Lands Act for Acquired Lands of 1947, and Geothermal Steam Act of 1970). These lands would be open for mineral exploration, for working existing patented and unpatented claims, and for staking new claims. The sought public law for the withdrawal would disallow new patenting of mining claims. Operations on claims (including leasable and salable materials) on Category B lands would continue to be managed through the standard issue of permits, leases, plans of operations, licenses, contracts, and grants.

Existing valid mining claims and areas of known mineralization would be avoided in the development of Navy sites. No mineral leases or sales would be authorized during site development or use by the Navy. No exploration or operations would be permitted within fenced EW and TACTS sites during their development or use. Unfenced sites could be explored, but mining operations could not take place. Abandoned sites would revert to Category B status and would be subject to Category B land use policies. Existing access and utility corridors for EW and TACTS sites would be available for mining exploration, subject to BLM regulations and Category B land use policies.

Cultural Resources/Natural Resources. Cultural resources would be managed according to the NAS Fallon CRMP and the PA with the Advisory Council and SHPO for Navy actions. The BLM would be responsible for cultural resource protection for non-Navy actions. Cultural and natural resources would continue to be afforded protection under applicable legislation and regulations. As with Category A lands, the Navy will identify the lands potentially containing cultural resources using the Carson Desert predictive model.

Natural resources, including soils, flora, and fauna, on EW, TACTS, and visual cueing device sites would be subject to identification, analysis, and impact mitigation, as required by various federal environmental laws and regulations. Site investigations and, where appropriate, mitigation plans will be completed prior to development. These areas would be available for field investigations until developed Navy sites are fenced.

Wilderness. The Navy has no plans for Category B lands that would impair the wilderness characteristics of lands in the Job Peak Wilderness Study Area (WSA), which lies adjacent to Category B lands in Dixie Valley. Public access to the Job Peak WSA would not be restricted by the Navy. The Navy has no plans for EW, TACTS, or visual cueing device site development in the WSA.

Water Access and Developments. The Navy would be notified and given the opportunity to review and approve new water developments on Category B lands, such as for cattle range improvements.

Establishing EW, TACTS, and visual cueing device sites would not affect existing or future water developments or water rights. Existing water developments would be avoided in site selection. Site selection also would avoid areas that could restrict access to water or in any other way affect water rights. No water development would be permitted on an EW or TACTS site during the term of its use.

Leases, Easements, Utility Corridors, and Rights-of-Way. The BLM would be responsible for issuing leases, easements and ROWs, or any other authorization with respect to the nonmilitary use of Category B lands. Navy opportunity to review and approve proposals is required to assess land use compatibility. The BLM would continue to manage existing leases, easements, ROWs, and utility corridors.

In summary, the Navy would manage Category A lands, and public access to these lands would be closed. Category B lands would be managed by the BLM, coordinated with the Navy, BUREC, and DOE where appropriate. Table 2 provides a summary of access characteristics, land use implications, and management procedures for each category.

Pursuant to federal regulations regarding the management of withdrawn land, this RMP has been developed by the Navy, in cooperation with the BLM, BUREC, and DOE, to provide land use policies for the withdrawn lands. (note: this draft is intended for distribution to BLM, BUREC, and DOE to begin the referenced coordination process). Resource information obtained from agency files, staff, and existing documents was utilized to develop this RMP.

This plan is prepared in tandem with Environmental Impact Statement for Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada (Department of the Navy 1997), which has been prepared to meet the requirements of the National Environmental Policy Act (NEPA) of 1969.

Table 2. Summary of Land Use Controls on Category A and B lands

	Category A - Exclusive Navy Use: Potential Ordnance Hazard	Category B - Navy and Public Use: Limited Land Use Conflicts
General Land Management Description	Closes land to public use because of safety concerns. Includes land identified as containing, or potentially containing, off-range ordnance.	Least restrictive land use. Would maintain multiple land uses with few regulations. Most lands fall into this category and would be managed by the BLM with Navy review and approval..
Public Access; Recreational Use	Closed to access to protect public safety.	Public access, recreational use not controlled. Organized events are subject to existing laws and must receive Navy approval. EW sites would be closed to the public, except for remote sites.
Future Development/ Structures	None allowed; exceptions require CO NASF review and approval.	Navy: NEPA compliance. Non-Navy: NEPA and BLM regulations and Navy review; 50' height limit on new or modified structures.
Mining *Exploration*	No new exploration permitted.	Regulated under existing laws with Navy review and approval of mining developments. Developed Navy sites closed to exploration during period of use. Open to public once site is abandoned.
Mining *Existing Claims*	No mining activity would be permitted because of safety hazards to miners from ordnance.	Claims access and operations regulated by BLM with review and approval of mining developments. Developed Navy sites would avoid existing claims.
Mining *New Claims*	No new claims permitted.	Regulated under existing mining laws with Navy review and approval of mining developments. The proposed withdrawal would preclude patenting of unpatented claims.
Leasable/Salable Minerals	No new leases, sales, developments.	BLM issues leases, permits, licenses, contracts, and grants with Navy review and approval. No new leases would be permitted once Navy site was proposed or in use. Leases allowed once site is abandoned.
Grazing	No grazing would be allowed on Category A lands because of existing and potential off-range ordnance hazards.	The BLM will continue to administer permits and to regulate activities under existing laws with Navy review and approval of range improvements. Use and maintenance of existing range improvements and cow camps permitted. Grazing permitted on unfenced developed Navy sites but excluded from fenced sites.
Cultural/Natural Resources *	Field investigations generally not allowed unless preceded by ordnance sweep; CRMP and PA describe compliance requirements (such as Section 106) for cultural resources.	Navy responsible for Section 106 and Section 7, as applicable for Navy actions; BLM responsible for Section 106 and Section 7, as applicable for non-Navy actions.

Table 2. Summary of Land Use Controls on Category A and B lands

	Category A - Exclusive Navy Use: Potential Ordnance Hazard	Category B - Navy and Public Use: Limited Land Use Conflicts
Wilderness	No Wilderness Areas or Wilderness Study Areas are designated as Category A lands.	Navy has no plans that would affect wilderness designation of Job Peak WSA. Navy will delete Job Peak WSA from withdrawal request if it is designated a wilderness area. Developed Navy sites would avoid WSA.
Water Access and Developments	New water developments and access to existing water developments would not be allowed on Category A lands to anyone other than BLM.	Navy to review and approve new water development proposals. New development restricted on developed Navy sites during period of use.
Leases, Easements, Rights-of-way	Generally no new leases, easements, or ROWs allowed. Existing leases, easements, or ROWs administratively managed by current jurisdictional agency.	BLM issues with Navy review and approval required to avoid incompatible land uses.

Note: * including threatened/endangered species and wetlands

Source: U.S. Navy (1997).

RESOURCE PLAN

Resource discussions in this RMP provide a listing of Management Objectives, Management Direction, and Management Actions that are a result of this planning effort. These discussions include the valid management actions that were taking place prior to this RMP. All of these management actions will be implemented and used for the cooperative management of the natural and cultural resources by BLM, NAS Fallon, BUREC, DOE, and other Federal, State, and local agencies on Category B lands. Where appropriate, the following resource discussions are accompanied by a map showing the location of that resource within the planning area. Permits associated with certain of these resources are listed below; BLM will assume review and approval authorities for these permits, subject to Navy concurrence.

Resources and management issues addressed in this RMP include the following:

- Vegetation including Threatened or Endangered Plant Species
- Wildlife including Threatened and Endangered Wildlife Species
- Soil, Water, and Air Resources
  - Shoal Site Monitoring
- Lands Program (rights-of-way/utility corridors; land use authorizations)
  - Right-of-Way (ROW) permits
- Fire Management
- Minerals/Mining/Geothermal
  - Mining Claims
- Livestock Grazing and Wild Horses
  - Development of Facilities
- Recreation, Wilderness, Hunting & Trapping (Access Issues)
  - Group Recreational Permits
- Visual Resources
- Cultural Resources

The area covered by this RMP will be referred to as the "planning area" in the following resource discussions, which address vegetation and wildlife habitat in this preliminary internal review

draft. Except as noted, the following management objectives, direction, and actions apply to all Category B lands.

VEGETATION INCLUDING THREATENED AND ENDANGERED PLANT SPECIES

The following objectives are general and reflect a current lack of site-specific resource inventory data for the lands proposed for withdrawal. Upon completion of resource inventories and baseline descriptions for these lands, more site specific objectives will be developed as necessary by NAS Fallon in cooperation with BLM, BUREC, and DOE as components of action or activity plans.

MANAGEMENT OBJECTIVES

V-O-1 To establish or maintain a prescribed ecological status, Desired Plant Communities, plant species composition, and species diversity.

V-O-2 To maintain a static to upward apparent trend in ecological status or towards Desired Plant Communities.

V-O-3 To conserve sensitive plant species and their habitat. Sensitive plant species include listed and proposed threatened or endangered species, candidates for federal listing as threatened or endangered, and federal Species of Concern (formerly Category 2 candidates for listing as threatened or endangered).

V-O-4 To minimize the establishment or spread of invasive exotic plant species, including noxious weeds.

MANAGEMENT DIRECTION

V-D-1 Use species native to the area for revegetation efforts when and where feasible.

V-D-2 Restrict surface disturbing activities in habitat of sensitive plant species, including threatened or endangered species.

V-D-3 Monitor areas adjacent to existing wild horse herd management areas to identify incursion of wild horses into the planning area.

V-D-4 Develop and maintain water sources on grazing allotments to achieve proper distribution of livestock and utilization of forage by livestock, horses, and other wildlife.

V-D-5 Use fencing only when monitoring demonstrates that other management practices are not successful in achieving the identified objectives.

V-D-6 Protect or enhance sensitive habitat areas, including wetlands.

V-D-7 Review and approve development proposals for potential impact to training safety.

MANAGEMENT ACTIONS

V-A-1 Develop and implement activity plans for wetland habitat areas throughout the planning area.

V-A-2 Build and maintain boundary fence between designated grazing allotments and Category A lands as necessary to prevent livestock from moving into Category A lands.

V-A-3 If monitoring detects potentially damaging incursion of wild horses into planning areas, take management action to exclude the horses or minimize their damage.

V-A-4 Prevent spread of established noxious weeds such as Russian knapweed and attempt to control or eliminate other noxious weeds species identified during monitoring.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 3.

Table 3. Applicable Management Objectives, Directions, and Actions for Vegetation on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
V-O-1	B	A/B	A	A	A	A	A/B	B	B	B
V-O-2	B	A/B	A	A	A	A	A/B	B	B	B
V-O-3 [3]	B	A/B	A	A	A	A	A/B	B	B	B
V-O-4	B	A/B	A	A	A	A	A/B	B	B	B
Management Direction										
V-D-1	B	A/B	A	A	A	A	A/B	B	B	B
V-D-2	B	A/B	A	A	A	A	A/B	B	B	B
V-D-3		A/B							B	
V-D-4	B[1]	B					B	B	B	B
V-D-5	B	B					B	B	B	B
V-D-6 [2]	B	A/B	A	A	A	A	A/B	B	B	B
V-D-7	B	B					B	B	B	B
Management Actions										
V-A-1	B		A						B	
V-A-2		A	A							
V-A-3	A	A/B	A	A	A	A	A/B	B	B	B
V-A-4	A	A/B	A	A	A	A	A/B	B	B	B

Notes: 1. Grazing on this land currently administered by BUREC and thus it does not have identified BLM grazing allotments.
2. Applies to any site where sensitive habitat areas, including wetlands, have been identified.
3. There are no federally listed threatened or endangered plant species currently identified within the withdrawal areas.

WILDLIFE INCLUDING THREATENED AND ENDANGERED WILDLIFE SPECIES

MANAGEMENT OBJECTIVES

W-O-1 To manage wildlife habitat within Category A lands for maximum sustainable wildlife value.

W-O-2 To manage wildlife habitat within designated grazing allotments to sustain viable wildlife populations (Category B lands).

W-O-3 To protect threatened and endangered wildlife and their habitat.

MANAGEMENT DIRECTION

W-D-1 Exclude livestock and wild horses from Category A lands.

W-D-2 Monitor/review development and mining permits to reduce impacts to wildlife.

W-D-3 Continue to recognize reserved forage for pronghorn antelope, mule deer, and desert bighorn sheep in designated grazing allotments at current levels; reallocate forage reserved for wildlife and livestock appropriate to the productivity of the remaining portions of allotments reduced in size due to Category A withdrawal.

W-D-4 Provide permanent water sources for wildlife on designated grazing allotments as funds are available.

W-D-5 Conduct monitoring of wildlife as a cooperative effort between NAS Fallon, BLM, and the Nevada Division of Wildlife.

MANAGEMENT ACTIONS

W-A-1 Develop and maintain up to 40 water sources for wildlife throughout the withdrawal area as funds are available.

W-A-2 Minimize impacts on wildlife and wildlife habitat and protect threatened and endangered species and their habitat by requiring appropriate impact avoidance or mitigation measures for mining and development project applications.

W-A-3 Nuisance animal control will be authorized, as required, through the District Animal Damage Control Plan (ADC), in coordination with BLM, NAS Fallon, the Nevada Division of Wildlife, and the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 4.

Table 4. Applicable Management Objectives, Directions, and Actions for Wildlife on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
W-O-1		A[1]	A[1]	A[1]	A[1]	A[1]	A[1]			
W-O-2	B[2]	B					B	B	B	B[3]
W-O-3	B	A/B	A	A	A	A	A/B	B	B	B
Management Direction										
W-D-1		A	A	A	A	A	A			
W-D-2	B	B					B	B	B	B
W-D-3	B[2]	B					B	B	B	B
W-D-4	B	A/B	A	A	A	A	A/B	B	B	B
W-D-5	B	A[4]/B	A[4]	A[4]	A[4]	A[4]	A[4]/B	B	B	B
Management Actions										
W-A-1	B	A/B	A	A	A	A	A/B	B	B	B
W-A-2	B	B					B	B	B	B
W-A-3	B	A/B	A	A	A	A	A/B	B	B	B

Notes:

1. Assumes that BLM licensed livestock grazing will be excluded from Category A lands by fencing and that Category A lands would be managed for maximum wildlife value (consistent with mission).
2. Assumes that B-16 north land within the BUREC jurisdiction is currently authorized for livestock grazing and would have grazing allotments extended into it after withdrawal.
3. Assumes that the Shoal Site is within the Le Beau Flat Grazing Allotment (based on DEIS Figure 3-10).
4. Monitoring of wildlife populations would be conducted in Category A lands solely under supervision of NAS Fallon personnel.

SOILS, WATER, AND AIR RESOURCES

The following management objectives, directions, and actions focus on the related issues of protection of soil and preventing deterioration of water and air quality on Category A and B lands.

MANAGEMENT OBJECTIVES

S-O-1 To protect the soil resource by minimizing erosion.

S-O-2 To maintain or enhance water quality and availability.

S-O-3 To prevent deterioration of air quality.

MANAGEMENT DIRECTION

S-D-1 Minimize disturbances to natural vegetation and soils on Category A and B lands.

S-D-2 Manage Category A and B lands to protect, enhance, and prevent deterioration of soil, water and air resources.

MANAGEMENT ACTIONS

S-A-1 Revegetate disturbed areas when and where feasible; minimize removal of vegetation.

S-A-2 Review proposed projects or permitted activities to ensure disturbance to natural vegetation and soils are minimized.

S-A-3 Identify Best Management Practices (BMPs) for implementation to minimize soil erosion, siltation, or dust generation from proposed civilian or military activities.

S-A-4 Review all proposed Navy and civilian projects on Category B lands to ensure unrestricted access to existing water developments and that existing water rights are unaffected.

S-A-5 Develop and maintain water sources on grazing allotments to achieve proper distribution of livestock and utilization of forage by livestock, horses, and other wildlife.

Shoal Site Monitoring. Special considerations are necessary for the Shoal Site. The Project Shoal Site located in the Sand Spring Range west of Range B-17 has been managed by the U.S. Department of Energy, as successor agency to the U. S. Atomic Energy Commission. It was withdrawn in 1962 for testing to determine whether seismic waves from underground nuclear testing could be differentiated from natural earthquakes. One nuclear device was exploded 367 m (1,205 ft) below the surface on this site in 1963. As a result of this test, the site is subject to controls on entry to the subsurface area within a defined exclusion zone between the depths of 55 m (180 ft) and 518 m (1,700 ft) below surface ground zero and extending laterally 1,006 m (3,300 ft). Access to the surface of the site is currently uncontrolled. Long-term access to the site for continued

subsurface monitoring and remediation activities by DOE would be required. It is anticipated that monitoring of groundwater flow and contamination and institutional control of subsurface access will continue on this site for at least 50 years into the future. It is anticipated that the Navy and DOE would participate in a joint withdrawal of the Project Shoal Site. Institutional control of the Project Shoal Site for purposes of preventing access to the subsurface radioactive contamination will remain with the DOE.

Table 5. Applicable Management Objectives, Directions, and Actions for Soil, Water, and Air Resources on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
S-O-1	B	A/B	A	A	A	A	A/B	B	B	B
S-O-2	B	A/B	A	A	A	A	A/B	B	B	B
S-O-3	B	A/B	A	A	A	A	A/B	B	B	B
Management Direction										
S-D-1	B	A/B	A	A	A	A	A/B	B	B	B
S-D-2	B	A/B	A	A	A	A	A/B	B	B	B
Management Actions										
S-A-1	B	A/B	A	A	A	A	A/B	B	B	B
S-A-2	B	B					B	B	B	B
S-A-3	B	A/B	A	A	A	A	A/B	B	B	B
S-A-4	B	B					B	B	B	B
S-A-5	B	B					B	B	B	B

LANDS PROGRAM

Rights-of-way (ROW) within the land withdrawal area have been designated for roads, utility corridors, transmission lines, and pipelines. Both the existing and planned corridors are shown in Figure 4.

MANAGEMENT OBJECTIVES

L-O-1 To provide for public safety on Category A lands.

L-O-2 To retain current levels of public access to Category B lands to the extent that no conflicts with safe military operations occur.

MANAGEMENT DIRECTION

L-D-1 Nonmilitary uses will be excluded from Category A lands, which will be managed by the Navy. Exceptions may be made by the Navy in certain cases and will be dependent upon public safety factors and military use compatibility.

L-D-2 Category B lands will be managed by the BLM, BUREC, or DOE, as appropriate.

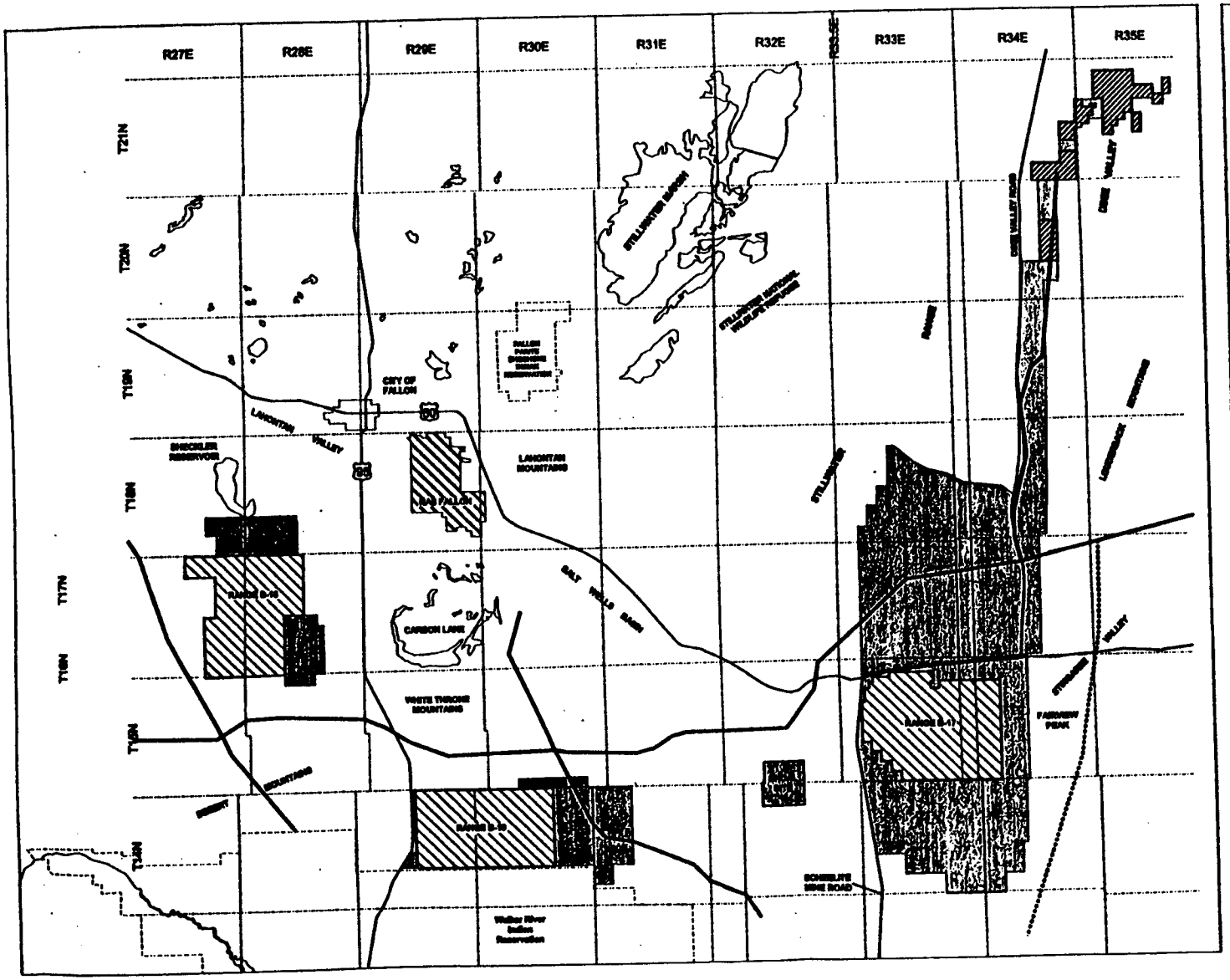
L-D-3 The BLM will maintain jurisdiction over ROW grants, mining, grazing, mineral, gas, and oil leases, along with ORV events on Category B lands.

MANAGEMENT ACTIONS

L-A-1 Public access will be prohibited on Category A lands, and no leases or ROW easements will be issued.

L-A-2 The BLM, BUREC, or DOE will continue to issue any leases, easements, ROWs, or other authorization with respect to the nonmilitary use of Category B lands, subject to Navy review and approval.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 6.



LEGEND

- Extent of Lands Proposed for Withdrawal
- Navy-owned land in Dixie Valley
- NAS Fallon and Ranges
- Existing ROW Corridors
- Proposed ROW Corridors

Note: The utility planning corridor through the Stillwater Range will be granted only if the Job Peak WSA is dropped from consideration as wilderness area.

N

0 5 10 Miles

Rights-of-way within the proposed land withdrawal area have been designated for roads, transmission lines, and pipeline corridors.

Existing and Planned Right-Of-Way Corridors

NAS Fallon, Nevada

Figure 4

Source: Department of the Navy 1997

Table 6. Applicable Management Objectives, Directions, and Actions for Lands Program on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
L-O-1		A	A	A	A	A	A			
L-O-2	B	B					B	B	B	B
Management Direction										
L-D-1		A	A	A	A	A	A			
L-D-2	B	B					B	B	B	B
L-D-3	B	B					B	B	B	B
Management Actions										
L-A-1		A	A	A	A	A	A			
L-A-2	B	B					B	B	B	B

FIRE MANAGEMENT

Suppression of wildland fires in the project area is important to protect structures and range improvements, for human safety, and to avoid conversions of range lands to dominance by undesirable species such as cheatgrass. It is anticipated that wildland fire suppression activities in and around Category B lands would be conducted by the Navy and BLM under a cooperative agreement that would be developed between NAS Fallon and the BLM Carson City District. Fire suppression activities would be the sole responsibility of the Navy on Category A lands potentially contaminated by ordnance.

MINERALS/MINING/GEOTHERMAL

Figures 5 and 6 show areas of mining districts and known and potential mineral deposits, respectively.

MANAGEMENT OBJECTIVES

M-O-1 To allow mining, geothermal, and minerals exploration activities on Category B lands to the extent that they do not conflict with safe Navy operations.

MANAGEMENT DIRECTION

M-D-1 Category A lands will be closed to all mining and mineral exploration.

M-D-2 Mining will be permitted on most Category B lands under existing mining laws (Mining Act of 1872, Mineral Lands Act for Acquired Lands of 1947, and Geothermal Steam Act of 1970), with specific limitations on heights of structures to be imposed by the Navy.

MANAGEMENT ACTIONS

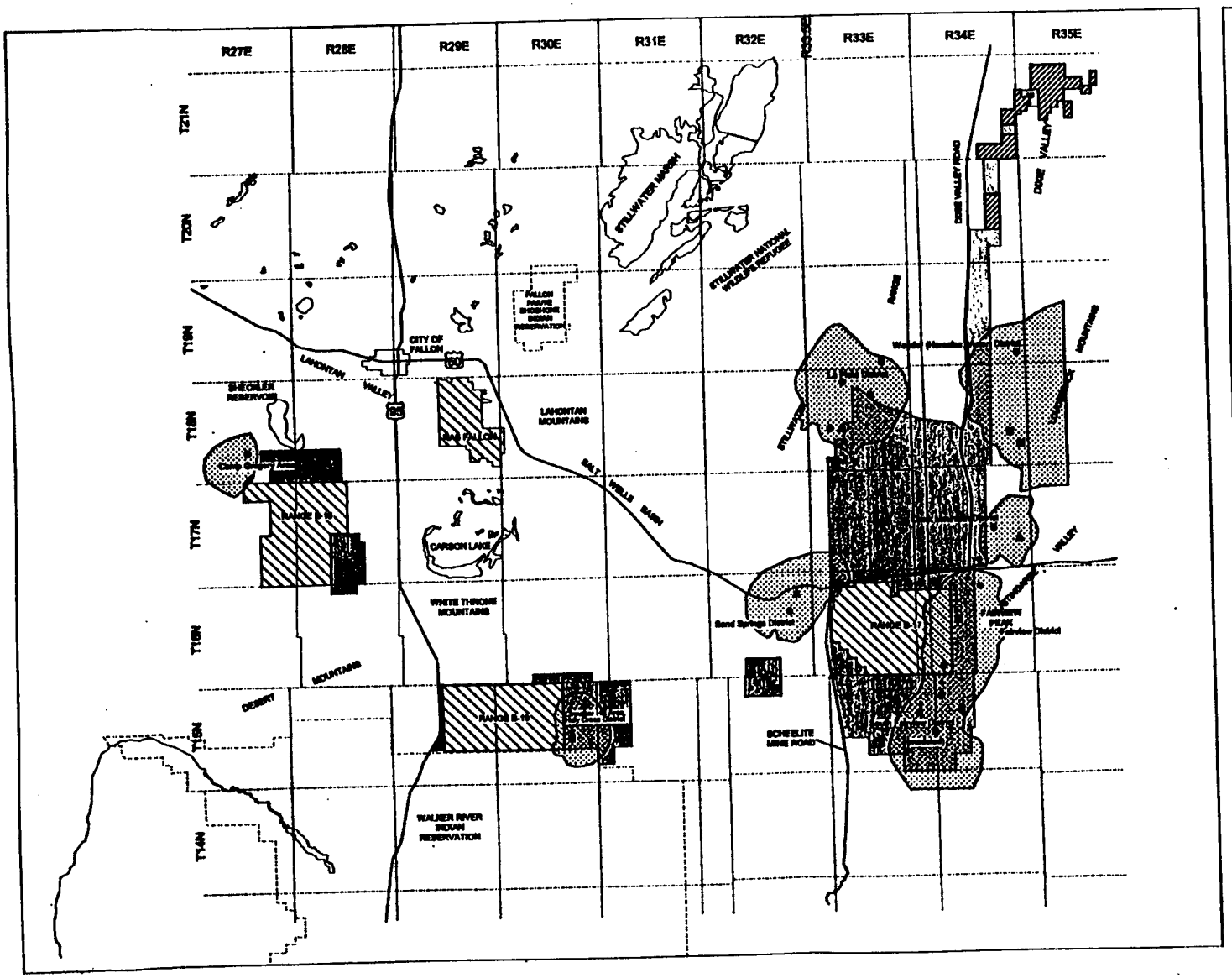
M-A-1 Category B lands will be open for mineral exploration, working existing patented and unpatented claims, and staking new claims, except within Navy developed sites.

M-A-2 Access to claims will be regulated by the BLM, as currently occurs.

M-A-3 Operations on claims (including leasable and salable materials) on Category B lands will be managed by the BLM through the issuance of permits, leases, plans of operation, licenses, and contracts and grants, subject to Navy concurrence.

M-A-4 Existing valid mining claims and areas of known mineralization will be avoided when developing Navy sites.

M-A-5 Exploration or operations within fenced EW and TACTS sites will not be permitted.



LEGEND

- Proposed Withdrawal Areas
- Navy Owned Land In Dixie Valley
- NAS Fallon and Ranges
- Mining Districts/Areas
- Inferred Resource
- Identified Resource
- Indicated Resource

N

0 5 10 Miles

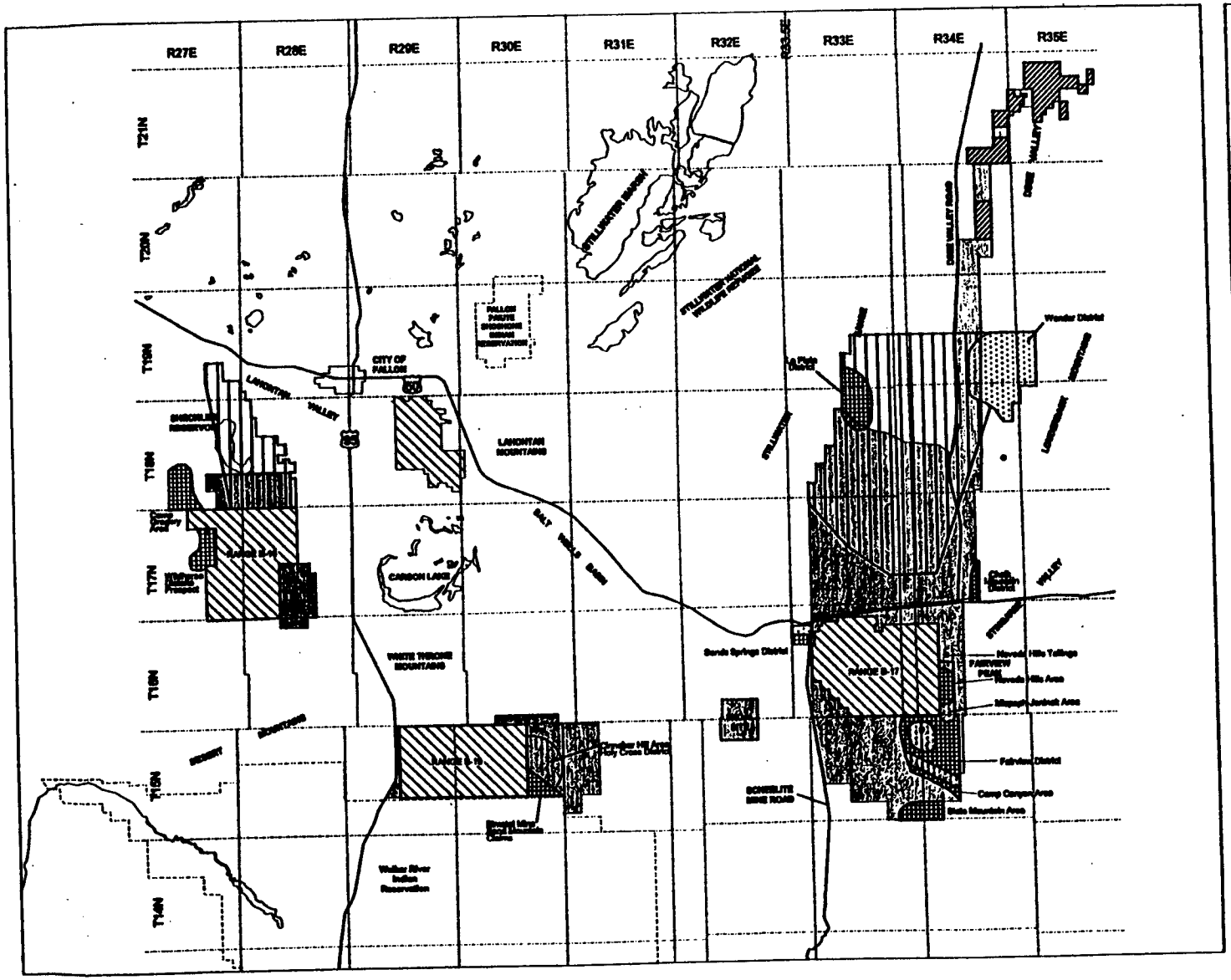
Mineral evaluations have occurred at most of the seven mining districts located within the withdrawal boundaries.

Mining Districts

NAS Fallon, Nevada

Figure 5

Source: Department of the Navy 1997



LEGEND

NAS Fallon and Ranges

Mineral Potential

- Identified Mineral Resource
- Area of Moderate Mineral Potential
- Area of High Mineral Potential
- Navy-owned land in Dixie Valley
- Proposed Withdrawal Areas

Petroleum Potential

- Low Petroleum Potential

Geothermal Potential

Geothermal potential for the entire area of withdrawal is only speculative.

N

0 5 10 Miles

The study area was evaluated for mineral, petroleum, and geothermal potential.

Mineral Resources

NAS Fallon, Nevada

Figure 6

Source: Department of the Navy 1997

M-A-6 Exploration of unfenced sites will be permitted, but mining operations will not be allowed.

M-A-7 Abandoned EW and TACTS sites will revert to Category B status and be subject to Category B land use policies.

M-A-8 Existing access and utility corridors for EW and TACTS sites will be available for mining exploration, subject to BLM regulations, provided that such activities do not interfere with Navy Access.

M-A-9 The Navy will explore means to compensate holders of significantly impacted mining patents and/or valid unpatented mining claims on Category A lands. Acquisition of these claims/patents will be subject to congressional authorization and appropriation.

M-A-10 Waivers to the height limitations on structures in Category B lands may be issued by the Navy on a case-by-case basis, depending on the proposed location and length of time the structure will be needed. The Navy will explore the possibility of accommodating equipment necessary for oil, gas, and geothermal drilling if it is to be installed for relatively short periods or in locations where it does not pose a safety hazard to military operations.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 7.

Table 7. Applicable Management Objectives, Directions, and Actions for Minerals/Mining/Geothermal on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site* [1]
Management Objectives										
M-O-1	B	B					B	B	B	B
Management Direction										
M-D-1		A	A	A	A	A	A			
M-D-2	B	B					B	B	B	B
Management Actions										
M-A-1	B	B					B	B	B	B
M-A-2	B	B					B	B	B	B
M-A-3	B	B					B	B	B	B
M-A-4	B	B					B	B	B	B
M-A-5	B	B					B	B	B	B
M-A-6	B	B					B	B	B	B
M-A-7	B	B					B	B	B	B
M-A-8	B	B					B	B	B	B
M-A-9		A	A	A	A	A	A			
M-A-10	B	B					B	B	B	B

Note: 1. Surface access is currently unrestricted on the Shoal Site; however, there is a strictly enforced exclusion on underground entry due to radioactive contamination between 55 m (180 ft) and 518 m (1,700 ft) depth. DOE will regulate any underground access.

LIVESTOCK GRAZING AND WILD HORSES

The locations of existing grazing allotments and wild horse management areas are shown in Figures 7 and 8, respectively. Existing grazing allotments are present in the proposed withdrawal areas. Existing wild horse herd management areas (HMAs) are present in the vicinity of B-16 S and Dixie Valley. None of these HMAs overlaps proposed withdrawal areas treated in this Resource Management Plan, however the Clan Alpine HMA is adjacent to the panhandle portion of the Dixie Valley withdrawal area.

MANAGEMENT OBJECTIVES

L/H-O-1 To improve the condition and productivity of rangelands to enhance livestock grazing on Category B lands.

L/H-O-2 To allow maintenance and management of populations of wild, free-roaming horses within designated herd management areas (Figure 8) in accordance with the Wild, Free-Roaming Horses and Burro Act of 1971 and BLM's policy.

L/H-O-3 To discourage expansion of wild horse populations onto Category A or B lands and to maintain the withdrawal areas as a burro-free area.

L/H-O-4 To achieve a thriving ecological balance consistent with other resource values.

MANAGEMENT DIRECTION

L/H-D-1 Plan Navy surface activities to avoid or minimize interference with permitted livestock grazing on Category B lands.

L/H-D-2 Livestock grazing on Category B lands would continue under current applicable laws (the Taylor Grazing Act of 1934, the FLPMA of 1976, and the Public Rangelands Improvement Act of 1978) and BLM policy. No livestock grazing would be licensed under existing permits on Category A lands.

L/H-D-3 Conduct annual monitoring to determine rangeland condition on Category B lands and to determine if wild horse populations from the herd management areas or wild burros are encroaching on Category A or B lands.

L/H-D-4 Develop a gathering plan for the removal of wild horses or burros from Category A or B lands outside designated herd management areas.

MANAGEMENT ACTIONS

L/H-A-1 Current grazing permits on Category A lands would be revoked after the land is withdrawn. (Grazing would continue under existing grazing permits on Category B lands). The renewal of grazing permits would continue to be handled by the BLM.

L/H-A-2 In Category B lands grazing would be excluded from fenced Navy sites (e.g., threat emitters) but could continue on unfenced developed sites. Cow camps, livestock water sources, or other range improvements would be avoided when establishing Navy sites whenever possible.

L/H-A-3 Ensure that Navy activities or permitted civilian activities or developments do not restrict access to existing cow camps and range improvements.

L/H-A-4 Reallocate forage reserved for wildlife and livestock on Category B lands, if necessary, appropriate to the productivity of the remaining portions of allotments reduced in size due to Category A withdrawal.

L/H-A-5 Make adjustments in livestock grazing management as necessary to maintain a static to upward apparent trend in ecological status or to attain Desired Plant Communities.

L/H-A-6 Conduct gatherings as necessary to remove wild horses outside the boundaries of designated herd management areas.

L/H-A-7 Remove all burros from Category A or B lands when encountered.

L/H-A-8 Amend, if necessary, the Herd Management Area Plans (HMAPS) for Horse Mountain, South Stillwater, and Clan Alpine HMAs to conform with this resource plan.

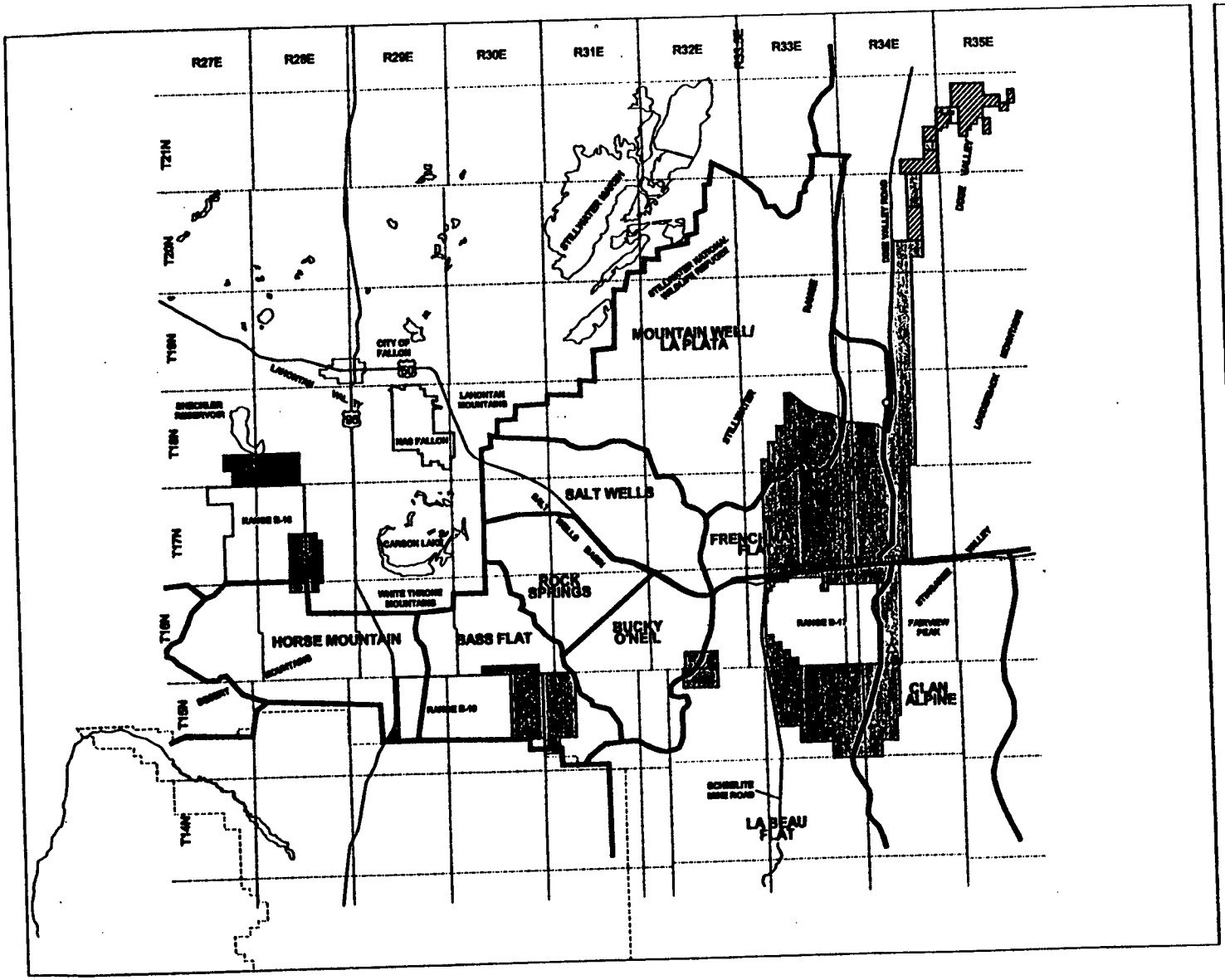
L/H-A-9 If monitoring demonstrates that the above management practices are not successful in preventing wild horse encroachment onto Category A or B lands outside existing herd management areas, build and maintain boundary fence at appropriate locations.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 8.

Table 8. Applicable Management Objectives, Directions, and Actions for Livestock Grazing, and Wild Horses on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
L/H-O-1	B	B					B	B	B	B
L/H-O-2	B	B					B	B	B	B
L/H-O-3	B	A/B	A	A	A	A	A/B	B	B	B
L/H-O-4	B	A/B	A	A	A	A	A/B	B	B	B
Management Directions										
L/H-D-1	B	B					B	B	B	B
L/H-D-2	B	A/B	A	A	A	A	A/B	B	B	B
L/H-D-3	B	A/B	A	A	A	A	A/B	B	B	B
L/H-D-4[1]		A/B							B	
Management Actions										
L/H-A-1	B	A/B	A	A	A	A	A/B	B	B	B
L/H-A-2	B	B					B	B	B	B
L/H-A-3	B	B					B	B	B	B
L/H-A-4							B			B
L/H-A-5	B	B					B	B	B	B
L/H-A-6	B	A/B	A	A	A	A	A/B	B	B	B
L/H-A-7	B	A/B	A	A	A	A	A/B	B	B	B
L/H-A-8		A/B							B	
L/H-A-9[1]		A/B							B	

Notes: 1. This measure would apply to any site where encroachment of wild horses or burros outside herd management areas has occurred. B-16 E and Dixie Valley are the withdrawal areas closest to existing HMAs.



LEGEND

- NAS Fallon and Ranges
- Proposed Withdrawal Areas
- Navy Owned Land In Dixie Valley
- Grazing Allotment Boundary
- Water Storage (Tank, Trough)
- Water Storage (Well, Spring Development)
- Guzzler

N

0 5 10 Miles

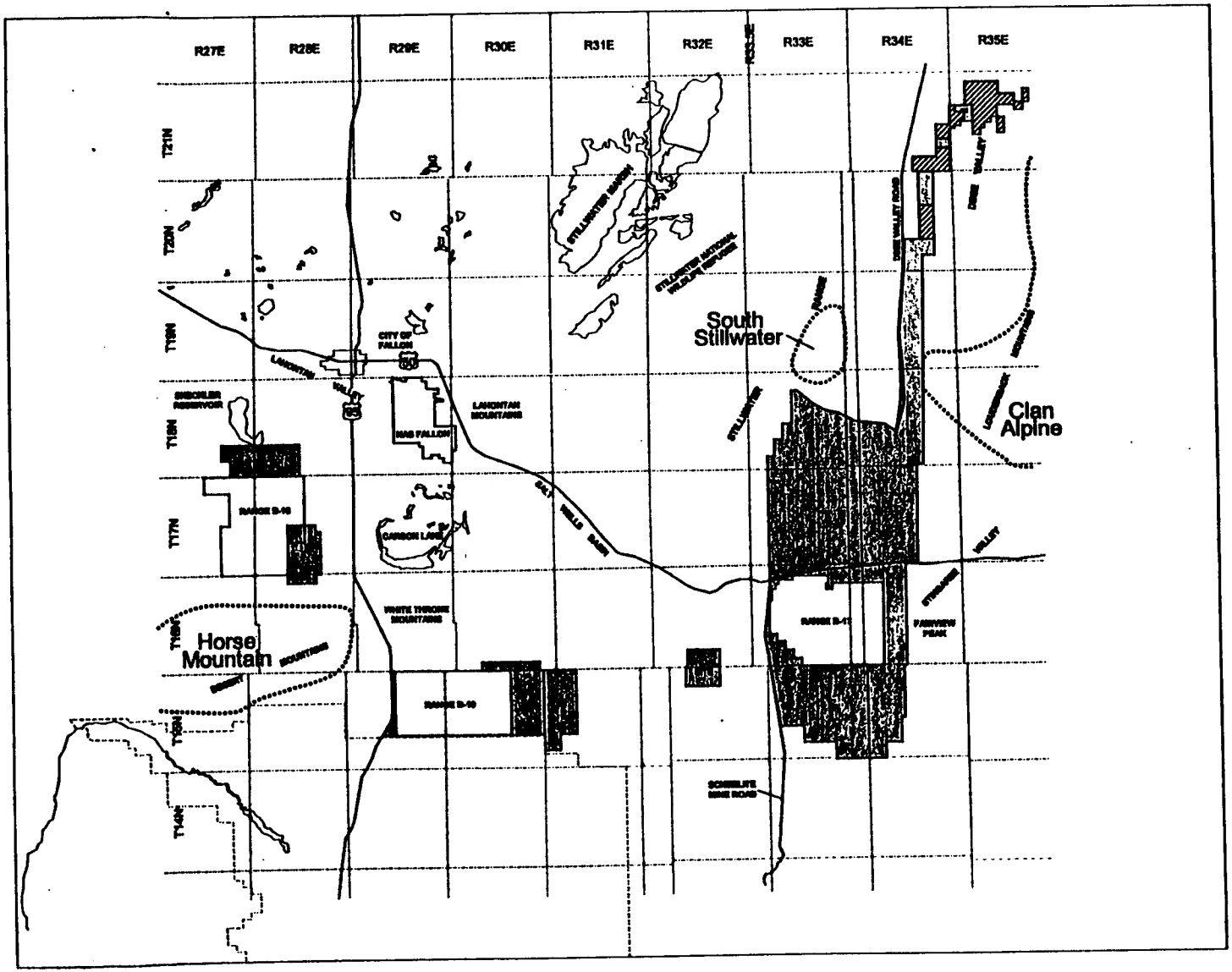
Grazing allotments exist over most of the land proposed for withdrawal.

Grazing Allotments and Water Developments

NAS Fallon, Nevada

Figure 7

Source: Department of the Navy 1997



LEGEND

- NAS Fallon and Ranges
- Proposed Withdrawal Areas
- Navy Owned Land in Dixie Valley
- Herd Management Area Boundary

N

0 5 10 Miles

The Wild Horses and Burros Protection Act of 1972 requires the Secretary of the Interior to protect and preserve wild and free-roaming horses and burros through management of land administered by the BLM.

Wild Horse Herd Management Areas

NAS Fallon, Nevada

Figure 8

Source: Department of the Navy 1997

RECREATION, WILDERNESS, HUNTING AND TRAPPING

Important recreational resources in the project area are shown in Figure 9.

MANAGEMENT OBJECTIVES

R-O-1 To avoid adverse impacts to wilderness study areas or wilderness areas, including Job Peak WSA near Dixie Valley.

R-O-2 To allow safe public access to Category B lands for the purpose of dispersed recreation, hunting, and trapping, consistent with Navy operational requirements for the affected lands.

MANAGEMENT DIRECTION

R-D-1 Public access to Category A lands will be prohibited.

R-D-2 Public access to Category B lands will be allowed in a manner consistent with current BLM regulations and land use plan decisions including ORV use designations.

MANAGEMENT ACTIONS

R-A-1 Close existing access roads to Category A lands and post signs indicating that all public access is prohibited.

R-A-2 Close and fence Category B lands that contain EW, TACTS, and portable visual cueing devices to prohibit public access where operations could cause impacts to public safety. (They will not be fenced in remote areas.)

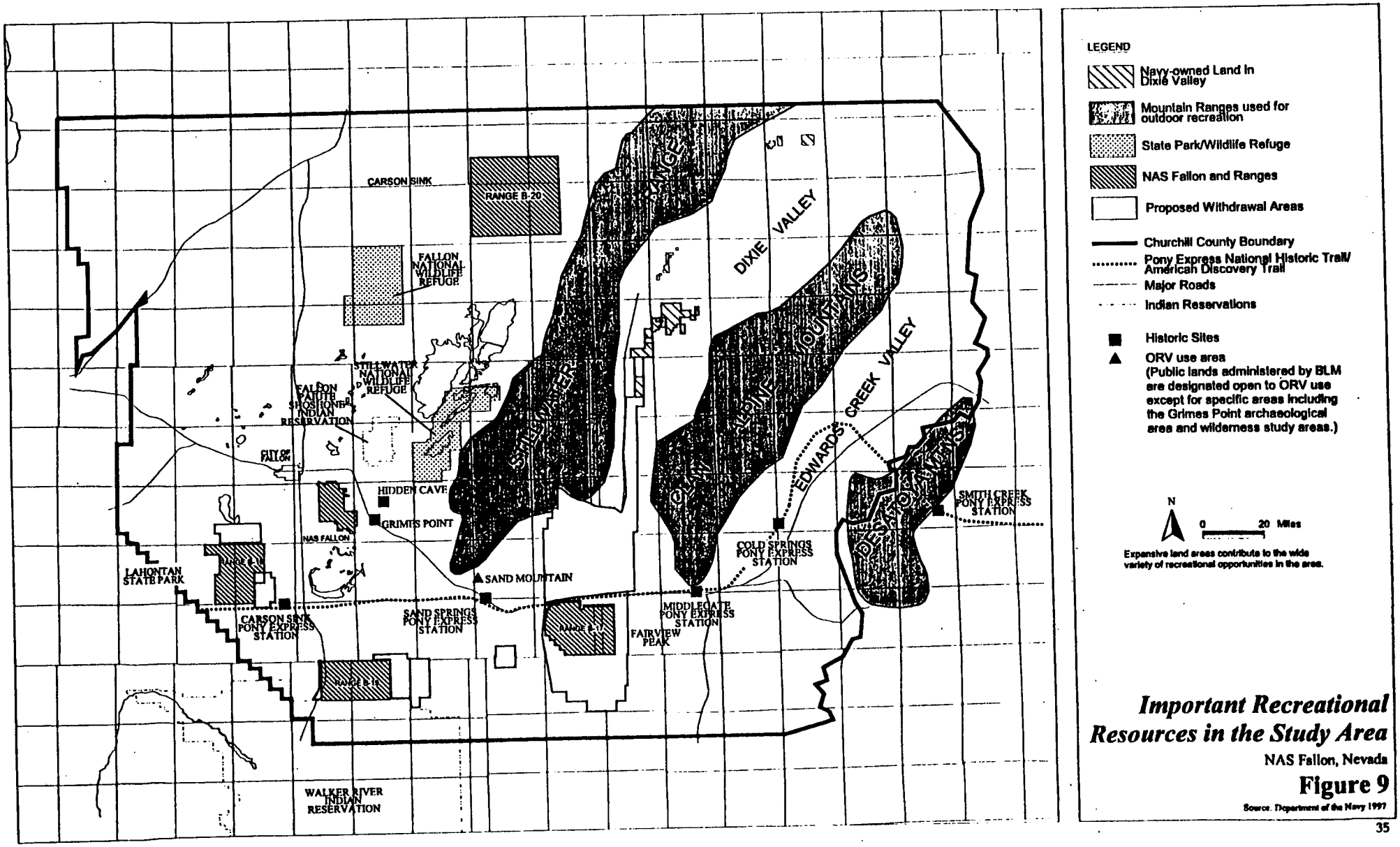
R-A-3 Prohibit access to fenced areas without Navy approval.

R-A-4 Prohibit organized recreational activities, such as ORV races, on developed sites.

R-A-5 Allow abandoned sites to be used for organized recreational activity in accordance with the surrounding land management categories.

R-A-6 Require advance notification and approval from the Navy for any organized activities currently subject to BLM, BUREC, or DOE permitting procedures, such as ORV races.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 9.



Important Recreational Resources in the Study Area

NAS Fallon, Nevada

Figure 9

Source: Department of the Navy 1997

Table 9. Applicable Management Objectives, Directions, and Actions for Recreation, Wilderness, Hunting, and Trapping on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
R-O-1									B	
R-O-2	B	B					B	B	B	B
Management Directions										
R-D-1		A	A	A	A	A	A			
R-D-2	B	B					B	B	B	B
Management Actions										
R-A-1		A	A	A	A	A	A			
R-A-2	B	B					B	B	B	B
R-A-3	B	A/B	A	A	A	A	A/B	B	B	B
R-A-4	B	B					B	B	B	B
R-A-5	B	B					B	B	B	B
R-A-6	B	B					B	B	B	B

VISUAL RESOURCES

MANAGEMENT OBJECTIVES

Vis-O-1 To protect the scenic values of withdrawn lands.

Vis-O-2 To ensure that the visual impacts of management practices and development activities are minimized.

MANAGEMENT DIRECTION

Vis-D-1 Assign visual resource management (VRM) classes in accordance with BLM guidance and policy.

Vis-D-2 Ensure all actions initiated or authorized by the regulatory agencies are in compliance with VRM guidelines.

MANAGEMENT ACTIONS

Vis-A-1 Manage the proposed withdrawal areas for VRM Class III values.

Vis-A-2 Environmental review of proposed developments on Category B lands would need to consider impacts to visual resources as part of the NEPA compliance process.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 10.

Table 10. Applicable Management Objectives, Directions, and Actions for Visual Resources on Category A and B Lands by Withdrawal Area

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
Vis-O-1	B	A/B	A	A	A	A	A/B	B	B	B
Vis-O-2	B	A/B	A	A	A	A	A/B	B	B	B
Management Directions										
Vis-D-1	B	A/B	A	A	A	A	A/B	B	B	B
Vis-D-2	B	B					B	B	B	B
Management Actions										
Vis-A-1	B	A/B	A	A	A	A	A/B	B	B	B
Vis-A-2	B	B					B	B	B	B

CULTURAL RESOURCES

MANAGEMENT OBJECTIVES

C-O-1 To conserve and protect archeological and historical sites in the project area, as well as those objects, structures, and sites of traditional cultural importance.

MANAGEMENT DIRECTION

C-D-1 Cultural resources will be managed in accordance with the NAS Fallon Cultural Resources Management Plan (CRMP) and the Programmatic Agreement (PA) with the Advisory Council and State Historic Preservation Office (SHPO) for Navy actions.

C-D-2 The BLM, BUREC, or DOE, with the cooperation of the Navy, will be responsible for compliance with cultural resource preservation laws for non-Navy actions on withdrawn lands.

MANAGEMENT ACTIONS

C-A-1 Field investigations generally will not be allowed on Category A lands.

C-A-2 Field investigations will be conducted on Category B lands in the planning stages of ground disturbing activities.

C-A-3 Prior to siting a Navy or non-Navy facility or activity having the potential to affect cultural resources, NAS Fallon would use the Carson Desert predictive model to determine the potential for cultural resources on withdrawal lands. The Navy would attempt to avoid those areas potentially containing cultural resources when siting military equipment and when conducting air and ground training operations. Where areas cannot be avoided, cultural resource survey will be conducted, and, if appropriate, consultation and mitigation will be undertaken.

C-A-4 Where feasible and prudent, alternatives to avoid affecting cultural resources will be implemented for non-Navy actions; where this is not possible, the comments of the Advisory Council on Historic Preservation will be sought in accordance with its regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act.

C-A-5 EW, TACTS, and visual cueing sites will be located to avoid culturally sensitive areas, based upon the results of project-specific cultural resource surveys conducted for each potential site.

C-A-6 Field investigations will be conducted on Category A and B lands in the planning stages of ground disturbing activities by integrated training actions.

The applicability of each management objective, direction, and action to the specific areas included in the withdrawn lands is summarized in Table 11.

Table 11. **Applicable Management Objectives, Directions, and Actions for Cultural Resources on Category A and B Lands by Withdrawal Area**

	PROPOSED WITHDRAWAL AREA									
	B-16 N	*B-16 E*	*B-17 N*	*B-17 S*	*B-17 E*	*B-17 W*	*B-19 E*	*B-19 W*	*Dixie Valley*	*Shoal Site*
Management Objectives										
C-O-1	B	A/B	A	A	A	A	A/B	B	B	B
Management Direction										
C-D-1	B	A/B	A	A	A	A	A/B	B	B	B
C-D-2	B	B					B	B	B	B
Management Actions										
C-A-1		A	A	A	A	A	A			
C-A-2	B	B					B	B	B	B
C-A-3	B	A/B	A	A	A	A	A/B	B	B	B
C-A-4	B	A/B	A	A	A	A	A/B	B	B	B
C-A-5	B	B					B	B	B	B
C-A-6	B	B					B	B	B	B

REFERENCES CITED

U. S. Dept. of the Navy. 1997. *Draft Environmental Impact Statement, Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada.* June.

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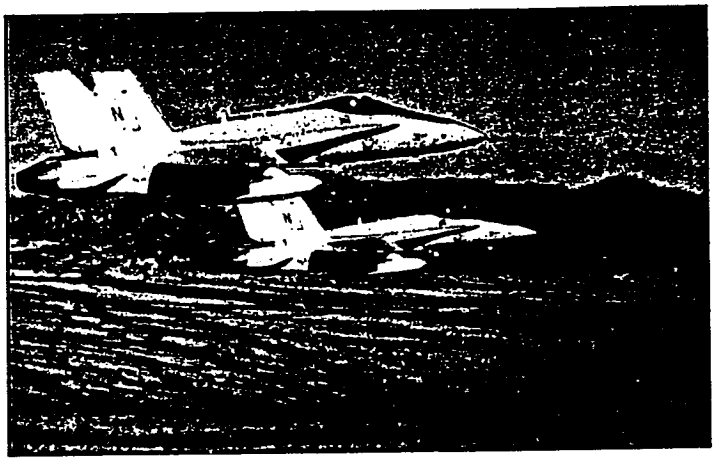
Volume 2

Final Environmental Impact Statement

Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada



May 1998

Department of the Navy
Naval Air Station Fallon
Fallon, Nevada

Response to Comments on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes NAS Fallon, Nevada

The Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes, NAS Fallon, Nevada, was circulated for public and agency review from July 10, 1997, to October 10, 1997. During this period, the Navy held public hearings on September 16, 1997, in Reno, Nevada, and on September 17, 1997, in Fallon, Nevada. The public hearings provided the public the opportunity to comment on the content and accuracy of information presented in the Draft EIS.

The National Environmental Policy Act, through Council on Environmental Quality implementing regulations, directs the lead agency to invite comments on the Draft EIS (40 CFR 1503.1) and provide responses to comments on the Draft EIS in the final environmental impact statement (40 CFR 1503.4). This response to comments section of the Final EIS presents the written and oral comments received during the public review period and responses to the substantive environmental issues raised in those comments.

The written comments received during the 90-day review period have been identified by letter designation, and each letter has been divided into discrete comments. The oral comments received during the public hearings, as presented in official transcripts, are identified as PHR for the public hearing held in Reno, Nevada, and PHF for the public hearing held in Fallon, Nevada. Like the written comment letters, discrete comments have been identified within each transcript.

Because of the number of comments and the similar nature of many of the comments, comments are organized by general issue areas and a single answer prepared for each comment in the issue areas. References to where the comment appeared in the comment letters and public hearing transcripts are provided for each comment. Detailed comments, such as formatting or edit-related comments or those dealing with a specific page of the Draft EIS, are responded to in Section 26, Detailed Comments. Comments that are not related to a substantive environmental issue or that express a statement to be entered into the record are included in Section 29, Miscellaneous and Other Comments.

The comments on the Draft EIS were divided into the following issue areas:

Section	Issue Area	Page
1.	Purpose and Need and Alternatives	RTC-3
2.	NEPA-related Issues	RTC-6
3.	Department of Defense Activity	RTC-8
4.	Federal Advisory Committee Act (FACA)/Citizen Advisory Board	RTC-8
5.	Land Use Management and Compatibility	RTC-9
6.	Mitigation Measures	RTC-11
7.	B-16 Training Range	RTC-13
8.	Shoal Site	RTC-14
9.	Integrated Air and Ground Training	RTC-15
10.	EW, TACTS, and Visual Cueing Device Site Development	RTC-16

Section	Issue Area	Page
11.	Airspace-related Issues	RTC-18
12.	Cumulative Impacts	RTC-19
13.	Biological Resources and Water Resources	RTC-21
14.	Air Quality and Noise	RTC-23
15.	Cultural Resources	RTC-25
16.	Environmental Justice	RTC-25
17.	Socioeconomics	RTC-29
18.	Mineral Resources and Mining	RTC-29
19.	Livestock Grazing and Wild Horse Management	RTC-31
20.	Recreation, Public Access, and Visual Resources	RTC-31
21.	Public Health and Safety	RTC-37
22.	Off-range Ordnance	RTC-39
23.	Chaff	RTC-40
24.	Utilities	RTC-42
25.	Maps and Figures	RTC-43
26.	Detailed Comments	RTC-45
27.	Support for the Proposed Land Withdrawal	RTC-79
28.	Opposition to Navy Actions	RTC-79
29.	Miscellaneous and Other Comments	RTC-80

Comments and Responses

1. Purpose and Need and Alternatives

a) Comment: The range of alternatives does not provide a wide margin of flexibility. For example, range B-19 borders the Walker River Indian Reservation. All three alternatives would withdraw lands along the border of the reservation east and west of B-19 rather than north of B-19 away from the reservation. Similarly, alternatives should be considered for B-16 that would withdraw lands south and west of the range, thus minimizing impacts to the City of Fallon and in the Sheckler District. An off-range ordnance alternative and Bureau of Land Management (BLM)-identified Preferred Alternative should be examined (see Comments B-15 and B-16).

References: Comments A-1 to A-3, B-14 to B-16, MM-16, SS-4

Response: The withdrawal areas are based on existing military training and public safety requirements. For example, aircraft fight patterns at range B-19 run in an east-west and west-east direction based on military airspace and training range configurations. Off-range ordnance sweeps and HAZARD analysis have identified the areas east and west of range B-19 as potential public safety hazard zones. Withdrawing the land north of B-19 would not satisfy the stated purpose and need of protecting the public from potential hazard areas and would not fulfill Navy training requirements. Withdrawing lands west and south of B-16 would not fulfill Navy training needs and would not encompass the 640 acres of land east of the range closed under the BLM's emergency closure order. In addition, lands west of B-16 contain petroglyph caves, an important cultural resource, and lands south of the B-16 contain the Pony Express National Historic Trail. As detailed in Section 2.2.3, an off-range ordnance alternative and the BLM-identified alternative are not responsible alternatives to accomplish the proposed action, would not meet all of the purpose and need objectives for the land withdrawal as described in Sections 1.3 and 1.4, and therefore are not carried forward in analysis.

b) Comment: The Navy should only use or withdraw public lands contaminated with off-range ordnance. The withdrawal of designated Category A lands is warranted.

References: Comments Y-1, HH-10, II-3, T-40, T-41, PHR-8, PHR-13

Response: As discussed in Section 2.2.3, this alternative would only partially fulfill the public safety criteria and would not fulfill the training requirements of the proposed land withdrawal; therefore, it is not carried forward for detailed analysis.

c) Comment: A 25-year withdrawal term is too long. The Nellis range received congressional approval for 15 years.

References: Comments BB-4, PHF-4

Response: At the time the Draft EIS was printed, the Department of the Interior allowed for withdrawals of up to 25 years to support the projected purpose and need of the proposed action. Congress will ultimately decide the length of the withdrawal term.

d) Comment: The Navy did not establish the purpose and need for action. The practical purpose of the proposed action appears to be to establish a ground troop training base through administrative action rather than through congressional authorization for a ground troop training base.

References: Comments DD-1, KK-6

Response: The purpose and need are discussed in detail in Sections 1.3 and 1.4. The Navy is not proposing to create a ground troop training base. Ground training integrated with aircraft operations is an ongoing Navy mission involving short-term, dispersed, small events. Events last from five minutes to two hours and involve small numbers (generally less than 15) of troops, one or two vehicles, and/or a helicopter. These events typically take place during the four to six air wing training events that occur each year. Ground training has occurred historically on proposed Category B withdrawal lands and on other public lands, as approved by BLM; however, the BLM Carson City District's current position is that it does not have the authorization to allow most military activities, including ground training, on public lands.

e) Comment: Alternatives to ground training should be provided, including use of other Department of Defense ranges. Rationale for excluding alternative sites appears weak. The Draft EIS did not establish that ground training could not be accomplished on lands already withdrawn by NAS Fallon or on other military lands in Nevada. The withdrawal should be held to the old electronic warfare range as sufficient land has already been withdrawn at Nellis for integrated air and ground training.

References: Comments B-33, F-9, F-15, T-54, Y-6, DD-2, II-1, WW-1, XX-1, PHR-15, PHR-27, PHR-75

Response: Moving ground training to another DOD facility would preclude integration of the air and ground units. Ground training is integrated with air operations and cannot be separated from the air mission; much of the ground training (see Section 2.3.1, Ground Activities) occurs in concert with the carrier air wing training events that occur four to six times per year (Section 1.2.2.2). It would not be possible to conduct only the ground training at another DOD facility; both the air and ground training would have to be relocated. Conducting integrated air and ground operations at another DOD facility is not a long-term alternative, as discussed in Section 2.2.3. As noted in Section 2.2.3, relocation would limit training time and increase the cost of training. In addition, land and airspace at Nellis Air Force Range are not available on a scale commensurate with Navy training requirements.

f) Comment: The Draft EIS should include an alternative without a withdrawal that examines use of a cooperative agreement to accomplish its needs. The Draft EIS fails to consider alternatives that could have sought to resolve these conflicts between the military mission and multiple use mandates for public lands through the establishment of the legally mandated NAS Citizen's Advisory Board or through a request to the BLM's Resource Advisory Agency.

References: Comments DD-2, DD-3

Response: The Navy consulted with the BLM Carson City District regarding instituting cooperative agreements to accomplish Navy needs. The BLM does not believe that it has the authorization under the Federal Land Policy and Management Act to allow most military activities discussed in Section 2.3.1. However, the Navy feels that it is in the interest of all public land users for the BLM to permit certain types of military activity on limited public lands, thereby precluding the need to withdraw, segregate, and control large parcels of land to prohibit multiple user activity.

g) Comment: The Draft EIS fails to consider an alternative to turn over Navy land acquired in Dixie Valley, which is surrounded by public lands, to the BLM. The Navy has no authority to own or manage any lands in the Dixie Valley. The Navy acquired private lands to mitigate the impacts of sonic booms; these lands were not acquired for a ground troop training base. Inholdings within public lands that are acquired by the Navy must be transferred to the federal agency controlling the surrounding lands unless there is specific authorizing legislation to acquire and manage the land as a ground troop training base. Such is not the case for lands acquired in the Dixie Valley. It is questionable whether the Navy should maintain control of the acquired lands, which undermines the entire Draft EIS.

References: Comment DD-4

Response: As discussed previously, the Navy is not creating a ground troop training base at NAS Fallon; integrated air and ground training is an ongoing mission of NAS Fallon. The Navy acquired Dixie Valley lands for military purposes through congressional authorization and may conduct military operations there to satisfy mission requirements. Federal agencies have the authority to hold property rights pursuant to 40 USC 483, Management and Disposal of Federal Property. Only upon the holding agency identifying lands as excess can lands be relinquished to the General Services Administration, which in turn has the responsibility of dispersing lands to the appropriate federal agency. The Navy acquired Dixie Valley lands with Congressional approval to mitigate potential impacts from sonic booms. Once these lands were acquired, the Navy was obligated to consider these lands for other future requirements, such as military training purposes.

h) Comment: The EIS, as stated in the No Action Alternative, does not prove that adequate training for the pilots cannot be provided if the lands continue to be administered by the BLM. The BLM can continue to designate off-range ordnance lands (Category A) as closed to public access; in no way should this interfere with station operations. Category B lands should remain public lands and be administered by the BLM. Operations and training could occur without this massive loss of public lands.

References: Comments KK-1, KK-2, KK-3

Response: The BLM Carson City District believes that it does not have the authorization to allow most of the military activities discussed in Section 2.3.1. Section 2.3.2.2 discusses how public use will be managed on Category B lands. Category B lands are proposed to remain open to public use and to continue to be managed by the BLM for multiple uses. The withdrawal of these lands is necessary to allow for military training activities not currently authorized on BLM-administered public lands around NAS Fallon training ranges.

i) Comment: The land withdrawal cannot be supported because there are existing homes in the areas outlined for expansion.

References: Comment NN-3

Response: There are no homes, private residents, or private property within the boundaries of any of the proposed withdrawal alternatives. Detailed maps have been added to Appendix I to clarify the boundaries of the withdrawals.

j) Comment: The Navy has not articulated the purpose and need and alternatives for the withdrawal 68,600 acres in the Dixie Valley.

References: Comment PHR-14

Response: As shown in Table 2-5, the Navy has requested the withdrawal of lands in the Dixie Valley area for development of up to five EW and TACTS sites, for placement of visual cueing devices, and for integrated air and ground training. The withdrawal of these lands is necessary to allow for military training activities not currently authorized on BLM-administered public lands around NAS Fallon training ranges. Withdrawal of these lands also will allow for varied and flexible siting of EW threat emitters and visual cueing devices necessary to ensure that realistic training is conducted.

2. NEPA-related Issues

a) Comment: Public involvement of the DEIS was inadequate. The DEIS should be reissued.

References: Comments B-1, B-6, VV-4

Response: Extensive public involvement was undertaken for this project as discussed in Section 1.5. Letters were sent to interested parties as identified from previous projects, announcements were placed in local newspapers, press releases were issued, and public hearings and scoping meetings were held in Fallon and Reno. A 90-day public review period of the Draft EIS, as suggested in the Engle Act, was implemented. The National Environmental Policy Act (NEPA) only requires a 45-day comment period.

b) Comment: Local scoping meetings should be conducted in central Nevada. Outreach to local governmen in rural Nevada was inadequate.

References: Comments Q-2, U-2, X-3, T-27, II-2, VVV-3, CCCC-1, PHR-2, PHR-20

Response: Public hearings and meetings were held within the region of influence for the project (see Section 1.5). Notices of the project were published in local newspapers and the public was invited to participate in the NEPA process. A special meeting was held in Austin on September 30, 1997, to respond to concerns of citizens of Eureka and Lander Counties during the September 16 and 17, 1997, public hearings. Scoping and public involvement letters also were sent to representatives of potentially affected Native American groups as shown in Appendix B. In addition, a meeting was held in November of 1995 with representatives of the BIA and members of potentially affected Native American groups to discuss how withdrawn lands would be managed.

c) Comment: Review period of the EIS should be extended (by 30 days, 60 days, or 1 year).

References: Comments Q-1, S-1, U-1, V-5, X-1, X-2, EE-1, VVV-1, WWW-1, CCCC-1, GGGG-1

Response: The comment period was 90 days, twice the minimum NEPA requirement. Further extensions to the public review period were not determined to be necessary.

d) Comment: EIS is vague, conclusory, outdated, and internally contradictory, limiting the ability of the public to adequately participate. For example, transportation/access is a key issue and is missing from the analysis despite the fact that a significant expansion is proposed along Dixie Valley Road. Data are outdated, including grazing information from 1983. Sections ar

direct conflict to Council on Environmental Quality (CEQ) guidance, such as deferring cumulative impact analysis to future documents. Other statements are conclusory or incorrect, such as the statement that increasing airspace south of B-16 would have no impacts on land use.

References: Comments B-2 to B-5, B-19, FFFF-1, PHR-21

Response: The transportation issues are discussed in Section 3.14 and 4.2.14 of the Draft EIS. As discussed in Section 4.2.14, roads on Category A lands will remain closed, an unmitigable impact, with the exception of the recently reopened gas pipeline road discussed in Section 3.14 and response to comment 20b. Section 4.2.14 states all roads in Category B areas are adequate to handle additional traffic from military activities; text has been added to the Final EIS to state that Dixie Valley Road is included in the analysis. Data on grazing is current and has been confirmed with the BLM; the 1983 citation was a typographic error and has been changed to read 1985a. This is the most recent resource management plan the BLM has conducted for the region. As noted in the sentence following the citation, and in Table 3-10, updated data is provided based on consultation with the BLM (Mr. Minor, Carson City District Office). All reasonably foreseeable actions are adequately discussed in Chapter 5. Analysis of potential impacts of future proposed projects are provided to the degree possible; no attempt has been made to defer or postpone analysis.

e) Comment: The Navy is piecemealing its actions with regards to the proposed changes to the B-16 airspace, the reasonably foreseeable Military Operations Areas (MOAs), and placement of electronic warfare (EW) and Tactical Aircrew Combat Training System (TACTS) sites.

References: Comments F-5, F-6, F-7, R-4, U-3, V-4, T-55, II-5, LL-24, NN-4, PHF-18

Response: The proposed B-16 airspace changes and the reasonably foreseeable MOA designations are discussed in Chapter 5 of the EIS. These actions are not related to the proposed land withdrawal or training that would occur on the proposed withdrawal lands, though the airspace changes proposed for B-16 did result from comments received during scoping for the EIS. The placement of EW and TACTS sites is analyzed in Section 4.2 of the EIS under each potentially affected resource area.

f) Comment: According to NEPA, EISs should be written to a tenth grade level. This EIS was difficult to understand and too lengthy.

References: Comment LL-38

Response: Due to the complexity of the issues, detailed analyses were required. To the greatest extent possible, the detailed analyses were simplified to a readable understanding of the findings.

g) Comment: The impact analysis uses outdated baseline conditions and is therefore inadequate.

References: Comment B-19

Response: The best available data were used when defining the existing environment. Resource management agencies were consulted, the latest data were gathered, and an extensive literature search was conducted. The BLM, the agency charged with resource management on these public lands, was involved as a cooperative agency. Policy statements referenced in this document reflect current management policies.

3. Department of Defense Activity

a) Comment: A comprehensive Department of Defense plan for airspace and land withdrawal activity is necessary.

References: Comments SS-1, PHR-30

Response: The Navy is currently developing a Navy-wide needs assessment, as are the other branches of the military. These individual efforts may be compiled in a Department of Defense national needs assessment.

b) Comment: The Navy should work cooperatively with the Air Force to share lands and airspace at Nellis Air Force Range (AFR). The final alternative selected should include the use of other Department of Defense facilities to minimize impacts in central Nevada.

References: Comments R-8, CC-1, HH-14, II-4, OO-9, KKK-1, RRR-5, SSS-4, FFFF-4, PHR-7

Response: The Navy and Air Force currently work cooperatively in sharing lands and airspace for training where possible and advantageous to both entities. As discussed in Section 2.2.3, airspace at Nellis AFR is used for test and evaluation (T&E) purposes, while airspace at NAS Fallon is used for operations and maintenance. While some training may be conducted at T&E ranges, it is not a priority within the Test and Evaluation Range mission. Furthermore, availability of combat training systems, targets, and resources at Nellis AFR are limited for Navy use, as described in Section 2.2.3 of the EIS. Additionally, use of Nellis AFR would not satisfy the alternative criteria to provide for efficient use of training time and fuel (see Section 2.2.1).

c) Comment: Many proposals have been made at western Department of Defense facilities. Department of Defense's failure to prepare a programmatic EIS for these proposed actions violates the spirit and letter of NEPA.

References: Comments Y-10, PHR-30

Response: Counsel of Environmental Quality regulations on implementing NEPA (40 CFR 1500-1508) do not require a programmatic EIS. Western Department of Defense facilities proposals are not connected actions and therefore are not required to be addressed in one EIS. One programmatic EIS for proposals made at all western DOD facilities is not appropriate because of the geographic separation of the actions, the differing resources and federal agencies involved for each proposal, and the requirements of Congress to conduct certain environment documentation. Each of the proposals must stand as individual documents to comply with NEPA. The Department of the Navy is preparing a Navy-wide needs assessment.

4. Federal Advisory Committee Act (FACA)/Citizen Advisory Board

a) Comment: The Navy should form a FACA committee for NAS Fallon. A broad and diverse committee of Nevada stakeholders should be established to advise the Navy on its present and future activities affecting public lands.

References: Comments F-12, F-18, J-7, Y-9, DD-3, II-9, PHR-18, PHR-36, PHR-72

Response: The Federal Advisory Committee Act is very specific concerning the conditions under which a FACA committee can be convened; a moratorium has been placed on advisory committees without Secretary approval. The purposes stated in this comment do not qualify f

establishment of a FACA for this action. Airspace and land withdrawal initiatives at NAS Fallon require the preparation of appropriate NEPA documentation, which mandates public participation at appropriate phases of the EIS preparation. The Joint Military Advisory Committee (JMAC) was created by the Special Nevada Report and meets with the State of Nevada semi-annually.

5. Land Use Management and Compatibility

a) Comment: Military training (visual cueing devices, ground training, integrated air training, expanded air combat training) that would occur on Category B lands is not compatible with public uses. Areas proposed for Category B management are on the approach to an active bombing range (B-17). Problems associated with attempting to provide open public access to these areas became apparent when at B-20 a Navy pilot fired on workers on an observation tower. Potential for future pilot errors are likely to increase over time as more visual cueing and threat emitters increase the complexity of training missions.

References: Comments B-7 to B-11, PHF-12

Response: The Navy believes that impacts of military uses on the public would not preclude public use and that the BLM is able to manage these multiple uses. For this reason, the Navy is proposing that withdrawn Category B lands remain open to public use under BLM management with Navy having review and approval authority for certain activities. The referenced incident occurred near a weapons impact area well within on an existing training range and not on lands proposed for withdrawal. The proposed withdrawal would not increase the likelihood of a similar incident because the public would not be allowed access on existing training ranges or proposed Category A lands around the training ranges. Public comments have supported public uses on proposed Category B lands. BLM management of Category B lands with Navy review and approval of certain activities would best accommodate the desires of the public and the training needs of the Navy (see Section 2.3.2.2).

b) Comment: BLM and BUREC are not equipped to manage dispersed recreation or any public uses while accommodating combat training facilities and missions. While the number of projected short-term ground-combat training is relevant to the analysis, long-term use is most significant.

References: Comment B-12

Response: The majority of Navy actions occur during the week, are highly localized, and are of short duration. Given the small number of integrated and ground training events, their short duration, and limited environmental impact, no long-term adverse environmental impacts will occur. The Navy does not feel that military activities conflict with dispersed recreation on Category B lands, but does recognize that the public may experience a startle effect from these activities. Mitigation has been added to the Final EIS Section 4.2.12 stating that education program materials on Navy training activities will be provided to the BLM, the Bureau of Reclamation (BUREC), and the Nevada Division of Wildlife (NDOW) for dispersal to the public.

c) Comment: It does not seem that co-management with the BLM is workable in the Dixie Valley area. A congressional bill should be introduced mandating the BLM to issue a perpetual permit to conduct proposed Navy land operations with the Navy legally responsible for problems it causes and required to reimburse the BLM for management costs due to Navy use of the area. The Navy could request legislative authority for the BLM to review and approve land use permits for short-term military uses.

References: Comments B-17, Y-7, KKK-4, KKK-5, PHR-16, PHR-71, PHR-73

Response: The Navy supports this type of arrangement; however, the Navy cannot stop training activities or implementation of this proposed action while pursuing such legislation. After completion of the proposed withdrawal, and in consultation with the BLM, the Navy will support legislation allowing for co-management of public lands near NAS Fallon for military purposes. Such legislation must allow for current and future training needs. At that time lands currently proposed for withdrawal as Category B lands could be returned to BLM administrative authority.

d) Comment: Category B lands could be managed by the BLM and therefore do not need to be withdrawn by the Navy. The Navy should consider an alternative that amends the BLM land use plan to be compatible with the Navy's defined mission. BLM management would provide assurance that lands remain open to multiple uses.

References: Comments J-4, J-7, T-108, T-110, T-115, T-116, T-122, T-128, KK-6, PHR-37, PHR-39

Response: The BLM Carson City district does not feel that military training uses described in Section 2.3.1 are appropriate for public lands, and their most recent interpretation of the Federal Land Policy and Management Act indicates they may not have the administrative authority to allow for military activities on public lands.

e) Comment: The Navy should not withdraw lands they do not want to manage. The Board of Eureka County Commissioners has on numerous occasions been required to supply BLM with financial or technical support to complete projects because the BLM did not have the time, staff, or money. The Bureau of Indian Affairs (BIA) opposes the continued management of withdrawn areas by the current land management agencies because the BLM and BUREC would then be responsible, monetarily and through public criticism, for contamination resulting from Navy activity.

References: Comments D-2, R-5, T-58, T-108, T-110, T-115, T-116, T-122, T-128, V-2

Response: Historically, Congress has maintained BLM management for Department of Defense withdrawals, as evidenced in Public Law 99-606. Congress has the ultimate authority on how proposed Category B withdrawal lands will be managed. Responsibility for cleanup of contamination resides with the contaminating agency, not with the managing agency.

f) Comment: Broad authority to permit public uses on Category B lands on a case-by-case basis and "generally" open lands provide no assurance that land will remain open in the long-term. No statement of what land uses would be restricted or what restrictions might apply are stated in the document. Public access should be assured to support present land use planning and uses. The BLM and BUREC should control accesses to their adjacent land. Given past Navy management practices, long-term access to lands under Navy control is far from guaranteed.

References: Comments J-2, J-7, L-4, BB-3, JJ-14, PHF-39, PHF-42

Response: Public access will remain open on Category B lands, as discussed in Chapter 2 and Chapter 4 and as detailed in the Resource Management Plan included as Appendix J in the Final EIS. The most likely land use restriction, discussed in Section 2.3.2.1 of the EIS, would involve the construction of structures greater than 50 feet in height on certain Category B areas such as aircraft run-in lines. The information presented in the EIS will be included in the Record of Decision, binding the Navy to continued public access for the long-term.

g) Comment: Actual management plans for the withdrawn lands should be included as part of the Draft EIS so that actual impacts and loss of use can be better evaluated.

References: Comments L-4, L-5, NN-1, NN-10

Response: The general land use management guidelines were identified and evaluated in the Draft EIS (see Section 2.3.3). As coordinated with the BLM, the Resource Management Plan has been included as Appendix J in the Final EIS and will be submitted with the Request for Withdrawal to Congress.

h) Comment: Co-use or multiple use of public lands should be encouraged and allowed to take place wherever possible.

References: Comment L-1

Response: Category B lands, except for fenced EW sites, would remain open to public use and access. As described in Section 2.3.2.2, Category B lands would be managed by the BLM with Navy review and approval of certain activities to ensure public safety and to meet training requirements. An example of potential incompatible uses include structures above 50 feet and large congregations of people at certain times and locations.

i) Comment: The Draft EIS states that if members of the public are around, the Navy will relocate its training. It is hard to believe that the Navy will actually adhere to this statement.

References: Comments II-8, PHF-12

Response: One goal of ground training is to remain undetected by non-Navy entities. Therefore, the Navy will avoid the public in their ground training operations, rather than reschedule or relocate the training. The Final EIS has been reworded to clarify this statement.

j) Comment: The statement, "any Navy training activity outside of the proposed withdrawal area would continue to be coordinated with the BLM or other appropriate agency," should be clarified. Identify what types of military uses may be necessary.

References: Comments F-10, F-16, Y-8, LL-3

Response: Specific training events, as well as emergent ones, might require use of lands outside the footprint of the withdrawal at some time in the future. The Navy will seek authorization for use of public lands for these purposes from the agency administering those lands. In most cases that would be the BLM.

6. Mitigation Measures

a) Comment: Provide more specific mitigation measures beyond Navy exploration of means to compensate claim and patent holders. Mining claims on segregated land should be returned or the claimants compensated. Privately held water rights on public land should be allowed to move to a site

where they could be accessed by the permittee or should be acquired outright by the Navy. Ranchers with grazing allotments should be given equivalent allotments or compensated for the loss of AUMs and subsequent devaluation of ranches. The EIS should report actual impacts to users (including fiscal) if there is no guarantee of mitigation. The statement that impacts to mining, grazing, water rights, and leases are unmitigable is false.

References: Comments A-6, G-1, L-3, R-1, T-67, T-70, T-94, T-114, T-119, T-121, T-127, V-1, LL-11, LL-12, LL-13, LL-15, LL-16, UU-1, FFFF-5, PHR-46, PHR-61, PHR-66, PHR-67, PHR-68

Response: The Navy is aware of this concern and realizes that these issues will have to be handled on a case-by-case basis. The Navy will consider compensation of all valid mining claims and grazing rights. These mitigation measures, as stated in Sections 4.2.2, 4.2.10, and 4.2.11, are subject to congressional authorization and appropriation.

b) Comment: The mitigation language for property takings needs to be changed. Although the proposed action may be subject to congressional authorization and appropriation, the document implies this is also true for compensating property takings.

References: Comment T-3

Response: This issue is adequately addressed in the EIS in Sections 4.2.2.1, 4.2.10.1 and 4.2.11.1.

c) Comment: Mitigations to the land withdrawal should include the return of Horse Creek, Dixie Valley landholdings, and the Mt. Grant area of the Hawthorne Army Depot to the Department of the Interior. A public easement across the private land at the base of Horse Creek Canyon should be provided. The Navy should identify non-mission critical lands that might be suitable for return to public land status.

References: Comments B-18, K-7, Y-7, BB-12, KK-4, PHF-10, PHR-77

Response: The Mt. Grant area is administered by the Department of the Army and actions affecting these lands are not subject to Navy discretion. Dixie Valley lands and Horse Creek are used extensively by the Navy for the completion of the Navy training mission and are therefore not available for disposition pursuant to 40 USC 483, Management and Disposal of Federal Property, to return to BLM administration. The Navy does not have any excess lands for return to public domain at this time. The Navy has in the past returned lands withdrawn in Nevada in excess of 790,000 acres.

d) Comment: The Navy withdrew in 1953 a one square mile panhandle where access roads converged, cutting off 30 square miles of public land. The public is now supposedly allowed to pass through the gate, but alongside the gate is a large 'do not trespass' sign. The gate has been locked in the past and may be locked in the future. The roads or access to the roads should be returned to BLM administration to be managed for Navy and public good.

References: Comments JJ-10, JJ-13, PHF-36, PHF-38

Response: The Navy intends to remove the lock from the gate to ensure public access. The gate may be latched while cattle are grazing. The No Trespassing sign has been removed. Because this land is part of the existing training range, it is not appropriate to relinquish it to the BLM.

e) Comment: There does not appear to be any assurance that mitigation measures regarding use or restrictions on Category A and B lands being proposed will be implemented.

References: Comments L-2

Response: All mitigation measures identified in the EIS will be included in the Record of Decision, which will act as the guidance document for implementing the action and associated mitigation measures. The Record of Decision is legally binding.

7. B-16 Training Range

a) Comment: The B-16 training range should be closed. While the proposed airspace reconfiguration would reduce the noise and safety threats, use of the range will continue to conflict with long-term regional land use. The only direction Fallon can develop is to the west, but growth is constrained by the B-16 training range.

References: Comments F-3, F-4, F-13, Y-2, Y-3, MM-2, MM-16, PP-1, QQ-1 to QQ-3, PHF-20, PHF-31, PHF-33, PHR-9, PHR-11, PHR-28

Response: Closure of B-16 without the concurrent establishment of a comparable training range and associated airspace would conflict with the mission of NAS Fallon. The costs and associated training lost with such an action cannot be justified by existing levels of public concern or environmental issues. Please refer to Section 2.2.3, Alternatives Not Considered in Detail, Close B-16.

b) Comment: The Navy should not be allowed to withdraw land at B-16. The RAICUZ footprint falls completely within the range boundaries. Many new homesites are being planned to the north of Sheckler and B-16. The area between Sheckler Reservoir and B-16 is at least a partial wetland and is used by many types of birds.

References: Comments Y-2, BB-11, MM-4, OO-2, HHH-5, PHF-33, PHF-38, PHR-53

Response: Only RAICUZ safety zone A falls within B-16 boundary; safety zones B and C fall outside this range boundary (see Figure 1-4 and 1-6). The Navy's Preferred Alternative would not withdraw the approximately 21,000 acres containing Sheckler Reservoir north of B-16 as proposed under Alternatives I and III. Please see Table 2-5 in the EIS for justification of the withdrawals at B-16. Section 3.3.3.5 of the EIS discusses waterfowl, shorebirds, colony-nesting and other marsh birds, songbirds, and raptors that inhabit or use the region. A study conducted by NDOW in 1989 on the effects of NAS Fallon military air operations found that different species of migratory birds responded differently to aircraft operations. Some, such as snow geese appeared sensitive to the noise, while others, such as Canada geese, acclimated to noise disturbances. The studies also found that many resident shorebirds and water birds are tolerant of aircraft disturbances. The proposed action would not result in changes to aircraft operations at B-16. Realignment of military training routes at B-16 (discussed in Sections 1.2.2.3, 3.5.3, and 5.7.3.7) have reduced low-level flights above Sheckler Reservoir, and proposed changes in flight patterns at B-16 (discussed in Section 5.6.5) would greatly reduce aircraft operations over the Sheckler District. Ground training performed north of B-16 would take place south of Sheckler Reservoir and would not occur in wetlands.

c) Comment: Armed overflight proposed outside of the withdrawn lands will result in bombing of BLM-administered public lands south of B-16 as evidenced in Figure 4 of the B-16 Range AICUZ update. Identify the liabilities to the BLM and the measures BLM will have to take to assure public safety on these lands.

References: Comments Y-3, PHF-16

Response: The Navy, in consultation with the BLM, has determined that the small potential for an inadvertent ordnance drop coupled with the inert nature of the ordnance is appropriate for the land uses located south of B-16. In addition, no inadvertent release has been documented since the early 1980s. Liabilities created, if any, to the BLM would be covered on a case-by-case basis between the Navy and BLM, allowing the BLM to manage lands within this area.

d) Comment: Congressional action is needed to direct the Navy to relocate the B-16 bombing range away from the Lahontan Valley region. Mitigative actions at B-16 would produce only a temporary solution, and changing growth patterns preclude the continued use of the range.

References: Comments Y-5

Response: Proposed changes in flight patterns at B-16 in conjunction with the existing realignment of military training routes from B-16 to B-20 to relieve the noise and overflight issues for the residents of the Sheckler District should sufficiently address the vast majority of public concerns. The costs and associated training that would be lost with such an action cannot be justified by existing levels of public concern or environmental issues. Please refer to Section 2.2.3, Alternatives Not Considered in Detail, Close B-16.

8. Shoal Site

a) Comment: The historic site conditions and ongoing activities at the shoal site have not been addressed in the EIS nor presented during the public meetings. No reference to Department of Energy (DOE) documents is included in the reference section. It is essential to retain knowledge of the site conditions so as to discourage entry into subsurface contaminated areas.

References: Comments HH-2 to HH-4, HH-6, HH-8, PHF-34, PHR-44

Response: Text has been added in Sections 1.2.2.3 and 3.8.1.4 to describe the existing environment of the shoal site and references have been included in Chapter 7, References. The DOE EIS for the Nevada Test Site and Off-Site Locations in the State of Nevada has been reviewed and incorporated by reference.

b) Comment: The extent to which the shoal site is impacted may constrain the Navy's ability to use this area and needs to be addressed in the EIS. The EIS should clearly state that access to the subsurface or removal of subsurface materials is prohibited without DOE approval.

References: Comment H-1

Response: The Navy is proposing a Navy withdrawal over a DOE withdrawal; therefore, DOE would retain responsibility for all subsurface resources and activities. The Navy would be responsible only for surface training activities, primarily combat search and rescue training. The Navy worked with the DOE in the development of the Resource Management Plan to clarify this issue. The Resource Management Plan is included as Appendix J in the Final EIS.

c) Comment: The Department of Energy does not agree that the Navy obtain the right to approve new or modified developments on the shoal site. There may be a DOE need for a nonconforming structure greater than 50 feet in height for site characterization and remediation purposes.

References: Comment E-1

Response: The Navy worked with DOE in developing the Resource Management Plan to accommodate both Navy and DOE needs. The Resource Management Plan is included as Appendix J in the Final EIS.

d) Comment: The EIS should clearly state that access to or removal of subsurface materials is prohibited without DOE approval.

References: Comment E-2

Response: The Navy does not plan to remove any subsurface material at the shoal site. Text to this effect has been added to Section 2.3.3 of the Final EIS.

e) Comment: The BLM has indicated that it has no interest in returning the shoal site to the public domain due to the existence of nuclear test contamination. The BLM should raise the issue that it may not be proper to transfer administration of the shoal site until the Department of Energy has completed its environmental program at the site.

References: Comments HH-5, PHR-44

Response: The shoal site will not be returned to the public domain. It will be a Navy withdrawal upon a DOE withdrawal with DOE retaining responsibility for management of subsurface resources.

9. Integrated Air and Ground Training

a) Comment: The intensity and type of training can dramatically increase over time in response to changing real-world threats. The EIS should evaluate the increase in FRTC use by other non-Navy forces.

References: Comments B-13, B-24

Response: Intensity and type of training may increase over time at NAS Fallon as a result of force restructuring decisions and real world scenarios. However, NAS Fallon is almost at capacity and is limited by available space. No plans for expansion currently exist and therefore cannot be evaluated in the EIS. Should any expansion in the operations of NAS Fallon be proposed, it will be subject to appropriate analysis under NEPA. Use of the Navy ranges by non-Navy forces is coordinated through the range scheduling department and is performed only for Navy benefit.

b) Comment: The Notice of Intent did not include ground training.

References: Comments F-9, T-54, Y-6, II-1, PHR-3, PHR-26, PHR-75

Response: Ground training is an existing mission component. Much of the ground training occurs in concert with the carrier air wing training events that occur four to six times per year. Ground training was added to the EIS at the request of the BLM Carson City District as clarification for how withdrawn lands may be used.

c) Comment: There is an implication that ground troop training on the proposed withdrawal is confined t integrated air and ground training exercises shown in Table 2-3 of the DEIS. The EIS needs t state that these missions could increase in the future and that there are no restrictions on potential future increases in type and intensity of ground training.

References: Comment B-35

Response: The number of training events presented in Table 2-3 were discussed in detail and represent the best reasonable estimate of potential foreseeable future training needs. While actual and projected training events are far fewer in number that those presented in the Draft EIS, the estimates used are reasonable and help to evaluate the highest potential intensity for ground training operations. Therefore, these figures are not expected to change significantly.

10. EW, TACTS, and Visual Cueing Device Site Development

a) Comment: Delete the sentence that any Navy training activity outside of the proposed withdrawal area would continue to be coordinated with the BLM or other appropriate agency. The BLM feels that military combat training operations are prohibited under FLPMA and the Engle Act.

References: Comment B-34

Response: See response to comments Section 5j. There may be additional actions necessary in the future that are not foreseeable at this time; future military training requirements could change and may require new demands of the Navy and BLM. Such situations will be handled on a case-by-case basis with the BLM Carson City District office or other appropriate administrating agency. The interpretation from the Carson City District office may not always be indicative of the management practices of other BLM offices; the Navy believes it is in the interest of public land users for the BLM to permit certain types of military activity on limited public lands. Certain limited military training operations, such as combat search and rescue, have been conducted on public lands.

b) Comment: The statement, "any Navy training activity outside of the proposed withdrawal area would continue to be coordinated with the BLM or other appropriate agency," should be clarified. A direct relationship exists between the expansion of EW and TACTS sites and the Navy's plan to increase existing airspace in the region. If this statement means that the Navy intends to develop EW sites outside the Dixie Valley, including under the Smokey, Diamond, and Duckwater Military Operation Areas, such actions could only be approved through a programmatic EIS and Congressional authorization, and should be included in the EIS.

References: Comments F-10, F-16, T-53, Y-8, PHR-4, PHR-17

Response: The Navy does not agree that a direct relationship exists between the expansion of EW and TACTS sites and the Navy's plan to increase existing airspace as stated in the State letter, or that EW sites can only be developed through a programmatic EIS and Congressional authorization. The referenced statement was included to indicate that there may be additional actions necessary in the future that are not foreseeable at this time; future military training requirements could change and may require new demands of the Navy and BLM. Such situations will be handled on a case-by-case basis with the BLM Carson City District office or other appropriate administrating agency. While the BLM Carson City District's interpretation of FLPMA considers all military training activity to be prohibited on public lands that are no withdrawn for that purpose, FLPMA interpretations by other BLM districts differ from t

interpretation. The Navy continues to believe it is in the interest of all public land users for the BLM to permit certain types of military activity on limited public lands, thereby precluding the need to withdraw, segregate, and control large parcels of land to prohibit multiple user activity. Under 40 CFR 1500-1508, Council on Environmental Quality regulations, only connected actions need be addressed in the same EIS. The proposed MOAs are not a connected action and are therefore not addressed in this EIS. The proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed. Therefore, the primary focus of the EIS is on land-based resources and issues, such as the effects of the withdrawal on public use of the proposed withdrawal lands. The primary issues of concern with a land withdrawal action are vastly different from those associated with an airspace establishment action. This training involves different legal, physical (land and air), and geographical requirements and would affect different regions of influence; as such, it is appropriate to analyze these actions separately.

c) Comment: Navy proposals to conduct military uses outside of the withdrawal footprint should be evaluated in the EIS.

References: Comment B-31

Response: The BLM and Navy are currently discussing the potential to conduct combat search and rescue training on public lands. This would allow military aircrews to become more adept at assisting in search and rescue missions and national disaster (e.g., flood and earthquake) rescues, as well as rescuing injured or stranded military personnel. No other military uses have been proposed or are foreseen outside the withdrawal area. Any actions outside the withdrawal area would be undertaken in accordance with the regulations of the appropriate administering agency, such as other BLM district offices.

d) Comment: The location of EW and TACTS sites should be identified and evaluated in the EIS. Identify if the Navy is planning on installing military electronic equipment below the Smokey, Diamond, and Duckwater MOAs.

References: Comments R-4, T-4, T-53, LL-7

Response: The location of existing EW and TACTS sites will not change. The location of future EW and TACTS sites described in the EIS have not been specifically identified but would be located within the proposed withdrawal boundaries. Upon approval of the proposed action and when needed, specific sites will be identified within the withdrawn area and evaluated for potential impacts and suitability for training. The Smoky, Diamond, and Duckwater MOAs do not exist. If they are formally proposed, site-specific NEPA documentation would be conducted. No EW or TACTS site development has been proposed by the Navy for lands that would be located under these MOAs as they were defined in the Special Nevada Report.

e) Comment: The Navy should not be allowed to put threat emitters under the Diamond, Duckwater, or Smokey MOAs.

References: Comment II-6

Response: As stated in Chapter 5, the Smoky, Diamond, and Duckwater MOAs do not exist. This is not part of the proposed action or part of any of the alternatives.

f) Comment: The expansion of EW sites represents a permanent commitment of public lands and should n be permitted outside of the Dixie Valley. Locating these sites outside of the Dixie Valle would result in the impairment of the character of the environment and the productivity of the land and in harmful levels of electromagnetic radiation.

References: Comments Y-8, PHR-17

Response: It is the Navy's opinion that EW sites are not permanent commitments, for they can be removed and the area restored to its prior condition. Most of the EW and TACTS sites identified in this DEIS would be located in the Dixie and Fairview Valleys—areas in which such devices are already located. The effects of electromagnetic radiation from these sites are discussed in Section 4.2.13.

g) Comment: The BLM Communication Sites Final Amendment has been shelved by the Navy in the DEIS. There is a strong conflict between the Navy's evaluation criteria and the BLM's stewardship of public lands. Public lands already have extensive military electronic equipment development and the public has suffered from ordnance, chaff, and flare litter. The Navy now wishes to acquire the Sheckler Reservoir for overflight and ground troop exercises.

References: Comment MM-1

Response: Withdrawal of Sheckler Reservoir is not proposed under the Navy's Preferred Alternative. Changing flight patterns at B-16 would reduce noise near developed areas and the reservoir, and would negate the need for the lands around Sheckler Reservoir. Additionally, changing flight patterns at B-16 would reduce the restricted airspace north of B-16 by returning 117 square miles to general aviation. The BLM Carson City District plan amendment is under protest bv the Department of the Navy as the Navy believes it is in the interest of all public land users f the BLM to permit certain types of military activity on limited public lands. These military activities are discussed in Section 2.3.1.

11. Airspace-related Issues

a) Comment: The EIS should include a clear, concise NEPA strategy for addressing reasonably foreseeable airspace withdrawals and for how the Navy intends to comply with Public Law 99-606.

References: Comment F-11

Response: As stated in Section 5.3, Cumulative Effects Region, the Navy is preparing a Legislative EIS (LEIS) to evaluate the environmental effects of continued military use of Navy-withdrawn lands in Nevada, as mandated by PL 99-606. The Draft LEIS is scheduled for release to the public in the summer of 1998. None of the reasonably foreseeable airspace actions have been formally proposed. Such a proposal would require site-specific NEPA documentation.

b) Comment: A programmatic EIS for all Navy-proposed airspace actions is required and alternatives should include co-use of other existing military airspace in the region.

References: Comment F-11, F-17, II-10

Response: The proposed action does not include any airspace proposals. There is no requirement in NEPA for a programmatic EIS. The proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed. Likewise there will be no expansion in flight activity under the proposed action. Therefore, the prima

focus of the EIS is on land-based resources and issues, such as the effects of the withdrawal on public use of the proposed withdrawal lands. B-16 airspace changes are independent of the land withdrawal and reasonably foreseeable actions and are being handled through the NEPA process with the FAA. If any airspace actions are formally proposed, they will be evaluated in site-specific NEPA documentation.

c) Comment: The Navy should treat the public land withdrawal and airspace expansion in two mutually exclusive environmental impact statements instead of trying to sneak the airspace expansion into this EIS.

References: Comments FFFF-2, FFFF-3

Response: The proposed action evaluated in this EIS is the withdrawal of public lands around existing NAS Fallon training ranges. If specific airspace actions are formally proposed, such as those discussed in Chapter 5, they would be evaluated in detail in separate NEPA documentation.

d) Comment: Define "strike aircraft rendezvous," "rendezvous area," "jammer axis," and "stand-off jammer" operations and what they entail. Identify what part of the Diamond MOA would be used for supersonic activity. Identify the impacts on civilian flight patterns if an ATCAA was established over the airspace. Identify impacts to the area below the Smokey MOA from a 200-foot AGL ingress.

References: Comments LL-21, LL-22

Response: Text has been added to define these terms. The airspace actions identified in Chapter 5 are only reasonably foreseeable, not proposed, and are not currently under formal environmental review. Specific details are not available on the actions; therefore, only a broad level of analysis can be provided. If specific airspace actions are proposed, they would be evaluated in detail in action-specific NEPA documentation.

12. Cumulative Impacts

a) Comment: In order for Congress to make a fully informed decision, the EIS should include cumulative impacts of past, present, and future short-term and long-term Navy actions on the human environment of central Nevada.

References: Comments B-19, B-20

Response: As discussed in Section 5.2, central Nevada is included as a secondary impact area. Section 5.8 has been revised to include the cumulative effects of airspace designations over lands of Nevada. The proposed action evaluated in this EIS, the withdrawal of public lands around existing training ranges, has no direct impact on central Nevada.

b) Comment: The EIS should include central Nevada in the cumulative impacts section.

References: Comment V-3

Response: As discussed in Section 5.2, central Nevada is included as a secondary impact area. Section 5.7 of the Draft EIS described the potential effects on central Nevada from reasonably foreseeable airspace actions at a level of detail commensurate with the level of detail available for the action. The proposed action evaluated in this EIS has no direct impact on central Nevada.

c) Comment: The EIS should include an expanded analysis of impacts on local governments in the cumulative impacts section.

References: Comment T-1

Response: The reasonably foreseeable actions discussed in Chapter 5 are not formally proposed and not detailed enough to conduct such an analysis.

d) Comment: The EIS should evaluate the actual MOA footprints, which according to information presented at the public hearings are smaller than the MOAs shown in the Draft EIS.

References: Comment R-6

Response: The airspace actions identified in Chapter 5 are only reasonably foreseeable and not yet under formal environmental review. Specific details are not available on the actions; therefore, only a broad level of analysis is provided.

e) Comment: The EIS scope should include the withdrawal of the proposed Diamond, Duckwater, and Smokey MOAs and evaluate impacts in Chapters 1 through 4 of the EIS.

References: Comments Q-3, T-11, T-12, T-13, T-14, T-15, T-42, T-43, T-44, T-51, T-88, U-3, LL-23, LL-25, VVV-2, CCCC-1

Response: Under 40 CFR 1500-1508, Council on Environmental Quality regulations, only connected actions need be addressed in the same EIS. The proposed MOAs are not a connected action and are therefore not addressed in this EIS. The proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed. Likewise, there will be no expansion in flight activity under the proposed action. Therefore, the primar focus of the EIS is on land-based resources and issues, such as the effects of the withdrawal on public use of the proposed withdrawal lands. The primary issues of concern with a land withdrawal action are vastly different from those associated with an airspace establishment action. Evaluating the actions separately allows for a more focused analysis of potential impacts from each action. Furthermore, training that occurs at the training ranges is separate from the training that would occur at the MOAs. Air-to-ground training is performed at the training ranges, while air-to-air training would be performed at the MOAs. This training involves different legal, physical (land and air), and geographical requirements and would affect different regions of influence; as such, it is appropriate to analyze these actions separately.

f) Comment: The proposed airspace expansion would result in impacts to noise, impacts to public health and safety from falling objects to people using major transportation corridors, and impacts to quality of life at currently unaffected areas of central Nevada and should be evaluated in the EIS. No permanent noise contamination should be allowed.

References: Comments R-2, T-2, UUU-2, YYY-1, ZZZ-1, DDDD-1, PHR-5, PHR-6

Response: As stated above, the proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed; therefore, no direct effects to the human environment of central Nevada would occur. Airspace expansion effects are discussed in Chapter 5 at a level of detail commensurate with the level of detail available on the airspace expansion action. Effects of airspace expansion will be evaluated in detail in site-specific NEPA

documentation once actions are formally proposed. Safety risks associated with falling objects are addressed in response to comment 26ggggggg.

g) Comment: The proposed airspace expansion would have a detrimental effect on wildlife, ecosystems, and the natural environment. Sonic booms stress wildlife.

References: Comments SSS-5, UUU-1

Response: The proposed action of this EIS only considers land withdrawals related to training and safety. The airspace actions referenced are still in the planning phase; therefore, effects could be evaluated only at a broad level in Section 5.7 of the EIS. Effects on wildlife and the natural environment from such airspace actions will be evaluated in site-specific NEPA documentation when they are formally proposed. Impacts of sonic booms on wildlife were discussed in the EIS for the Proposed Supersonic Operations Area and Other Proposed Actions at, NAS Fallon, Nevada, June 1985.

h) Comment: The proposed airspace expansion would place an undue burden on private and commercial aircraft in the area. The effects on commercial airlines should be clearly defined in the EIS.

References: Comments R-3, FFFF-3, PHR-5

Response: The proposed action of this report only considers land withdrawals related to training and safety. The airspace actions referenced are still in the planning phase; therefore, effects could be evaluated only at a broad level in the EIS. Effects on private and commercial aviation from such airspace actions will be evaluated in site-specific NEPA documentation when they are formally proposed.

13. Biological Resources and Water Resources

a) Comment: The EIS inadequately assesses wildlife issues such as eagle habitat and rare fish species, including tui chub found on Navy lands in the Dixie Valley. These species are dependent on minimal disturbance of habitat for continued existence. In addition, there is no mention of loggerhead shrike, which use the proposed withdrawal areas during mating season. The EIS should provide specific proposed actions and assess all impacts, including impacts from ground training.

References: Comments J-5, SS-2, MM-7, PHR-22, PHR-51

Response: Sensitive species and habitats such as tui chub, loggerhead shrike, and eagle habitat are discussed in Sections 3.3.4, 3.3.5, and 4.2.3 of the EIS. As discussed in Section 4.2.3, siting of EW, TACTS, visual cueing sites, and ground training areas will avoid sensitive habitats as identified by biological surveys conducted prior to site construction or activity. If habitat for sensitive species is identified, the sites or activities would be relocated.

b) Comment: The proposed withdrawal would be detrimental to wildlife utilization on these lands.

References: Comment SSS-3

Response: The analysis in the EIS concludes that while some wildlife could be adversely affected, the relative number impacted is small, habituation is anticipated, and no sensitive species would be affected. Thus, the effects are not considered significant.

c) Comment: The B-17 withdrawal area includes 33,400 acres of Category A land encompassing 70 percent of the delineated bighorn sheep habitat. Restricted access to the five water developments will impede the Division of Wildlife's ability to manage wildlife in this area, including the need to perform helicopter surveys, ground surveys, and project maintenance. Impacts on sheep should be evaluated.

References: Comments J-1, T-98, PHR-33, PHR-60

Response: The Navy will work with the Division of Wildlife to provide access to maintain water developments and conduct required management activities. Therefore, no impacts to sheep are expected.

d) Comment: Navy activities could interfere with chukar brooding at the shoal site and Stillwater Range from July to September and with bighorn sheep lambing in the Louderback Hills during the spring months.

References: Comment J-3

Response: As discussed in "Monitoring the Effects of Military Air Operations at the Fallon Naval Air Station" (NDOW 1987), chukar brooding would be sensitive to low-level overflight. No change in overflight of the shoal site is proposed as part of the proposed action. The report also concluded that aircraft disturbances had little impact on bighorn sheep.

e) Comment: The Draft EIS does not address the effects of new or increased ground disturbance or invasion or further spread of noxious weeds and other exotic species. Mitigation measures necessary to avoid such effects should be included in the Final EIS.

References: Comment M-1

Response: Disturbing sites in this climate may spread noxious weeds. The Resource Management Plan (Appendix J in the Final EIS) contains a noxious weed and weed control management program. The Navy currently has an Integrated Natural Resource Management Plan for the management of noxious weeds on all Navy lands. Text to this effect has been added to Section 4.2.3 of the Final EIS.

f) Comment: Sheckler Reservoir, which is used for irrigation, has been a benefit to migratory waterfowl. A change in management may leave the reservoir dry or polluted or even hazardous for farmers and waterfowl that use it. While the reservoir is not included in the Western Hemispheric Shorebird Reserve Network, migratory birds use it anyway.

References: Comments MM-3, MM-6, PHF-37, PHR-48, PHR-50

Response: The Navy is not proposing to change the management or use of Sheckler Reservoir. The Navy has no intention of draining the reservoir. Under the Preferred Alternative, Sheckler Reservoir would not be withdrawn.

g) Comment: The Draft EIS does not mention beetles, butterflies, bees, moths, toads, squirrels, spiders, or chipmunks. No chaff studies have mentioned this wildlife. The Draft EIS does not mention the migratory route for tarantulas along Scheelite Mine Road; the expansion of B-17, use of ground troops, and chaff could be detrimental to this species.

References: Comments MM-8, MM-9

Response: Text on tarantulas has been added to Sections 3.3.4.2 and 4.2.3 of the Final EIS. Amphibians, reptiles, fish, invertebrates (including butterflies and beetles), and mammals potentia

occurring on the withdrawn lands are discussed in Section 3.3.3 and presented in Appendix F. Table 3-1 lists sensitive species. All amphibians, reptiles, fish, invertebrates (including butterflies and beetles), and mammals were considered in the impact analysis. No chaff studies addressing these species exist. However, chaff has been dispensed over B-17, which includes the Scheelite Mine Road used by tarantulas for over 30 years with no apparent adverse impact to the species.

h) Comment: The EIS violates Section 404 of the Clean Water Act and the Endangered Species Act concerning wetlands and ponds extant on such Navy-acquired lands as the Turley Ranch.

References: Comments Z-2, PHR-2

Response: Under the proposed action evaluated in this report, the Navy is not proposing to alter, destroy, or impede habitat values of any wetlands. The proposed action would not affect Turley Ranch or other Navy-acquired lands.

i) Comment: Include a list of all water rights holders on lands proposed for withdrawal (similar to Appendix H). State whether the state water master has been consulted on this issue.

References: Comment LL-11

Response: The State Engineer was consulted in the process. Water rights holders on Category B lands would not be adversely impacted. As discussed in Section 4.2.2, the Navy will explore means to compensate holders of water rights on Category A lands, subject to Congressional authorization and appropriation.

j) Comment: The continuation of jet overflights in the Sheckler/Carson Lake area jeopardizes birds, as well as pilots.

References: Comment PHR-52

Response: The proposed action evaluated in the EIS would not involve any changes in aircraft flight operations over the NAS Fallon training ranges.

14. Air Quality and Noise

a) Comment: Noise mapping should be provided for each of the alternatives.

References: Comment A-8

Response: The EIS does not propose changes in aircraft flight operations; therefore, the noise contours presented in Figure 1-6 for ranges B-17 and B-19 and in Figure 5-4 for B-16 represent noise conditions under all alternatives. Noise contours for the proposed change in flight patterns around B-16 discussed in Section 5.6.5 are shown on Figure 5-5. Exact locations for helicopter activities associated with integrated air and ground training have not been determined, but noise from flyover, peak, and average event helicopter operations are provided in Section 3.5.4. As noted in Table 3-4, peak noise levels greater than 65 dBA would occur at distances less than 750 feet from the helicopter flight track.

b) Comment: The use of ROUTEMAP and NOISEMAP to analyze flight patterns at B-16 is unacceptable and does not satisfy the NEPA mandate for the assurance of "scientific integrity" and "scientific accuracy" under 40 CFR 1502.24. The Department of Defense is aware of the flaws in these programs. New noise analysis tools such as Assessment System for Aircraft Noise should be

used for analysis. The Department of Defense should undertake an updated analysis of th expected noise environment using the Air Force computer programs (MR-OPS and MR NMAP) for predicting noise in low-level operating areas to obtain an assessment of the expected magnitude of changes in noise levels and noise environments.

References: Comment Y-13

Response: Changes in flight patterns at B-16 are beyond the scope of the proposed action; the action will be evaluated through NEPA requirements with the FAA. ROUTEMAP, NOISEMAP, and other Department of Defense computers models are updated to reflect current methodologies, and use of ROUTEMAP and NOISEMAP are accepted modeling methods that meet the NEPA requirement of scientific integrity.

c) Comment: Identify whether normally acceptable noise levels are federal, state, or local standards. The US Environmental Protection Agency recognizes Ldn < 55 dBA as a goal for outdoor residential areas to protect public health and safety. State if the Navy is exempt from EPA guidelines. Provide a basis for comparison of noise levels (e.g., 70 dB is similar to a vacuum cleaner at 10 feet). Identify how much further noise travels during temperature inversions, which are common in winter months. Identify what effect temperature inversions would have on modeled noise level contours.

References: Comments LL-4, LL-5, LL-6

Response: Text has been added to Section 3.5 to distinguish between federal and state standards and to show relative noise levels. The EPA noise levels are goals, not mandates. The state standard for residential areas is 65 dBA. Temperature inversions would propagate noise over greater distances. Inversions were not specifically modeled; rather, average day conditions we modeled to represent conditions present over most of the year.

d) Comment: The discussion of noise impacts should be inclusive of all expected noise impacts. The Department of Defense assumes that if the day-night level is less than 65 dB then there will be no impact. This is an arbitrary cutoff for assessing noise impacts. This levelized measurement means nothing to residents who experience noise episodes rather than day-night averages. It is important to acknowledge that even at a decibel level of 55 or less, jet noise intrudes into the human environment, particularly in rural areas.

References: Comment Y-13

Response: The Day-Night Average Sound Level (DNL) is the accepted methodology for assessing long-term impacts from aircraft noise. DNL is associated with annoyance and is the appropriate methodology to evaluate various alternatives. The DNL is not the noise of a particular aircraft; hence, individual events may at times be annoying with potential speech interference. Due to lower background or ambient noise levels in rural areas, a DNL of 65 would adversely affect the speech patterns of approximately 13 percent of the population. No changes in aircraft flight operations would result from the proposed action.

e) Comment: Include federal ambient air quality standards in Table 4-1 for comparison.

References: Comments LL-10

Response: Federal and state ambient air quality standards are shown in Table 3-2 of the EIS. Because the emissions from site-specific activities do not allow for a direct comparison to ambient air quality standards, the standards have not been added to Table 4-1.

15. Cultural Resources

a) Comment: More comprehensive investigations of archeological resources should be conducted.
References: Comments III-3
Response: As discussed in Section 4.2.7, all proposed site developments are subject to compliance with the National Historic Preservation Act and with the procedures set forth in the NAS Fallon Cultural Resource Management Plan and Programmatic Agreement, including any required archeological surveys.

b) Comment: Nuclear test sites should be listed on the National Register as a part of our historical heritage.
References: Comments HH-7, HH-9
Response: The Department of Energy maintains the authority to nominate energy-related sites to the National Register of Historic Places.

16. Environmental Justice

a) Comment: The change in aircraft patterns at B-16 could result in noise problems at the Walker River Indian Reservation. The increase in Naval training along the Walker River Indian Reservation could result in effects on tribal members even though the number of range operations may remain the same. Action should be taken in compliance with Executive Order 12898. The BIA opposes the change in flight patterns from north to south because this would bring high-speed, low-level flights over the Walker River Paiute Tribe, which has already suffered from ordnance contamination at B-19.
References: Comments A-9 to A-11, D-4, F-5, F-6, F-8, F-14, Y-4, II-7, SS-3, PHR-10, PHR-29
Response: Although the change in the run-in line at B-16 would alter the flight patterns at B-16, there would be no change in the number of aircraft overflying the Walker River Indian Reservation and no adverse noise impacts. Based on noise modeling (Figure 5-5), the reservation would experience noise levels below 60 Ldn, with the highest levels (below 60 Ldn) along the sparsely populated northern border. Given the high altitude approach level to B-16, the fact that the designated arming point is north of the reservation boundary, and the use of practice/inert ordnance on that range, the change in the run-in line would not increase the risk of off-range ordnance contamination of the reservation.

b) Comment: The EIS should include the percentage of live ordnance items found on reservation lands and an estimate of quantity of live and inert ordnance expected to be found on reservation and non-reservation lands (and what the current lands uses are if not part of the proposed withdrawal). Incorporate into the project description a discussion of how the Navy will work with tribal members to remove all live ordnance (see Comment A-15).
References: Comments A-14, A-15
Response: Due to operational changes and past ordnance sweeps, the Navy does not expect current operations to generate or find any live ordnance on reservation lands. Procedures for handling old ordnance discovered as the result of sweeps or by the public are clearly defined in NAS Fallon instructions and considered effective. The Walker River Paiute Tribe is aware of these procedures and has used them when necessary.

c) Comment: The BIA opposes any withdrawal of public land that would increase the size of the B-19 training range. The increase in land withdrawals would result in ordnance contamination on additional reservation lands.

References: Comment D-1

Response: The proposed action does not advocate any changes to aircraft ingress and egress of B-19, changes to procedures implemented to prevent off range ordnance, or changes in target area location. Therefore, the risk of off-range ordnance occurring at the Walker River Indian Reservation would not increase as a result of the proposed action.

d) Comment: Much of the cumulative impact region, including the Reese River Valley, Crescent Valley, Grass Valley, and Bald Mountain, is located within the area identified by the Indians Claim Commission as the aboriginal territory of the Western Shoshone. The Western Shoshone have stated their opposition to any additional military expansion due to noise during traditional ceremonies, health concerns, and degradation of plant and animal resources caused by remote equipment and materials emitted during flights.

References: Comment D-3

Response: The areas referred to in this comment are too distant from the actual withdrawal acreage to be reasonably considered as being impacted by this action.

e) Comment: The EIS, on page 3-42 of the Draft EIS, does not address the potential impacts of the land withdrawal on local (Walker River Paiute and Fallon Paiute-Shoshone) or more distant (Yomba Shoshone Tribe) reservations. The EIS does not discuss the effects of ground training in th Dixie Valley on the Stillwater area Native Americans.

References: Comments D-5, II-7

Response: The impacts of the proposed withdrawal will not have a measurable impact on any of the environments listed in this comment. Impacts to individual resources are summarized in Table 2-6 and discussed in detail in Chapter 4.

f) Comment: The Navy, as described in the Draft EIS, does not provide for protection of tribal trust resources as required by law. Nothing in the Draft EIS indicates that the Navy consulted with the Bureau of Indian Affairs or that the Navy consulted with the Walker River Paiute Tribal Council regarding its plans to withdraw B-19 for testing and training operations. It also never held public meetings on the Walker River Indian Reservation. Range Safety Zone A extends onto reservation lands; however, the Navy cannot extend its activities onto reservation land without congressional and tribal consent, which it has not obtained. The proposed withdrawal at B-19 does not protect the reservation lands from degradation and interference in that it allows live and inert ordnance to fall on reservation lands.

References: Comments W-1, W-8

Response: No changes to aircraft flight operations at B-19 would result from the proposed withdrawal; therefore, no new impacts to tribal members or reservation resources would result from the proposed action. Any remaining ordnance found on reservation land would continue to be handled through procedures established by the Tribe and NAS Fallon. Notices on scoping and public hearings on the Draft EIS were distributed to the Walker River Paiute Tribe, and a meeting was held in November of 1995 with representatives of the BIA and members

potentially affected Native American groups to discuss how withdrawn lands would be managed.

g) Comment: The Navy has not accepted responsibility for existing ordnance on off-range lands and should clean up the lands that have been contaminated. Figures 1-3 and 1-5 inaccurately portray lands contaminated and likely to be contaminated by ordnance in that they do not account for off-range ordnance that has fallen on reservation lands. The Draft EIS does not indicate whether the Navy took steps to remove ordnance on reservation lands or whether it consulted with the tribe regarding this issue. Not including the tribe among the signatories on a memorandum of agreement with the BLM and the state regarding cleanup of off-range ordnance and omitting the reservation from cleanup efforts is a breach of its trust responsibility. The inability of the tribe to use ordnance-contaminated lands may be an unconstitutional taking. The mitigation plan in the Draft EIS should provide for cleaning up ordnance on reservation lands.

References: Comments W-2, W-8, Y-4

Response: The Navy is currently working with the Tribe to perform ordnance sweeps, ordnance retrieval, and the rendering safe of any ordnance reported on the Walker River Indian Reservation. This comment addresses cleanup responsibility for tribal lands contaminated by previous action and is outside of the scope of the action proposed in this EIS.

h) Comment: The Navy has not taken sufficient steps to mitigate increased noise impacts on the reservation. The reservation already experiences noise interference from Navy training, and withdrawing B-19 will result in increased noise from overhead flights. The Draft EIS does not present mitigation to noise resulting from training operations at B-19. The Navy made no effort to ascertain whether Navy activities on B-19 will comply with tribal noise or other environmental ordinances.

References: Comments W-3, W-8, Y-4

Response: The proposed withdrawal action will not change aircraft flight operations in the vicinity of B-19. Therefore, the proposed action will not create increased noise levels. However, the Navy will conduct noise studies to verify the Navy's position that there are no significant noise impacts associated with existing operations at B-17 and B-19. The Navy is reviewing the draft tribal noise ordinances to determine their applicability to the federal government, If applicable, mitigation measures will be studied.

i) Comment: The environmental baseline analysis in Chapter 5, Cumulative Impacts, is deficient because it does not include tribal activities. It omits discussion of potential tribal activities in the northern part of the reservation that the tribe cannot use due to Navy activities. The cultural resources assessment appears to be deficient. The Navy has a trust responsibility to conduct cultural and traditional Native American use surveys and to consult with the Bureau of Indian Affairs and Native Americans during the scoping process.

References: Comments W-4, KK-5

Response: Neither the proposed land withdrawal nor the proposed airspace restructuring at B-16 would have any effect on the Walker River Paiute Tribe. Section 5.6.6.4 discusses environmental justice issues associated with proposed Navy activities. The land withdrawal would not involve any changes in aircraft operations near the reservation, and the B-16 airspace restructuring would not result in noise impacts over the reservation, as discussed in response to comment

12e. As stated above, the Navy will conduct noise studies to verify the Navy's position tha there are no significant noise impacts associated with existing operations at B-17 and B-19. Th Navy is actively working with the Tribe to resolve issues associated with off-range ordnance on reservation lands as discussed in Section 3.13.2. Scoping and public involvement letters were sent to representatives of potentially affected Native American groups as shown in Appendix B. In addition, a meeting was held in November of 1995 with representatives of BIA and members of potentially affected Native American groups to discuss how withdrawn lands would be managed.

j) Comment: The Navy did not consult with the Western Shoshone during preparation of the Draft EIS. Shoshone peoples are not depicted on maps.

References: Comments X-1, PHF-45

Response: Scoping and public involvement letters were sent to representatives of potentially affected Native American groups as shown in Appendix B. In addition, a meeting was held in November of 1995 with representatives of the BIA and members of potentially affected Native American nations to discuss how withdrawn lands would be managed. Shoshone peoples are not depicted on maps in the EIS because they are outside the region that would be affected by the proposed action.

k) Comment: The reasonably foreseeable MOAs would affect two Western Shoshone communities, Yomba and Duckwater.

References: Comment X-2

Response: If the airspace expansions are proposed, site-specific environmental documentation would b conducted and impacts to Western Shoshone communities addressed. Potential effects from the designation of these MOAs are discussed in Sections 5.7 and 5.8 of the EIS.

l) Comment: The proposal unfairly targets rural communities and individuals, placing a disproportionate impact on a population.

References: Comments II-7

Response: The proposed withdrawal action would not disproportionately impact any populations. Individuals of a population, such as a miner with a claim on withdrawn land, may be affected, but their adversity does not apply to all rural residents.

m) Comment: The Draft EIS states that Fallon is the community nearest the proposed land withdrawal when the Walker River Indian Reservation is the nearest community.

References: Comment W-5

Response: The intent of this statement was to identify the populated town or city nearest the NAS Fallon air station. Text has been added to Section 3.9.1 to identify the location and population of Schurz.

n) Comment: The Draft EIS refers to the Walker River Indian Reservation as if it were the Walker River Paiute Tribe. When referring to the governing body operating with the reservation, reference should be made to the tribe.

References: Comment W-7

Response: The text has been revised in the Final EIS as requested.

o) Comment: Information presented to tribal administrators is not being shared with tribal members.
References: Comment PHF-44
Response: Pursuant to the National Historic Preservation Act, the Navy must coordinate with the elected Tribal Counsel and with the Tribal Chairman with regard to tribal coordination and consultation. It is not within the authority of the Navy to dictate how the Tribal Chairman distributes the information.

17. Socioeconomics

a) Comment: The proposed withdrawal would hamper the economic status of the local communities that use these lands for economic gain.
References: Comment SSS-3
Response: As discussed in Sections 3.9 and 4.2.9 of the EIS, the economic benefits realized from the lands proposed for withdrawal are limited. Any effects would be within the historic range of variation for local economies.

18. Mineral Resources and Mining

a) Comment: The opportunity for discovery, exploration, and development of mineral resources is lost with each new military land withdrawal. The military should limit withdrawals and identify currently withdrawn lands for release at every opportunity.
References: Comment K-1
Response: Most Category A lands are already closed to mineral exploration and development under a BLM emergency closure order. Category B lands will remain open to discovery and exploration under existing mining laws but may be closed to patenting. Approximately 189,000 acres were segregated as described in Section 3.10. Under the Preferred Alternative, approximately 60,000 acres of this land would be removed from segregation and returned to unrestricted development and patenting.

b) Comment: The Navy should be required to follow the same guidelines as the BLM or Forest Service in permitting a mining operation rather than reserving the right to approve development of mineral resources.
References: Comment K-4
Response: Mineral exploration on Category B lands would be managed subject to existing mining laws (Mining Act of 1872, Mineral Leasing Act of 1920, Mineral Lands Act for Acquired Lands of 1947). As discussed in Section 2.3.2.2, the Navy is proposing the right to approve permits to ensure compatibility with military operations. The authority to revise existing mining laws resides with Congress; revision to provisions of existing mining laws has historical precedent with other military land withdrawals, as in PL 99-606 Section 12 (e) and (f). Examples of activities not compatible with military training may include structures over 50 feet tall, depending upon location. Because of the geographical sensitivity of compatibility determinations arising from the need for public and pilot safety, permits have to be evaluated on a case-by-case basis.

c) Comment: The Navy should look at opportunities for private industry to develop sand and grave' resources that might benefit the Navy in local site construction projects.

References: Comment K-5

Response: The BLM issues permits for sand and gravel resources and would continue to do so with Navy approval under the proposed Category B lands.

d) Comment: The Jet prospect location should be shown on Figure 3-9.

References: Comment K-6

Response: Jet prospects have been added to Figure 3-9.

e) Comment: The withdrawals east and southeast of B-17 would place the Fairview and Slate Mountain mining districts, areas with good mineral potential, under Category A status. Potential mineralized portions of B-17 should be placed in a multiple use status with a 50-foot height restriction. Signs posted along the western border and roads could warn the public of aircraft overflight. High mineral potential areas should be protected from ordnance contamination.

References: Comments K-8, KKK-3, KKK-5

Response: The BLM has issued an emergency closure for much of this land to protect the public from off-range ordnance. Restriction on operations in these areas have been implemented but cannot completely protect the public from potential off-range ordnance. Category A status would afford increased public protection from off-range ordnance, and these lands cannot be opened to public uses, particularly uses involving subsurface activity.

f) Comment: The withdrawal east of B-19 would remove the Holy Cross Mining District from exploratic and development. Instead, a portion of the Walker River Indian Reservation should be lease in Rawhide Wash.

References: Comment KKK-2

Response: The Holy Cross Mining District is within Category A lands, which are currently closed under a BLM emergency closure order for safety reasons. The withdrawal would continue this closure.

g) Comment: It is not clear as to whether the Slate mine is in Category A footprint south of B-17. The mine is not within the HAZARD and RAICUZ footprint and no ordnance was found in this area. This area does not present a public safety danger and should not be included in the land withdrawal.

References: Comment JJ-8

Response: The Slate mine is outside of the proposed withdrawal area. More detailed maps of the proposed withdrawal areas have been included as Appendix I.

h) Comment: There are an estimated 1,500 man-hours spent in Category B areas collecting gemstones and petrified wood. This area should remain open.

References: Comment PHR-40

Response: As discussed in Section 2.3.2.2 of the Draft EIS, Category B lands would remain open to the public and would be managed for multiple uses.

19. Livestock Grazing and Wild Horse Management

a) Comment: A one-half mile buffer around all springs and water troughs should be provided because helicopter landings and ground training activity would scare wildlife and cattle away.

References: Comments WW-2, XX-2, PHF-21

Response: This buffer has been added to Sections 4.2.3 and 4.2.11 of the Final EIS as a mitigation.

b) Comment: The EIS does not adequately address the impact of ground training of approximately 200 troops annually on cattle and their grazing patterns.

References: Comment VV-3

Response: The proposed action does not include events of 200 ground troops. As shown on Table 2-3, a maximum of 200 events could occur annually. An event is defined as one military evolution lasting from five minutes to two hours that could potentially involve small numbers (generally less than 15) of troops, one or two vehicles, and/or a helicopter. In reality, far fewer than 200 events would likely occur; impacts from this number are evaluated as a worst case scenario. Based on the small numbers involved in a training event, and the fact that a one-half mile buffer around all springs and watering troughs would be observed, no impacts to grazing patterns are anticipated from the proposed action.

c) Comment: Military withdrawal of public land poses a threat to the BLM's ability to manage wild horses. The Clan Alpine Wild Horse Management Plan is outdated and not consistent with federal regulations. Future problems with wild horses on Navy properties and conflicts with wild horses are imminent. If lands are withdrawn the Navy should amend its resource management plan to provide the support and funding to manage the Clan Alpine herd. This would require proper census and gathers to achieve the appropriate management level.

References: Comments I-1, I-4, I-5

Response: The Preferred Alternative would incorporate the very western tip of the Clan Alpine Herd Management Area (less than one percent of the total management area). The herd management areas are depicted in Figure 3-11 and the Preferred Alternative is depicted in Figure 2-8. Any overlap of withdrawn lands would be on Category B lands. The movement of horses and management of horses would not be impeded. The Navy does not have the authority or expertise for the management of wild horses.

d) Comment: The District should revise its plan to make the Horse Mountain Herd Management area horse-free. Wild horses in the South Stillwater HMA appear to be sustaining themselves at carrying capacity.

References: Comments I-2, I-3

Response: The BLM is responsible for changes to wild horse management.

20. Recreation, Public Access, and Visual Resources

a) Comment: The withdrawal areas will cut off public vehicular access to significant amounts of public land, including public lands north of B-16 into the Dead Camel Mountains, on the Dixie Valley floor, and into the Gabbs Valley Range Wilderness Study Area (WSA), Wonder, and Clan Alpines. This blockage is especially serious at Cow and Deep Canyons and in areas of high

wildlife and historic value. If this is not the Navy's intent, access corridors or new road skirting withdrawal areas should be provided. If this is the Navy's intent, the EIS needs to clearly state this. The Navy has already limited some access to public lands by closing previously utilized public access roads at B-16; further restriction is not right and not good for the general public. Changes in routing have caused nearby interest areas to be forgotten by the community; other parts of the county also will be accessed less and less and could subsequently be forgotten due to closed roads.

References: Comments Z-2, BB-6, CC-2, CC-3, CC-4, JJ-17, OO-3, OO-6, RR-1, PHF-6, PHR-23, PHR-34

Response: The proposed withdrawal lands surrounding B-16 (except one section on the east side of B-16 as shown in Figure 2-8) and in the Dixie Valley would be Category B lands and open to public access. It is the Navy's intent for Category B lands to remain open to military and public uses and to avoid restriction of access to surrounding areas along Dixie Valley Road and north of B-16.

b) Comment: The EIS does not indicate if the recently reopened road following a gas pipeline east of B-19 will remain open if surrounding lands are withdrawn.

References: Comments BB-7, PHF-7

Response: Although the road is in an area that was closed because of off-range ordnance, the Navy has cleared the road as a safe transit corridor. A 200-foot corridor is fenced to allow road access, and the road is swept annually for off-range ordnance. The road would remain open for public access under the proposed land withdrawal. This is possible because soil-to-bedrock conditions are shallow, which doesn't permit ordnance to be buried under the surface. Off-range ordnance would remain on the surface and would be easily identified and collected by the explosi ordnance disposal team. In addition, training operations at B-19 have been altered to greatly reduce the potential for off-range ordnance to fall in this corridor.

c) Comment: Access should be provided on withdrawn lands, including Soda Lake and the Fairview area.

References: Comments TT-1, IIII-2, JJJJ-1

Response: Soda Lake is north of the Sheckler Reservoir and Highway 50 and would not be impacted by the action in any way. In the Fairview area where lands are proposed for withdrawal, public access cannot be permitted south of Highway 50 due to public safety hazards. Those lands north of Highway 50 are designated as Category B lands and will remain open to public access.

d) Comment: The proposed withdrawal would halt continuous access for recreation.

References: Comment SSS-3

Response: Recreational access would only be denied on Category A lands. Recreational opportunities on these lands are currently restricted by the BLM. No restrictions on access on Category B lands, including along Dixie Valley Road, would occur except at small fenced EW sites. These sites would number fewer than five and would be dispersed so as not to hinder all access to an area.

e) Comment: There appears to be an ongoing pattern of closing a one to two mile stretch of road barely within the borders of the withdrawal area. Documentation supporting a public safety need for these closures was weak or nonexistent. It seems that borders were established precisely to include those roads and prevent the public from accessing large tracts of land. The BLM must want to keep people off or the Navy must want to keep its borders safe from US citizens.

References: Comments JJ-1, JJ-2, JJ-3

Response: The Navy intends to close no roads except those in Category A lands that are already closed due to off-range ordnance. No roads will be closed in areas designated Category B.

f) Comment: Bell Canyon Road, Bell Flat Road, and Slate Mountain Road are located on Category A land surrounding B-17. Ordnance was found on Bell Canyon Road and it is in the HAZARD footprint and should be closed. Bell Flat Road and Slate Mountain Road were not found to contain ordnance nor were they identified in the HAZARD study as areas of potential ordnance contamination. The roads run no more than one-half mile within the withdrawal boundary. These small sections of land, which present no danger to the public, should be given up or the fence run east and north of the roads, respectively.

References: Comment JJ-8

Response: Bell Flat and Slate Mountain Roads are located in areas defined by the HAZARD footprint (Figure 1-3) and therefore will be closed to public access. Local BLM policy is that roads must be 100 percent safe from off-range ordnance. With the exception of the gas pipeline road located east of B-19, the Navy cannot guarantee these roads are 100 percent free of hazards.

g) Comment: Diamond Field Jack Wash Road runs for approximately two miles east of B-19 one-half mile inside the Category A withdrawal boundary. Ordnance sweeps did not take place on this road though the area was identified as containing ordnance (Figure 3-13 and 1-5). The road was not identified in the HAZARD study as an area of potential ordnance contamination. This small section of land, which presents no danger to the public, should be given up or the fence run on both sides of the road. The alternative route to this road is very rugged and not easily traversed.

References: Comment JJ-9

Response: Local BLM policy is that roads must be 100 percent safe from off-range ordnance. The Navy cannot guarantee these roads are 100 percent free of hazards.

h) Comment: It appears that the withdrawal north of B-16 will include part of the Sheckler Reservoir Dam Road. Identify if this road will be closed and if the Navy will maintain it. In addition to accessing the lake, this road is the jumping off point for access to Red Mountain and the Nipple and the only reasonably close remaining road into the Dead Camel Mountains. The primary access to Red Mountain and the Nipple, located in the northwestern corner of the withdrawal, is only one-quarter to one-half mile inside the withdrawal boundary. If closed, the most used access to these areas would be cut off. This small section of land, which constitutes no danger to the public, should not be included in the withdrawal.

References: Comment JJ-10

Response: The land withdrawal north of B-16 does not include Sheckler Reservoir Dam Road. Due to seasonal fluctuations in the reservoir water level, parts of the reservoir may fall within the Category B lands. It is not the intent of the Navy to prevent access to the reservoir. All lands north of B-16 will be designated as Category B lands and no roads will be impacted.

i) Comment: The roads east of B-16 are on Category B lands and should therefore remain open for public use. The Pony Express Route/Simpson Road was fenced and gated in the 1953 withdrawal. The road is located on the southeastern point of the range in a one-eighth square mile area. With the new withdrawal, two miles of road will come under Navy control. No live ordnance was found or predicted in this area, and the Navy should remove all of the Pony Express Route out of Navy control. The Sam Springs Wash Road falls within the outermost corner of the withdrawal area. This road should also not be included in the withdrawal.

References: Comment JJ-11

Response: The roads on Category B lands east of B-16 will remain open to public access. Navy maps and the map provided by the National Park Service do not indicate that the Pony Express Trail crosses B-16. The land withdrawal will not affect use of the Pony Express Trail.

j) Comment: The roads north of Highway 50 in the Dixie Valley area are Category B and therefore should remain open to the public. The Navy plans to put EW, TACTS, and visual cueing devices along the roads in the valley. The Draft EIS says that access across these sites will not be permitted; nothing in the Draft EIS says that these sites will not be placed on existing roads and trails. The La Plata Canyon Road is located in the heart of the Dixie Valley withdrawal. It is likely that the public will avoid using the road due to Navy developments; the Navy should mitigate the appearance by making the road and signs more user friendly and by keeping EW and TACTS off the road. Eleven Mile Canyon Road is the northern boundary of the Preferred Alternative. If it is closed to public use, it will make getting to some areas of the eastern Stillwaters impossible. There are approximately 15 roads and trails east of the panhandle; if a EW or TACTS site were placed on each road, the roads could all be cut off. EW and TACTS should be kept off these roads and trails.

References: Comment JJ-12

Response: Roads on Category B lands, including roads in the Dixie Valley, would remain open to public access. Navy developments will not be sited so as to block existing roads and trails, though developments may be sited near existing roads and power lines to limit disturbance of additional land.

k) Comment: The Draft EIS does not mention the following activities regularly undertaken by local residents—four-wheeling, motorcross, motorcycling, visiting mines and ghost towns, snow sports, lion hunting, boating, swimming, bird watching, flora, fossil, and arrowhead collecting, insect collecting, pine nut gathering, woodcutting, and rock collecting. The Draft EIS states that the number of users of the Dixie Valley area is not very high, but does not mention that the percentage of locals who use the area is high. The statement that the same recreational opportunities are available elsewhere in the region is not true to the locals. Public interest has built a wealth of information about local sites that appeal to specialized interests.

References: Comments JJ-15, JJ-16

Response: With the exception of up to five fenced EW sites and the limited nature of integrated air and ground training, recreational activities on Category B lands will not be impacted and the lands will remain open to public use. Activities cited in the comment but not included in the Draft EIS have been added to Section 3.12 of the Final EIS. No data on recreational usage numbers are kept by the BLM.

l) Comment: Dirt roads, which are important to county residents, are barely mentioned in the Draft EIS. The statement that the impacts to roads are unmitigable was unresponsive. The Draft EIS did not point out that county highways, US 50E/W, US 95N/S, and State Routes 361, 839, and 121 extend five miles north, eight miles south, 15 miles east, and 15 miles west of Fallon; there are no other paved roads in the county. The remaining 87.2 percent of the county can only be accessed by dirt roads and trails, which create a vast transportation network for miners, ranchers, and recreationists. The Draft EIS suggests limited use and limited usefulness for these roads, which is not the case. The statement that only minor roads would be affected is misleading; Churchill County is primarily accessed by minor roads. Identifying alternative routes as mitigation only works in valleys and open areas; alternative routes through mountain ranges or canyons may not be feasible, preventing access to these areas.

References: Comment JJ-18

Response: The Navy recognizes the importance of these roads and trails, and they will remain open to public use on Category B lands.

m) Comment: The Draft EIS fails to mention the hunting and trapping of fur-bearing mammals. Hunting conflicts could occur at the shoal site from October through December, at the Stillwater Range from August to November, in the Clan Alpines from August through November.

References: Comments J-3, BB-1, PHF-2, PHR-60

Response: Text has been added to Section 3.12 of the Final EIS to reflect the popularity of hunting and trapping of fur-bearing animals. This activity will not be affected on Category B lands.

n) Comment: The conflicts of uses of and access to the Pony Express National Historic Trail are not assessed in the EIS. The trail is now and will continue to be impacted by Navy activity. There is a severe restriction of public access for miles of the trail. The historic corridor is presently off limits due to off-range ordnance, which should be cleared as mitigation for withdrawal. If the corridor and historic trail resources including the historic landscape are off-limits, then an alternative way needs to be provided for visitors to experience the trail. The Navy should reassess the continued closure of the trail corridor and resources of the Pony Express trail and give consideration to assuring continued access and safe passage and adequate marking along the trail. A long-range management plan that identifies significant trail resources and recommendations is underway through the Denver Center of the National Park Service. The trail corridor across Nevada is a significant part of the Pony Express Trail.

References: Comments C-1, C-2, C-3, C-4, C-5, AA-1, AA-2, AA-3, PHR-43

Response: It is not the Navy's intention to now or in the future restrict access of the Pony Express National Historic Trail. Based on best available information, the trail does not cross the existing training ranges and would only possibly cross Category B lands, which would remain open for public access. Several different maps depict the trail as running alongside Highway 50.

o) Comment: Low-flying aircraft are detrimental to the experience and attitude of the re-enactment of the Pony Express Trail ride.

References: Comment AA-1

Response: As the proposed action is a land withdrawal action and does not involve changes in aircraft operations, no new impacts to the Pony Express National Historic Trail would result from the

proposed action. However, text has been added to the Final EIS to state that if there is one large planned event per year, the Navy will work with trail personnel to alter flight activities during the event if compatible with training needs at the given time.

p) Comment: All of the alternatives except the No Action Alternative would seriously impair Wilderness Study Areas in the Dixie Valley and in the 40 Mile Desert within the meaning of the FLPMA Section 603, 102a, and 201a. The Preferred Alternative borders the eastern boundary of Job Peak. The other alternatives intrude into Job Peak and violate the nonimpairment guidelines and statutes of FLPMA Section 603. Failure to mention the Job Peak WSA makes the EIS generic under NEPA. The EIS should include impacts on the Stillwater, Clan Alpine, and Desatoyas.

References: Comments Z-1, PHR-32, PHR-38

Response: The Job Peak WSA is discussed in detail in Sections 3.8 and 4.2.8. Under the Navy's Preferred Alternative, the withdrawal would not include the WSA. Under the proposed action, no new activities are planned in the Stillwater, Clan Alpine, and Desatoya ranges.

q) Comment: The Draft EIS should not state that recreation loss cannot be compensated. This is not the case and is not a responsible position for the Navy to take.

References: Comments T-69, II-11

Response: There are no means of compensating lost recreational opportunities on Category A lands. Recreational opportunities are available nearby with similar or higher values, but the option value of use is foregone.

r) Comment: The withdrawal area north of B-16 appears to cross the embankment of Sheckler Dam. If so, access should be provided so that personnel from the State Engineer's office will be able to perform periodic inspections of the dam. If Alternative I is chosen, the State Engineer's office assumes the Navy will assume responsibility for safe operations and future maintenance of the dam.

References: Comment G-2

Response: Under all of the alternatives, land withdrawn north of B-16 would be designated Category B and would therefore be open to public access.

s) Comment: Visual resource analysis is based on actual existing visual environment, rather than "perceived" environment. Delete "perceived."

References: Comment B-58

Response: Text has been revised as suggested.

t) Comment: Define "casual exploration."

References: Comment B-59

Response: The word "casual" has been deleted.

21. Public Health and Safety

a) Comment: Provide additional details on accident probabilities to make the information meaningful. If there is risk of accidental dropping of ordnance, explain what it is. Quantify the likelihood of accidental drops in armed overflight areas.

References: Comments A-4, B-25, B-27, LL-15

Response: The probabilities referenced were obtained from the Special Nevada Report (SAIC 1991) and are for military aviation in general, not specific to NAS Fallon. Data from the Naval Safety Center indicates that incidents at NAS Fallon have occurred where ordnance and racks have fallen off aircraft due to premature release or other aircraft malfunctions. It is not possible to quantify the probability of such events. Hence, the Navy has identified Range Safety Zone B, the area of armed overflight, where such events are most likely to occur should they occur. RSZ B is shown on Figure 1-4 (B-16) and Figure 1-6 (B-17 and B-19) in the EIS. Between 1989 and 1996, there were 18 mishaps associated with NAS Fallon operations. Nine of the mishaps occurred on the air station and nine occurred on the training ranges or on public or private land. No civilians were involved in any of the mishaps.

b) Comment: Clarify if movement of ground troops and equipment through the proposed Dixie Valley corridor will result in contamination within or adjacent to the corridor that could result in additional withdrawals.

References: Comment K-3

Response: Activities within the Dixie Valley would not involve the delivery of live or practice/inert ordnance or other health hazards that could result in future land safety withdrawals. No small arms weapons or other ordnance will be fired on withdrawn lands; use of ordnance and ammunition is authorized only on existing training ranges.

c) Comment: The use of inert ordnance at B-16 will result in the release of titanium tetrachloride. The Draft EIS does not fully describe the possible release, the potential for off-range contamination, or the environmental consequences of the use of titanium tetrachloride, including but not limited to ground, air, and water contamination, impacts to human health, and impacts to wildlife. If the chemical composition includes vanadium, identify the potential health and environmental risks.

References: Comments Y-12, PHF-17

Response: Inert ordnance contains trace amounts of titanium tetrachloride. Upon explosion, the titanium tetrachloride contained within the inert ordnance is exposed to the air. The compound quickly degrades into titanium dioxide, a compound approved for household use and commonly found in white paint and cosmetic opacifiers, and hydrogen chloride, which in turn degrades into sodium chloride, or table salt, and water in an alkaline desert environment. Dry titanium tetrachloride is not corrosive and cannot be absorbed through the skin. Inhalation of the substance on the B-16 range is highly unlikely given its rapid degradation and the quick degradation of its by-products in the alkaline desert environment. Titanium tetrachloride will react violently when exposed to water and is corrosive when combined with water; however, the exothermic reaction will not generate sufficient heat to start any fires. The reaction is dependent upon the amounts of titanium tetrachloride and water, but with the trace amounts

of titanium tetrachloride in the inert ordnance used at NAS Fallon and considering its rapid degradation, the reaction would last mere seconds. The hydrogen chloride by-product of an exothermic reaction is likewise quickly dissipated into the environment. The contamination of soil and ground water are unlikely given its quick degradation upon contact with the ground and the surrounding desert environment. Impacts to humans and wildlife also are unlikely given the quick degradation of the compound within the desert environment. Vanadium is a by-product of uranium mining and is not contained within the inert ordnance used on B-16. The proposed action is the withdrawal of lands surrounding existing training ranges for range safety and training purposes. No changes in existing operations would result from the proposed action, and the size of the impact areas would not increase. Therefore, the potential exposure to off-range ordnance or any contamination from inert ordnance would be reduced.

d) Comment: B-16 is on higher ground than Fallon and flooded in January 1997. A ground water study of this area should be conducted to check for heavy metal contamination.

References: Comments MM-5, PHR-49

Response: As stated above, the proposed action evaluated in the EIS is the withdrawal of lands around the existing training ranges for range safety and training purposes. No changes to existing training operations at the ranges, such as ordnance delivery, would result from the proposed action. As such, no contamination would result from the proposed action.

e) Comment: The Draft EIS should discuss the potential health and safety impacts to Highway 50 travelers north of B-17 and south of the Dixie Valley area. It is difficult to believe that the HAZARD footprint, using statistical probability, conveniently follows the boundary of the road.

References: Comment LL-14

Response: Training at B-17 has been revised so as to contain the HAZARD footprint to below Highway 50. In addition, the limited number of historical incidents associated with this area, probably due to the fact that the highway is a readily identifiable landmark, supports the defined boundaries of the HAZARD area. Appendix D provides the methodology of the HAZARD analysis.

f) Comment: The need for flexibility and rapidly changing technology are not valid reasons for the land withdrawal because the land withdrawal represents a permanent consequence. Technologies are changing so fast that it appears that they are not adequately tested for public health and safety effects prior to implementation.

References: Comments NN-6, NN-7

Response: The need for the land withdrawal is explained in Section 1.4 of the EIS. The training ranges were established in 1953; no other land-based changes for training have occurred prior to this proposed action. The Department of Defense tests and evaluates new technology during the development process. These tests are conducted on specific test and evaluation ranges. NAS Fallon is not a test and evaluation range.

g) Comment: If off-range ordnance areas are too dangerous for the public, then they are too dangerous for military use.

References: Comment PHR-70

Response: The BLM has determined that public access is not appropriate on lands identified as containing off-range ordnance. Given the limited nature of ground training activities, the experience of Navy personnel in identifying, avoiding, or handling off-range ordnance, and annual sweeps of off-range ordnance areas, integrated air and ground training may be conducted on these lands.

22. Off-range Ordnance

a) Comment: Undetonated bombs are few and far between on the ranges.
References: Comment HHH-3
Response: Any unexploded ordnance poses a hazard to public safety.

b) Comment: The Navy should have to clean up areas of unexploded ordnance before they withdraw any other lands. The Navy should clean up areas of identified moderate and high mineral potential. The contention that a cleanup cannot be accomplished is an insult to everyone's intelligence.
References: Comments K-9, NN-2, NN-8, OO-7, HHH-4, PHR-69
Response: As discussed in Sections 1.4.3.3 and 3.13, Off-range Ordnance Sweeps and Public Health and Safety, respectively, the Navy has performed and continues to perform surface sweeps of these areas. However, technology is not currently available to economically and reliably remove all subsurface unexploded ordnance.

c) Comment: Despite what is said in the EIS, there are no assurances that target areas will not be increased with the expansion of the ranges, leading to additional off-range ordnance incidents and future land withdrawals for safety buffers. Reasonable safeguards should be included in the final alternative to prevent expanding contamination as well as provisions holding the Navy accountable.
References: Comments K-2, Z-3, R-7, T-21, HH-11, NN-2, OO-7, PHR-8, PHR-69
Response: The targets will remain in the current ranges as established in 1953 and within the boundaries of the HAZARD footprint. Substantial investment has been made in the development of these target areas, and no change in their use is proposed or would benefit training. The current Memorandum of Agreement between the Navy, BLM, and State of Nevada provides for regular sweeps of areas that have been affected by off-range ordnance. This provision would continue to apply after the withdrawal.

d) Comment: Much of the Slate Range, which has a high wildlife value, will be Category A and closed to the public. The HAZARD methodology footprint shows this as a potential ordnance area but the ordnance sweeps found no ordnance there. This seems to contradict the accuracy of the footprint. Some Category A documents show no existing off-range ordnance and none predicted to fall.
References: Comments BB-8, JJ-4, PHF-8
Response: The HAZARD report, discussed in Section 1.4.3.1, predicts a public safety concern for almost all Category A lands south of B-17 (area of the Slate Range) as shown on Figure 1-3 of the EIS. In discussions with the BLM, the small area of remaining unaffected withdrawal lands would be managed under Category A for consistent management of the area around B-17.

e) Comment: The text and maps do not match the size and shape of the inert ordnance area. The Draft EIS discusses 1,920 acres (three square miles) belonging to the BLM (the shaded area within th striped area in Figure 1-5). That shaded area is two, not three, square miles on the rest of the maps. Either way, the border would be one or two miles from the reservoir. However, one of the figures says that 12,180 BUREC areas and 24,464 BLM acres were contaminated. That is 19, not three, square miles. Additionally, if the number is 12,180 acres, the BLM shading should be twice the BUREC shading. Instead only 5,760 BUREC acres are shown as contaminated.

References: Comment JJ-21

Response: Figure 1-5 identifies three square miles of BLM-administered land around the B-16 training range that contain practice/inert ordnance—two square miles north of B-16 and one square mile east of B-16. The 24,464 acres of BLM land identified as containing off-range ordnance include these three square miles (1,920 acres) of land around B-16 and 22,544 acres of land around the B-17 and B-19 training ranges. The 12,180 acres of BUREC-administered land containing practice/inert ordnance are north of B-16 and are depicted by cross-hatching on Figure 1-5.

f) Comment: There appears to be no public safety reason for withdrawing lands north of B-16. All off-range ordnance is inert, which poses virtually no threat to the public as evidenced by years of public use without incident. Nevertheless, the Navy included the 1,920 acres of inert BLM land in its closure order. The BUREC, when contacted, declined to have its nine square miles of inert ordnance-contaminated land closed. There is no explanation for why the BLM wants its lands closed while BUREC did not. It can only be assumed that the BUREC knew what inert meant while the BLM did not.

References: Comments JJ-22, JJ-23, JJ-25

Response: The action is outside the scope of this analysis.

23. Chaff

a) Comment: The Navy should implement the use of biodegradable chaff. The EIS should discuss the dispersion pattern of chaff, the estimated areas involved, and whether chaff disperses on lands outside the ranges and buffer zones. The EIS should disclose how many chaff bundles are to be dispersed in each proposed withdrawal area.

References: Comments A-12, A-13, A-17, B-19, HH-11

Response: Subsection Chaff and Flares within Sections 2.3.1 and 4.1.13 discuss dispersion and areas affected, which are primarily the Dixie Valley and B-17. The Navy is investigating the use of degradable chaff. The use of chaff in training is an ongoing activity at NAS Fallon; no change in chaff use is proposed under the proposed action.

b) Comment: The EIS should include a discussion of how environmental conditions and aluminum size and shape affect the oxidation period of aluminum chaff; a description of the composition of a standard chaff bundle; and an estimate of the time necessary for complete or near-complete oxidation of chaff. The EIS should disclose what becomes of the dipoles after aluminum oxidation and stearic acid degradation.

References: Comments A-16, A-17, B-19

Response: Studies that address these issues are incorporated by reference as discussed in Sections 2.3.1, 4.1.3, and 4.2.1. The US Air Force recently completed a comprehensive study on chaff. Results of this study are incorporated into the Final EIS.

c) Comment: The EIS should include a more detailed description of visual impacts of chaff.
References: Comments A-18, B-19
Response: Section 4.2.6 provides an analysis of visual impacts of chaff. Additional text has been added based on the US Air Force study.

d) Comment: The Draft EIS states that the use of chaff does not significantly impact health and safety, yet it is well known that no studies of human health impacts have ever been prepared by the Department of Defense. Other Department of Defense documents state that crystalline silica is a potential human carcinogen; surface feeding wildlife may consume chaff, which would pass through their digestive systems or form compacted pellets in the gizzard; more research concerning chaff is needed, especially concerning the behavior of chaff in anaerobic or acidic conditions found in wetlands; litter and debris detract from the naturalness and impact Wilderness Study Areas; glass and carbon and likely iron fibers deposited on soils are susceptible to resuspension, thus there is a potential risk of fiber inhalation; hypothesized effects of chaff on wildlife include disruption of feeding, behavior of ingestion, toxicity, and inflammatory response in the respiratory system; and pyrotechnic chaff is considered a munition because it uses an explosive charge to disperse the chaff upon release. Lack of documentation of chaff effects will no longer be accepted as a claim of no impact.
References: Comments Y-11, HH-11, LL-9
Response: The Navy's position based on experience and best available data is that chaff poses no hazard to public health, wildlife, or the natural environment. The US Air Force recently completed a detailed study on chaff, and this information has been incorporated into the Final EIS in the Section 4.2 resource impact analyses. The General Accounting Office also is currently investigating this issue.

e) Comment: Chaff studies on oysters in the Chesapeake Bay and short-term cattle studies do not equate to conditions or grazing patterns in Nevada. The bottleneck the Navy would like to create in Dixie Valley would be a high concentration chaff area. Chaff studies do not assess the effects of chaff on wildlife found in this area. The Draft EIS states that there will not be an effect on plant life, yet another report stated that plants showed a significant reduction in height. The Draft EIS does not include the effects of chaff on avian health, and only one report known to the commenter contains reference to avian health.
References: Comments MM-10, MM-11, MM-12, MM-13
Response: The land withdrawal itself would not result in an increased or more concentrated use of chaff. The panhandle area of the Dixie Valley is proposed for withdrawal for ground training purposes and placement of cueing devices, as described in Section 2.3.1 of the EIS, not as an area to increase chaff use. Please see the response to the previous comment for information on additional studies performed and being performed. The Navy's position based on experience and best available data is that chaff use poses no hazard to public health, wildlife, or the natural environment. The effects of chaff use on wildlife are discussed in Section 4.2 of the EIS.

f) Comment: The Draft EIS states that the Navy expects wildlife to habituate to overflights, however, as indicated in the studies mentioned in the Draft EIS, wildlife do not want to be habituated. It is obvious to anyone with common sense that this land withdrawal would have great environmental consequences for animals, wildlife, and humans.

References: Comments MM-14, MM-15

Response: Flight operations would not change as a direct result of this proposed action; therefore, no additional impacts are expected from aircraft overflights.

g) Comment: The military is dropping chaff throughout the west without permission of the landowners below, which may be a violation of property rights.

References: Comment Y-11

Response: The FAA authorizes the deployment of chaff in the special use airspace of NAS Fallon.

h) Comment: The Rural Alliance for Military Accountability opposes the current and proposed use of chaff until sufficient independent analysis of the potential impacts has been completed.

References: Comments Y-11

Response: The General Accounting Office has been directed and is in the process of conducting a study on chaff.

i) Comment: The BLM has mandated the use of chaff over public lands associated with operations at Mountain Home Air Force Base. It is not known how the BLM can assure public safety on lands where it allows the use of chaff and flares.

References: Comments Y-11

Response: Action is outside the scope of this analysis.

24. Utilities

a) Comment: A 50-foot height limitation would render the existing east-west utility corridor that traverses the Dixie Valley area useless. This corridor was established through the FLPMA planning process in cooperation with the area BLM districts. A review of corridors would show that there is only one east-west corridor through the State of Nevada. The loss of this corridor due to height restrictions could affect the future transmission and delivery of economical energy to western Nevada.

References: Comment FF-1

Response: Please see Section 4.2.8.1. Rights as established by existing rights-of-way will not change. Future development of structures over 50 feet in height would generally be prohibited. The Navy will work with utility companies on a case-by-case basis to ensure safety and transmission needs are compatible.

b) Comment: An eight-inch high-pressure natural gas transmission main passes through Category A and B land east of B-19. The pipeline is thin-walled construction and at a relatively shallow depth in some locations, and therefore the use of ordnance on or near or ordnance-caused landslides along this pipeline could be detrimental. The maintenance road along the pipeline right-of-way crosses over the pipeline in some locations and if large military vehicles were to use this road, additional cover across the pipeline would be required. Access to the pipeline on Category A

land is required to perform an annual land patrol of the pipeline and for normal operation and maintenance. Relocation of the pipeline would require extensive consideration, design, and construction and would be the financial responsibility of the Navy.

References: Comments GG-1 to GG-3

Response: The road will remain open for maintaining the gas line along the corridor, including on Category A land, as discussed in response to comments Section 20b. Text has been added to Section 3.14, Transportation, in the Final EIS for clarification.

25. Maps and Figures

a) Comment: Many of the maps and figures need to be changed and all should show official highway designations and locations of towns in central Nevada. Standard maps showing roads and terrain should be used. Townships and ranges need to be identified. A label for the Fairview Valley should be included on the maps.

References: Comments T-5, JJ-1, LL-1, LL-2, LL-8, LL-17, LL-18, LL-19, LL-20, LL-37, PHR-31

Response: More detailed maps, including section information, have been added to the Final EIS as Appendix I. Requested information cannot be shown on every map due to the small scale or they would become cumbersome and unreadable.

b) Comment: Figures 5-1 and 5-2 inaccurately show the Walker River Indian Reservation as smaller than it is.

References: Comment W-6

Response: The figures have been corrected in the Final EIS.

c) Comment: The map shows the B-16 withdrawal footprint incorrectly. The footprint, from the northern B-16 boundary to the northern withdrawal boundary, shows a distance of two or three square miles. If it is two miles, the offsets give an appearance of a maximum total of 5,440 acres. If it is three miles, the offset gives the appearance of 7,520 acres. The text states that 6,120 acres will be withdrawn. Please clarify.

References: Comment JJ-22

Response: Detailed maps of the Preferred Alternative boundaries have been included in Appendix I of the Final EIS.

d) Comment: On Figure 5-3, show the location of existing or proposed supersonic corridors.

References: Comment LL-19

Response: The existing supersonic operations area has been added to Figure 5-2. The proposed supersonic corridor discussed in Section 5.7.2.2 has been depicted on Figure 5-3 as presented in the Special Nevada Report (SAIC 1991). Site-specific NEPA documentation would be performed once an action was formally proposed.

e) Comment: The Appendix D figures are of a poor quality. The symbol for dirt roads is almost illegible and obscure figures in the center of the figures are unidentifiable. The figure on page three identifies a north-south dirt road. If this is Scheelite Mine Road it should continue further south. Indicate whether this road is to be moved or remain closed. Figure 2 needs a scale for distance. Page 10 of the appendix refers to Figures 7 through 10. If these are the same figures shown, figure titles need to be revised. The page six figure is of a different scale and meaningless

to the reader. Add scales or legends to the figures or eliminate them altogether. Figures 11 and 12, as referred to in the text, are missing.

References: Comments LL-26 to LL-36

Response: Appendix D was included to provide the reader more information on the methodology and conclusions of the HAZARD report described in Section 1.4.3.1. This is a published document included for informational purposes only. The main intent of the report was to depict HAZARD boundaries, not area roads.

f) Comment: Information about the withdrawal north of B-16 is hard to evaluate because the maps show Sheckler Reservoir in the wrong place and the wrong size and shape for normal conditions. The withdrawal map shows the reservoir one mile south of where it is shown on the Nevada Map Atlas and Nevada Atlas and Gazetteer. The USGS State of Nevada map is the only map showing the reservoir in the shape that it is. It also shows smaller bodies of water south of the reservoir that are not depicted on the Draft EIS maps. Depending on the withdrawal distance from existing boundaries, the withdrawal would include this unknown section of water and Reservoir Dam Road, the most fished area. The withdrawal map shows the reservoir to be about three square miles. The Nevada maps listed above show it to be about six square miles and similar to a butterfly shape. The Draft EIS underplays the normal size and use of the reservoir.

References: Comments JJ-10, JJ-19, JJ-20

Response: The figures in the EIS were developed from digitized USGS maps and basic landforms cannot be changed. The Navy recognizes that due to seasonal fluctuations, the size and shape of the reservoir varies. The Navy has no intention of restricting use or access of the reservoir.

g) Comment: The maps do not show which of the Bureau of Reclamation acres are TCID acres, and no right-of-way is shown across the TCID dam. What roads are considered TCID roads and what will the Navy do with non-legal Category B roads north of B-16.

References: Comments JJ-10, JJ-24

Response: Public access, including use of roads, would remain open on Category B lands and would not be affected.

h) Comment: There are no legal descriptions for the lands in the proposed withdrawals making it difficult to ascertain what lands are included.

References: Comments BB-2, JJ-1, PHF-3

Response: Detailed maps of the Preferred Alternative boundaries, including section information, have been added to the Final EIS as Appendix I.

i) Comment: The maps inaccurately portray the location of the Pony Express Trail. In the 1861 land survey, it appears to go across the tail end of B-16. The map also doesn't show the reach between Faraway Site and the Stillwater section.

References: Comment PHR-42

Response: All the maps in the Navy's possession show that the Pony Express National Historic Corridor crosses south of B-16. The National Park Service was contacted and provided a map of the trail corridor in the vicinity of NAS Fallon lands; the figures in the Final EIS have been revised to reflect the correct trail location. The trail does not cross existing Navy withdrawn lands. The proposed action would not result in restrictions to access on the trail corridor.

26. Detailed Comments

The following comments deal with specific issues or questions rather than general issues. Responses to these comments are provided below. For the specific comment, please refer to the referenced letter and comment within the letter.

a) Comment: See Comment A-5
Response: Acreages of Category A and B lands have been added to Table 2-1 as suggested.

b) Comment: See Comment A-7
Response: Figure 1-1 depicts only Churchill County as it is the area that encompasses NAS Fallon lands. Text has been added to the figure to indicate the extent of the reservation.

c) Comment: See Comment B-21
Response: The Navy acquired Dixie Valley lands for military purposes through congressional authorization and may conduct military operations there to satisfy mission requirements. Federal agencies have the authority to hold property rights pursuant to 40 USC 483, Management and Disposal of Federal Property. Only upon the holding agency identifying lands as excess can lands be relinquished to the General Services Administration, which in turn has the responsibility of dispersing lands to the appropriate federal agency. The Navy acquired Dixie Valley lands with Congressional approval to mitigate potential impacts from sonic booms and for military purposes.

d) Comment: See Comment B-22
Response: In the proposed action the Navy has asked for review and approval authority as suggested by the cooperating agency. It is expected that the Navy review would take place within the time the BLM currently is required to review and act on any permits, waivers, and special event actions. The customer should feel no additional delays from this added review; the vast majority of the actions reviewed by BLM would be compatible with Navy training operations and approval would be quickly granted by the Navy.

e) Comment: See Comment B-23
Response: The majority of Navy use of Category B areas would be on existing roads and trails. EW and TACTS sites will to the extent possible use existing roads and utility corridors (see Section 3.14).

f) Comment: See Comment B-26
Response: It is the Navy's position that activities proposed on Category B lands are compatible with most existing public uses. Where public use is not compatible, steps have been outlined to mitigate incompatible uses. Incompatible land uses include EW sites, which would be fenced to prevent public access, and structures over 50 feet in some areas, which would be evaluated on a case-by-case basis. The designation of Category B lands allows the Navy to complete valuable training the BLM Carson City District office does not feel it can authorize while limiting restrictions to

public use of proposed withdrawal lands to the greatest extent possible (see Sections 3.12 and 4.12).

g) Comment: See Comment B-28
Response: The Navy believes that military activities on proposed Category B lands are compatible with most existing public uses. In those instances where military activity is incompatible with existing public uses, actions will be taken to mitigate the military activity to the greatest extent possible while still maintaining optimal training. In those instances where proposed public uses and development could interfere with military activity, the Navy would review the activity. Review would be mainly for height restrictions and the presence of large scale development near existing training ranges. The designation of Category B lands allows the Navy to complete valuable training the BLM Carson City District does not believe it can authorize under FLPMA while minimizing restrictions to the public use of withdrawn land.

h) Comment: See Comment B-29
Response: A review of the videos from the scoping meetings showed the following recommendations—NAS Fallon should move operations east of the City of Fallon, should consolidate operations to B-20, should use lands acquired in the Dixie Valley, and should avoid the Job Peak Wilderness Study Area.

i) Comment: See Comment B-30
Response: Text has been revised to state that lands will remain open to public uses with the exception of fenced EW sites. Specific land use management is discussed in detail in Section 2.3.2.2.

j) Comment: See Comment B-32
Response: The Navy acquired Dixie Valley lands for military purposes through congressional authorization and may conduct military operations there to satisfy mission requirements. Federal agencies have the authority to hold property rights pursuant to 40 USC 483, Management and Disposal of Federal Property. Only upon the holding agency identifying lands as excess can lands be relinquished to the General Services Administration, which in turn has the responsibility of dispersing lands to the appropriate federal agency. The Navy acquired Dixie Valley lands with Congressional approval to mitigate potential impacts from sonic booms and for military purposes.

k) Comment: See Comment B-36
Response: Existing and foreseeable training requirements appear compatible with the types of public uses undertaken on these lands. Future changes to the training mission for NAS Fallon could require exclusive use of land or allow lands to be returned to the public domain. While these changes are not foreseen, administrative processes currently exist for BLM to respond to either situation.

l) Comment: See Comment B-37
Response: It is expected that the Navy review would take place within the time the BLM currently is required to review and act on any permits, waivers, and special event actions. The customer should feel no additional delays from this added review; the vast majority of the actions

reviewed by BLM would be compatible with Navy training operations and approval would be quickly granted by the Navy.

m) Comment: See Comment B-38
Response: The text in Section 2.3.3 regarding practice/inert ordnance has been revised to indicate that practice/inert ordnance poses a low risk and a correspondingly low probability of harm.

n) Comment: See Comment B-39
Response: Detailed direction is provided in Section 2.3.2.2 under the topic public access and recreation. Text has been revised to indicate that such sites would not be accessible to the public. Table 2-4 has been revised by deleting "generally" from Category B lands under public access/recreational use and adding "except for remote sites" at the end of the sentence.

o) Comment: See Comment B-40
Response: Regulation of mining on Category B lands is detailed in Section 2.3.2.2, Mining, and summarized in Table 2-4. No Navy approval or concurrence would be required for exploration, for working existing claims, or for staking new claims. Navy approval or concurrence would be required for the construction of structures related to mining. The Navy is proposing a change to the existing mining laws similar to those enacted under PL 99-606 Section 12 (e) and (f) that would give the Navy the authority to review and approve mining developments on a case-by-case basis.

p) Comment: See Comment B-41
Response: Regulation of mining on Category B lands is detailed in Section 2.3.2.2, Mining, and summarized in Table 2-4. No Navy approval or concurrence would be required for exploration, for working existing claims, or for staking new claims. Navy approval or concurrence would be required for the construction of structures related to mining. The Navy is proposing a change to the existing mining laws similar to those enacted under PL 99-606 Section 12 (e) and (f) that would give the Navy the authority to review and approve these mining developments on a case-by-case basis. Developments would only be disapproved if incompatible with the Navy training mission. For example, structures over 50 feet in height would not be compatible if located on run-in line approaches to the ranges. In addition, the Navy is proposing to disallow patenting of new claims on Category B lands.

q) Comment: See Comment B-42
Response: The area discussed in Section 3.3.2.8 includes the training ranges, the areas adjacent to the training ranges, and the Dixie Valley area. Much of these lands are disturbed as determined in the Special Nevada Report (SAIC 1991).

r) Comment: See Comment B-43
Response: Text has been revised as suggested.

s) Comment: See Comment B-44
Response: Text has been revised as suggested.

t) Comment: See Comment B-45
Response: Text has been revised as suggested.

u) Comment: See Comment B-46
Response: Table 3-3 and Section 3.3.4 have been updated based on observations of bats during 1996 and 1997 within NAS Fallon.

v) Comment: See Comment B-47
Response: Table 3-3 and Section 3.3.4 have been updated based on observations of bats during 1996 and 1997 within NAS Fallon. Text has been revised as suggested.

w) Comment: See Comment B-48
Response: Text has been revised to state that a corridor along Highway 50 is part of a National Park Service-proposed National Trails System trail called the American Discovery Trail.

x) Comment: See Comment B-49
Response: Text has been revised to reflect this recent information.

y) Comment: See Comment B-50
Response: Text has been revised to include commercial recreation activities.

z) Comment: See Comment B-51
Response: Maps and text have been updated based on details provided by the BLM in February 1998.

aa) Comment: See Comment B-52
Response: For purposes of developing the context and importance of the Dixie Valley area and electronic warfare threat environment, the reader is referred to Sections 1.2, 1.2.2.3, and 3.8.1.5; Figures 3-3 and 3-4; and Appendix A.

bb) Comment: See Comment B-53
Response: Updated data have been included in the Final EIS where available.

cc) Comment: See Comment B-54
Response: The panhandle area would be designated Category B and would remain open to the public; the panhandle presents no limits to the public traversing this area. Navy use of the panhandle area would consist primarily of parking a vehicle (visual cueing device) along the side of roads and trails that branch off of the Dixie Valley Road for the duration of a training exercise (up to two hours) or of foot traffic. No Navy activities would occur immediately adjacent to the road in the Nevada Department of Transportation right-of-way corridor that runs 100 feet to either side of the centerline. Mitigation has been added to Section 4.2.12 stating that educational materials describing Navy training activities will be provided to local BLM, BUREC, and NDOW offices for dispersal to the public upon request.

dd) Comment: See Comment B-55

Response: The Navy's position based on experience and best available data is that chaff poses no hazard to public health, wildlife, or the natural environment. The US Air Force recently completed a detailed study on chaff, and this information has been incorporated into the Final EIS in the Section 4.2 resource impact analyses. The General Accounting Office also is currently investigating this issue.

ee) Comment: See Comment B-56

Response: The panhandle area would be designated Category B and would remain open to the public; the panhandle presents no limits to the public traversing this area. Mitigation has been added to Section 4.2.12 stating that educational materials describing Navy training activities will be provided to local BLM, BUREC, and NDOW offices for dispersal to the public upon request.

ff) Comment: See Comment B-57

Response: Helicopter noise is described in Section 3.5.4. Effects to wildlife, including game species, is discussed in Section 4.2.3. Helicopter use by the Navy will have similar effects as helicopter surveys conducted by NDOW. Most Navy activity will take place on the valley floor, not in the areas detailed in the comment. Therefore, no significant effects to lambing or hunting are expected.

gg) Comment: See Comment B-60

Response: It is clearly delineated in Section 4.2.10.1, Development and the Patenting, that the primary Navy concern on Category B lands is height of structures and land ownership. The only restrictions within Category B lands are a 50-foot height limit, maintaining claims in an unpatented status, and restricting access at fenced EW sites. The Navy feels that there may be flexibility within these restrictions depending upon the location and type of mining activity. Even though the Category B lands do not contain areas of high mineral potential, the Navy desires to continue mining activities as part of the multiple use management within Category B lands.

hh) Comment: See Comment B-61

Response: The Navy agrees that its training activities near watering areas could have a potential impact on livestock and wildlife. A mitigation measure has been added to Section 4.2.11 of the Final EIS to state that the Navy will not conduct ground training or low level flights below 500 feet above ground level (AGL) within one-half mile of all springs and water troughs. With regard to human error, every effort will be made to minimize the incidence of such errors with training and pre-briefing discussions on ground training limitations. The referenced incident occurred on an existing training range, not on public lands, and is not indicative of the likelihood for increased future incidents as there is no intent to provide public access to any existing training ranges. Public support indicates that Category B lands should remain open to multiple uses.

ii) Comment: See Comment B-62

Response: Disturbing sites in this climate may spread noxious weeds. The Resource Management Plan (Appendix J in the Final EIS) contains a noxious weed and weed control management program.

The Navy currently has an Natural Resource Management Plan for the management of noxious weeds on all Navy lands. Text to this effect has been added to Section 4.2.3 of the Final EIS.

jj) Comment: See Comment B-63
Response: Please refer to Section 4.2.8.1 of the Final EIS. The utility corridor as developed by BLM will remain, subject to existing rights, and the Navy will work with individual utility providers on a case-by-case basis to ensure safety and transmissions needs are compatible.

kk) Comment: See Comment B-64
Response: Text revised as suggested.

ll) Comment: See Comment B-65
Response: The Navy does not feel that proposed military activities are incompatible with recreational use of the area, though mitigation has been added to Section 4.2.13 of the Final EIS to note that educational materials describing Navy training activities will be provided to local BLM, BUREC, and NDOW offices for dispersal to the public upon request. The Navy would require review of permitted recreational activities, but would not prevent BLM-approved recreational event from occurring; only in an extreme case would an event have to be rescheduled if military activities could not be adjusted. As stated in Section 1.3, the purpose for the proposed action is to provide the necessary land area for the Navy to change and improve training and to provide safety buffer zones around the training ranges; the studies listed in Section 1.4.3 assist in determining lands needed. As discussed in Section 2.2.1, one evaluation criterion is to minimally disrupt the BLM mission to provide for multiple uses of public lands. As no usage data is available, experience of NAS Fallon personnel has been used. In the experience of NAS Fallon personnel who access this area, few recreational users have been noted and therefore the number is not thought to be very high during the time training is occurring. Since training would occur primarily on weekdays, and half would occur at night, there is basis for the statement that training would occur at times when encounters with recreationists would be less likely.

mm) Comment: See Comment B-66
Response: The land withdrawal will not affect the Pony Express National Historic Trail recreational events either at the B-16 area or the B-17 area. The Navy coordinated with the National Park Service to clarify the location of the trail corridor (see response to comments Section 20 comments i, n, and o).

nn) Comment: See Comment B-67
Response: The recreational use discussed in Section 3.12 of the EIS is compatible with all three evaluation criteria listed in Section 2.2.1 of the EIS for Category B lands. While the Navy does not feel that proposed military activities are incompatible with recreational use of the area, mitigation has been added to Section 4.2.12 of the Final EIS to note that educational materials describing Navy training activities will be provided to local BLM, BUREC, and NDOW offices for dispersal to the public upon request.

oo) Comment: See Comment B-68

Response: As discussed in Section 2.2.2, the No Action Alternative does not establish the appropriate management responsibility for lands containing off-range ordnance and does not provide for the safety buffers around B-17 defined through HAZARD modeling. Sections 2.2.2, No Action Alternative, and 2.2.3, Off-range Ordnance Withdrawal, detail the impacts to training from implementing either of these alternatives.

pp) Comment: See Comment B-69

Response: The CEQ regulations cited serve to guide the development of the impacts section of the environmental document. All adverse impacts and mitigations are identified and discussed in detail in Chapter 4 by alternative and by resource. Further the CEQ regulations part 1502.14 state ". . . it [this section] should present the environmental impacts of the proposal and the alternatives in comparative form thus sharply defining the issues . . ." This comparative discussion can be found in Table 2-6. Text has been added to the introduction of Chapter 4 and Section 4.3 directing the reader to the comprehensive summary of impacts table. Please refer to Sections 4.2.12.1, 4.2.12.2, and 4.3 and Table 2-6 regarding the loss of recreational opportunity.

qq) Comment: See Comment B-70

Response: The proposed land withdrawal does not include any reservation land. Currently, negotiations are ongoing with the Walker River Paiute Tribal Council with regard to the off-range ordnance lands adjacent to B-19. To date this Tribe is in the process of developing land use policies and controls for their reservation lands. No changes to aircraft flight operations or target areas are proposed as part of the proposed action; therefore, no conflicts with Tribal land use plans or policies are expected.

rr) Comment: See Comment B-71

Response: Chapter 5 identifies all proposed and reasonably foreseeable actions. Where appropriate, past actions also have been identified and evaluated. The proposed action evaluated in this EIS has no direct impact on central Nevada.

ss) Comment: See Comment B-72

Response: The document identified is an administrative action to support proposed changes in the BLM Carson City District land use plan. The Navy feels that the detailed analysis in the referenced document is inadequate and provides no supporting documentation. The plan is currently held in an extended administrative appeal and a final decision for the Land Use Plan Amendment is pending.

tt) Comment: See Comment B-73

Response: This topic has been discussed in the past. Public Law 99-606 Section 6 directed the Secretaries of the Air Force, Navy, and Interior to prepare the Special Nevada Report to look at the cumulative aspects of the military in Nevada. The DOI was involved in that effort and we would encourage their involvement in any similar future actions.

uu) Comment: See Comment B-74
Response: No cumulative impacts analysis is being deferred, lands considered in this EIS also will be considered in the environmental documentation required in Public Law 99-606.

vv) Comment: See Comment B-75
Response: The mining data in the vicinity of the withdrawal areas were updated prior to publication of the Draft EIS (Appendix H). The information presented in the referenced Section 5.4.3.1 has not changed significantly and adequately characterizes mining activity in the region.

ww) Comment: See Comment B-76
Response: The information on visitors to Grimes Point and Hidden Cave has been updated in Section 5.4.3.3 of the Final EIS. It is encouraging to see recreational and other uses of the public lands continue and increase with the past and current uses of the military. With continued close work between the DOI and DOD the Navy will maintain this same successful multiple use management of public lands.

xx) Comment: See Comment B-77
Response: The information on these sites has been added to Section 5.5.1. The total number of sites is approximately 72. The total number of acres of public land affected, which includes access roads, utility corridors, and the actual site location, is approximately 565. The 565 acres are dispersed throughout the 4.2 million acres administered by the BLM Carson City District. All existing sites have been developed under BLM rights-of-way with BLM coordination and review of Navy environmental documentation. Development of the sites included standard mitigation measures described in Section 4.2 of the EIS for proposed EW and TACTS sites. These threat emitter radar and aircraft tracking instrumentation subsystem sites are extremely important to the NAS Fallon training mission.

yy) Comment: See Comment B-78
Response: The supersonic operations area (SOA) falls within the 10,387 square miles of existing MOA airspace listed in Table 5-2. The environmental effects of the SOA were evaluated in the Final Comprehensive Environmental Impact Statement for the Proposed Supersonic Operations Area and Other Proposed Actions at NAS Fallon, Nevada, June 1985.

zz) Comment: See Comment B-79
Response: The MOU requires the Navy to fly above 3,000 feet above ground level (AGL) over WSAs when tactically feasible. This MOU is still in effect and to date Navy is unaware of any complaints. As stated in the MOU, the Navy is prepared to respond to any complaints documented.

aaa) Comment: See Comment B-80
Response: The Pony Express National Historic Trail is discussed in Section 4.2.13 of the EIS and in response to comment Section 20. Section 5.5.2.3 acknowledges impacts to recreation from aircraft overflights. Section 5.6.6.3 has been revised to state that there will no impacts to mining and grazing as a result of the proposed airspace restructuring and designations and that the actions will reduce noise levels north of B-16 but increase noise levels south of B-16 over the

area of the Pony Express National Historic Trail. Text also has been added to state that the Navy will work to alter training to the extent practicable to reduce noise during organized events on the Pony Express National Historic Trail.

bbb) Comment: See Comment B-81

Response: Figure 1-4 depicts the revised range safety zones for the proposed change in flight patterns at B-16. Based on RAICUZ methodology and the professional judgment of the Navy, the change in flight approach patterns would not conflict with use of public lands in the area south of B-16. Limitations on structure height in the immediate vicinity of the run-in line and advanced planning and scheduling with the range department for large organized events would ensure public and pilot safety.

ccc) Comment: See Comment B-82

Response: The current text is supported by available data cited.

ddd) Comment: See Comment B-83

Response: The current text is supported by available data cited.

eee) Comment: See Comment B-84

Response: The Mt. Grant area is administered by the Department of the Army and actions affecting these lands are not subject to Navy discretion. The Navy acquired Dixie Valley lands for military purposes through congressional authorization and may conduct military operations there to satisfy mission requirements. Federal agencies have the authority to hold property rights pursuant to 40 USC 483, Management and Disposal of Federal Property. Only upon the holding agency identifying lands as excess can lands be relinquished to the General Services Administration, which in turn has the responsibility of dispersing lands to the appropriate federal agency. The Navy acquired Dixie Valley lands with Congressional approval to mitigate potential impacts from sonic booms and for military purposes. The Navy has in the past returned lands withdrawn in Nevada in excess of 790,000 acres.

fff) Comment: See Comment B-85

Response: Appendix H and Section 3.10.8.3 have been revised as suggested.

ggg) Comment: See Comment B-86

Response: Because neither the proposed action nor any of the detailed alternatives involve B-20, B-20 is not depicted on most maps in Chapters 1 through 4. B-20 is depicted on Figure 1-1, which shows all NAS Fallon-administered lands, and Chapter 5, which discusses the cumulative effects of NAS Fallon operations in Churchill County.

hhh) Comment: See Comment B-87

Response: Base closure and realignment decisions are made at the Congressional level. Base closure decisions have resulted in the realignment of training missions to facilities, such as NAS Fallon, that were not slated for closure. This has made NAS Fallon and the Fallon Range Training Complex more strategically important for the combat readiness of the Navy. An off-range Ordnance Alternative was not found to be a viable alternative, as discussed in Section 2.2.3.

Even with the addition of the shoal site, this alternative does not meet the Navy training requirements listed in Section 2.2.1.

iii) Comment: See Comment B-88
Response: The term off-range ordnance (ORO) was used in the document because it has broad public acceptance and understanding.

jjj) Comment: See Comment B-89
Response: Text in Section 3.13 has been revised to further define and discuss inert ordnance. Ordnance can only be called inert if it has a paper certification. Ordnance used at NAS Fallon is practice ordnance rather than inert ordnance because it has not been certified. Practice rounds may or may not have spotting charges or other reactive materials for scoring purposes, but they have no live explosive fillers.

kkk) Comment: See Comment B-90
Response: Chaff and flares may or may not be used simultaneously. Pending the perceived threat to the pilot determines what evasive action may be taken. See discussion on chaff in Section 1.2.2.3, B-17 and Dixie Valley Area and Section 4.1.3.

lll) Comment: See Comment B-91
Response: The statement is accurate as it appears in the text. Training conducted in a simulator, while valuable, is not a substitute for live training. The loss of realism in training would result in incomplete training, thereby increasing the potential for loss of lives in actual combat situations.

mmm) Comment: See Comment B-92
Response: Text has been added in Sections 1.2.2.3 and 3.8.1.4 to describe the existing environment of the shoal site.

nnn) Comment: See Comment B-93
Response: NAS Fallon requires a variety of terrain to meet its training mission. The realistic training provided at NAS Fallon is based on real world threat scenarios; proposed withdrawn lands would provide terrain representative of the terrain that could be encountered in such scenarios. No changes in the use of chaff and flares or ordnance deliveries would result from the proposed land withdrawal; these are ongoing mission activities conducted in accordance with the Fallon Range Users Manual.

ooo) Comment: See Comment B-94
Response: Text in Section 2.2.1 has been revised as suggested.

ppp) Comment: See Comment B-95
Response: Text has been added in Sections 1.2.2.3 and 3.8.1.4 to describe the existing environment of the shoal site. The Navy is proposing a Navy withdrawal over a DOE withdrawal; therefore, DOE would retain responsibility for all subsurface resources and activities. The Navy would be responsible only for surface training activities, primarily combat search

and rescue training. The Navy worked with the DOE in the development of the Resource Management Plan to clarify this issue. The Resource Management Plan is included as Appendix J in the Final EIS.

qqq) Comment: See Comment B-96
Response: The last sentence of Section 2.2.2, Alternative II, indicates that all off-range ordnance lands are included for withdrawal under this alternative.

rrr) Comment: See Comment B-97
Response: The Navy is currently working with the Walker River Paiute Tribe to address subsurface ordnance on reservation lands. In addition, the Navy has revised training operations to reduce the likelihood of future off-range ordnance.

sss) Comment: See Comment B-98
Response: The proposed land withdrawal would not result in any changes to ordnance delivery operations and will not increase the size of the impact area. The memorandum of agreement is discussed in Section 1.4.3.3 of the EIS. Once lands are withdrawn, the memorandum will be terminated, though the Navy will continue to perform annual sweeps of these lands. In addition, the Navy is investigating the potential use of new ordnance remediation technology developed by the Naval Research Laboratory. Text to this effect has been added to Section 1.4.3.3 of the Final EIS.

ttt) Comment: See Comment B-99
Response: Chaff and flares may or may not be used simultaneously. Chaff references have been updated to include only those in Navy possession rather than citing articles referenced within other articles.

uuu) Comment: See Comment B-100
Response: Subsection Chaff and Flares within Sections 2.3.1 and 4.1.13 discuss dispersion and areas affected, which are primarily the Dixie Valley and B-17. The Navy is investigating the use of degradable chaff. The use of chaff in training is an ongoing activity at NAS Fallon; no change in chaff use is proposed under the proposed action. See response to comments Section 23 for more discussion on chaff.

vvv) Comment: See Comment B-101
Response: See 40 CFR Part 260, Appendix I, Figure 1. If the state is a RCRA-authorized state (Nevada is) and has adopted the federal regulations (Nevada has), they have to consider the chaff as being used for its intended purpose. Chaff does not fit the definition of a solid waste as defined in 40 CFR Part 261.2. Chaff use at NAS Fallon is authorized by the FAA.

www) Comment: See Comment B-102
Response: Authorized chaff is approximately six ounces by weight. When dispersed, chaff leaves the tube and is dispersed or, on very rare occasions, fails to disperse and remains in a bundle. Hydrogen gas that may be generated from the chaff would be insignificant since it would

not be in an enclosed area but would disperse rapidly into the atmosphere. Therefore, chaff is not flammable and poses no fire hazard.

xxx) Comment: See Comment B-103
Response: Materials associated with spent flares would not qualify as RCRA-regulated solid waste (see response to comment B-101, above). The Navy is unaware of any studies on the effects of flares on wildlife, water, or plants, though experience has not shown flares to have any adverse effect on these resources. Studies have indicated that if the flare properly fires, the compounds listed in the comment would be used up during firing.

yyy) Comment: See Comment B-104
Response: The use of flares is an ongoing activity within the NAS Fallon training mission; flares are deployed in accordance with guidelines detailed in the Fallon Range Users Manual. No changes in flare use would occur as a result of the proposed land withdrawal; therefore, historic data regarding flares usage is not required.

zzz) Comment: See Comment B-105
Response: Deployment of flares is regulated by the Fallon Range Users Manual. No fires have resulted from flares deployed from aircraft at NAS Fallon, though fires have resulted from the use of handheld flares. NAS Fallon is preparing a fire management plan that will include the proposed withdrawal lands.

aaaa) Comment: See Comment B-106
Response: The Navy consulted with the BLM Carson City District regarding instituting cooperative agreements to accomplish Navy needs. The BLM does not believe that it has the authorization under the Federal Land Policy and Management Act to allow most military activities discussed in Section 2.3.1. However, the Navy feels that it is in the interest of all public land users for the BLM to permit certain types of military activity on limited public lands, thereby precluding the need to withdraw, segregate, and control large parcels of land to prohibit multiple user activity.

bbbb) Comment: See Comment B-107
Response: The acreages shown in the original application and subsequent additions are not additive; Alternative I does not include the panhandle area. Alternative II includes the panhandle, which allowed the lands proposed for withdrawal in the Job Peak WSA to be deleted from the withdrawal footprint. No alternative includes the land south of B-16; if the change in flight patterns is instituted, these lands would continue to be managed by the BLM through a memorandum of agreement or understanding with the Navy.

cccc) Comment: See Comment B-108
Response: Public access will remain open on Category B lands, as discussed in Chapter 2 and Chapter 4 and as detailed in the Resource Management Plan included as Appendix J in the Final EIS. The most likely land use restriction, discussed in Section 2.3.2.1 of the EIS, would involve the construction of structures greater than 50 feet in height on certain Category B areas such as aircraft run-in lines. The information presented in the EIS will be included in

the Record of Decision, binding the Navy to continued public access for the long-term. As stated in Section 2.2.1, it was the Navy's intent when formulating the alternatives to keep as much land open to public uses, and therefore minimally disrupt the BLM mission to provide for multiple uses.

dddd) Comment: See Comment B-109
Response: The panhandle area would be designated Category B and would remain open to the public; the panhandle presents no limits to the public traversing this area. The panhandle area is proposed for withdrawal for ground training purposes and placement of cueing devices, as described in Section 2.3.1 of the EIS. The BLM Carson City District's current position is that it does not have the authorization under FLPMA to allow most military activities, including ground training, on public lands without a withdrawal.

eeee) Comment: See Comment B-110
Response: As discussed in Section 2.2.2, Alternative II, the panhandle would allow for the uninterrupted movement of personnel during ground training and for placement of cueing devices; establishment of the panhandle allows for the reduction in the size of the withdrawal footprint in the Dixie Valley area.

ffff) Comment: See Comment B-111
Response: Additional information on ground training has been added to Section 2.3.1, Ground Activities. The information presented in Table 2-3 and evaluated in Chapter 4 represents a high intensity of ground activity. In reality, far fewer events would likely occur; impacts from these numbers are evaluated as a worst case scenario.

gggg) Comment: See Comment B-112
Response: Buffers include lands containing off-range ordnance, as identified during surface sweeps (Figure 1-5), and lands with the potential to contain off-range ordnance, as identified by the HAZARD report (Figure 1-3). The HAZARD footprint is developed by identifying designated target impact areas and by analyzing the types of weapons used, the type of delivery maneuvers employed, and the flight characteristics of the aircraft performing the delivery.

hhhh) Comment: See Comment B-113
Response: The amount of acreage proposed for withdrawal at the shoal site under the Preferred Alternative will be consistent with the lands identified in the withdrawal application. The lands withdrawn at the shoal site may be less than 2,765 acres, but would not exceed this amount. The 7,405 acreage represents the lands used by the Navy north and south of the DOE-withdrawn lands, as well as the DOE withdrawal.

iiii) Comment: See Comment B-114
Response: Text has been added to Sections 1.2.2.3 and 3.8.1.4 to indicate that prior to the enactment of FLPMA, the Navy used 4,800 acres of land north and south of the DOE shoal site under a BLM special land use permit.

jjjj) Comment: See Comment B-115
Response: The Navy has been working closely with both BLM and DOE regarding the proposed withdrawal at the shoal site. See the Resource Management Plan, Appendix J for further information.

kkkk) Comment: See Comment B-116
Response: Text has been added in Sections 1.2.2.3 and 3.8.1.4 to describe the existing environment of the shoal site and references have been included in Chapter 7, References. The DOE EIS for the Nevada Test Site and Off-site Locations in the State of Nevada has been reviewed and incorporated by reference.

llll) Comment: See Comment B-117
Response: The Navy, in consultation with the BLM, has developed a resource management plan, included as Appendix J in the Final EIS. The resource management plan was developed based on land use management policies outlined in Section 2.3.2 and analyzed in Section 4.2 of the Draft EIS. All potential impacts from the proposed withdrawal have been reviewed by the public; the resource management plan details management and protection of the resources as discussed in the Draft EIS and augmented with public comment on the Draft EIS. The location of future EW and TACTS sites described in the EIS have not been specifically identified but would be located within the proposed withdrawal boundaries upon approval of the proposed action and when needed. As discussed in Section 4.2.3, siting of EW, TACTS, visual cueing sites, and ground training areas will avoid sensitive habitats as identified by biological surveys conducted prior to site construction or activity. If habitat for sensitive species is identified, the sites or activities would be relocated.

mmmm) Comment: See Comment B-118
Response: The regional cumulative effects upon the sensitive resources are discussed by resource in Section 5.8. The inclusion of effects from grazing, mining, and other activities on the environment is beyond the scope of this EIS.

nnnn) Comment: See Comment B-119
Response: The figures in the Final EIS have been revised to reflect the correct boundary of the Stillwater National Wildlife Refuge.

oooo) Comment: See Comment B-120
Response: Text has been updated in Section 3.3 to indicate that individual peregrine falcons have been observed on at least 29 occasions during the years 1990 through 1997, with no record of peregrine falcons in 1992.

pppp) Comment: See Comment B-121
Response: The definition of primary wetlands has been revised in Section 3.3.5 to state that "Primary wetlands are the wetlands located within the Stillwater National Wildlife Refuge, Stillwater Wildlife Management Area, Carson Lake, and Fallon Indian Reservation. Secondary wetlands are administered or owned by another agency, organization, or individual."

qqqq) Comment: See Comment B-122
Response: As stated in Section 4.2.2 of the EIS, no impacts from chaff would be expected to occur. The aluminum in chaff (Al^{+3}) converts quickly to $Al_2(SO_4)_3$ in high sulfate water such as that found in Churchill County. $Al_2(SO_4)_3$ is alum, a compound commonly used in water treatment plants to remove colloidal metals from drinking water. As a nontoxic precipitate, no impacts to aquatic organisms would be expected to occur from the aluminum in chaff.

rrrr) Comment: See Comment B-123
Response: Text has been added to Section 3.3.4.2 and Section 4.2.3.1 to indicate that the only recorded nesting by bald eagles in this area occurred at the Lahontan Reservoir in 1997. A pair of bald eagles established a nest and successfully incubated an egg, but the lone eaglet did not survive.

ssss) Comment: See Comment B-124
Response: The development of any of these sites is closely coordinated with appropriate Navy and BLM resources specialists before any lands disturbance occurs. Recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, consultation is not required. See Newton County Wildlife Ass. v. Forest Service, 113 F. 3d 110 (8th Cir. 1997).

tttt) Comment: See Comment B-125
Response: As discussed in Section 4.2.3, siting of EW, TACTS, visual cueing sites, and ground training areas will avoid sensitive habitats as identified by biological surveys conducted prior to site construction or activity. If habitat for sensitive species is identified, the sites or activities would be relocated.

uuuu) Comment: See Comment B-126
Response: No impact to migratory birds from chaff is expected because chaff is not deployed over B-16 or the Sheckler District.

vvvv) Comment: See Comment B-127
Response: The BLM has established the carrying capacity of lands in designated grazing allotments based on forage availability. Therefore, removing land from grazing in Category A areas would not result in increased grazing in other areas beyond the BLM-established carrying capacity of lands.

wwww) Comment: See Comment B-128
Response: A listing of all active claims can be found in Appendix H. The Navy cannot take any action on the proposed lands to be withdrawn prior to the Department of Interior withdrawal request or Congressional authorization and appropriation. Reclamation would be negotiated as part of the acquisition process and would be closely coordinated with the BLM.

xxxx) Comment: See Comment B-129

Response: Section 3.7 discusses the NAS Fallon Cultural Resources Management Plan (CRMP) and Programmatic Agreement. Under the terms of the CRMP, the plan must be updated every five years or after a significant change. Section 4.2.7 has been revised to indicate that the CRMP will be updated upon approval of the land withdrawal to include withdrawn lands. The predictive model covers all of the Carson Desert, including the proposed withdrawal areas, as discussed in Section 3.7 of the EIS.

yyyy) Comment: See Comment B-130

Response: The Navy is required to coordinate with the State Historic Preservation Officer regarding the nominating process for surveyed resources that may be eligible for listing in the National Register of Historic Places. NAS Fallon established an internship position in coordination with the University of Nevada, Reno to evaluate identified sites that are potentially eligible for listing on the National Register.

zzzz) Comment: See Comment F-1

Response: The State public hearing comments are contained in the transcript document for the September 16, 1997, hearing and are indicated as comments PHF-9 through PHF-18.

aaaaa) Comment: See Comment F-2

Response: Responses to issues of concern are detailed in response to detailed comments presented in this letter and public hearing comments.

bbbbb) Comment: See Comment J-6

Response: The information presented in the EIS will be included in the Record of Decision, binding the Navy to continued public access for the long-term. Provisions of the Memorandum of Agreement (MOA) referred to in the comment have been fulfilled by the Navy. The warm water fishery was supported by the Navy in verbal communication with the Fallon Field Office of NDOW, indicating that the State could continue to use the ponds for the warm water fishery. The Navy purchased equipment to monitor sonic booms and conducted sound monitoring beginning in 1986. This information was available for the NDOW biota study of 1989. The Navy stopped sending data from the noise monitoring to the State in 1991 because all identified studies had been completed. However, monitors are still in place in the area and are active. In addition to monitoring the sonic booms, the Navy established procedures to quickly assess, evaluate, and reimburse claimants for damages caused by sonic boom activity. Funding for all studies associated with the MOA were clearly identified in the MOA dated 2/25/86 and amended 1/30/87. The Navy has determined that its reduced water allocations for the Newlands project pursuant to PL 101-618 may further enhance the Lahontan Valley wetlands. More recently the Navy conducted a wetlands inventory, completed an ecological inventory (discussed in Section 3.3 of the Final EIS), is updating its natural resource management plan, and is preparing to initiate other sensitive species surveys. The Navy in coordination with BLM and NDOW via an MOA is currently addressing public access and recreation at Horse Creek. Road and watershed improvements to rewater the original streambed at Horse Creek have been initiated.

ccccc) Comment: See Comment O-2
Response: The Draft EIS is correct. As stated in Section 1.5 and referenced to in the executive summary, the BLM held a meeting to invite comments on the addition of the panhandle to the withdrawal area and changes in flight patterns at B-16.

ddddd) Comment: See Comment O-3
Response: The No Action Alternative would be the least disruptive of the natural environment of the alternatives evaluated; therefore, it is considered the environmentally preferred alternative. However, the No Action Alternative would not be protective of the human environment, as discussed in Section 2.2.2, No Action Alternative, and would not satisfy the purpose and need of the proposed action. Text to this effect has been added to the executive summary and Chapter 2.

eeeee) Comment: See Comment O-4
Response: The referenced paragraph has to do with closing B-16 as an alternative considered but eliminated from detailed consideration. The history of the Sahwave Range is discussed in Section 1.2.1. The Sahwave Range was disestablished in 1965, therefore, it cannot be used as an alternative to B-16.

fffff) Comment: See Comment O-5
Response: The resource management plan is included as Appendix J in the Final EIS.

ggggg) Comment: See Comment O-6
Response: Acreages have been added as suggested.

hhhhh) Comment: See Comment O-7
Response: Category A lands will be fenced to protect the public from the hazards associated with off-range ordnance.

iiiii) Comment: See Comment O-8
Response: Under the proposed action, Category A lands will be closed to mining because of off-range ordnance (Section 2.3.2.1). Holders of existing valid mining claims will be compensated subject to congressional authorization and appropriation (Section 4.2.10). The authority to revise existing mining laws resides with Congress; revision to existing mining laws has historical precedent with other military land withdrawals.

jjjjj) Comment: See Comment O-9
Response: Existing structures would be grandfathered in.

kkkkk) Comment: See Comment O-10
Response: The change has been made to Section 3.5 as suggested.

lllll) Comment: See Comment O-11
Response: The information has been added to Section 3.8.3 as suggested.

mmmmm) Comment: See Comment O-12
Response: The information has been added to Section 3.8 as suggested.

nnnnn) Comment: See Comment O-13
Response: There are no BLM grazing allotments in this area, though BUREC-administered grazing does occur. Lands withdrawn north of B-16 would be Category B; any grazing that occurs in this area would not be affected by Navy activities. Section 3.12 has been updated to state that BUREC-administered grazing occurs north of B-16.

ooooo) Comment: See Comment O-14
Response: Information presented in Section 1.4.3.2 of the Draft EIS has been added to Section 3.9 of the Final EIS.

ppppp) Comment: See Comment O-15
Response: Section 3.8.5 has been revised as suggested.

qqqqq) Comment: See Comment O-16
Response: Section 3.10.8.2 adequately discusses the mining claim process; patenting of claims prior to 1955 is not germane to the existing conditions.

rrrrr) Comment: See Comment O-17
Response: The Resource Management Plan is included as Appendix J of the Final EIS.

sssss) Comment: See Comment O-18
Response: Maintenance of the three watering troughs will continue through an agreement with the Navy and the appropriate state or federal agencies. Text in Section 4.2.3.1 has been revised.

ttttt) Comment: See Comment O-19
Response: Special mining regulations will be required for Category B lands as described in Section 2.3.2.2. Allowing development of structures without Navy approval would not ensure the avoidance of incompatible land uses, such as structures over 50 feet in run-in line approach areas. Patenting of valid mining claims is not possible because patenting gives the claimant absolute title to the land; such title would not allow the Navy to monitor for incompatible land uses. Maintaining unpatented claims would still guarantee the claimant exclusive right to the minerals providing all annual assessment fees and other administrative requirements were fulfilled through BLM (Section 4.2.10).

uuuuu) Comment: See Comment O-20
Response: Information provided in the Draft EIS is adequate since the proposed action would not involve or affect ground water use or quality.

vvvvv) Comment: See Comment O-21
Response: Maps of wildlife areas are not required; wildlife and habitats are adequately described in Section 3.3, Biological Resources. As stated in Section 4.2.3, any development on withdrawn lands would be coordinated with appropriate wildlife agencies. In addition, sensitive habitats would be avoided when siting these developments.

wwwww) Comment: See Comment O-22
Response: Public Law 101-618 would have no direct or indirect cumulative effects on existing, proposed, or reasonably foreseeable actions identified in Chapter 5. PL 101-618 was enacted to provide for equitable apportionment of waters of the Truckee River, Carson River, and Lake Tahoe. It authorized modifications to purposes and operations of certain reclamation projects, authorized acquisition of water rights for fish and wildlife, fulfilled trust obligations, fulfilled goals of the Endangered Species Act, and protected significant wetlands from further degradation. Section 206(c) of the law requires NAS Fallon to develop land management plans and measures to achieve dust control, fire abatement, and foreign object damage control in a manner that to the maximum extent practicable reduces direct surface deliveries of water.

xxxxx) Comment: See Comment O-23
Response: The methodology of the cumulative impacts section is detailed in Section 5.3 of the EIS. Sections 5.5 through 5.7 present the existing, proposed, and reasonably foreseeable actions and their likely individual effects on the environment. Section 5.8 presents the cumulative effects of all these past, proposed, and reasonably foreseeable actions on the region.

yyyyy) Comment: See Comment O-24
Response: The date in Table A-1 has been revised to 1954.

zzzzz) Comment: See Comment T-6
Response: The reasonably foreseeable MOAs are independent actions from the proposed land withdrawal. The proposed land withdrawal is necessary for public safety around and military training associated with the training ranges. Training associated with the ranges is independent from the training that would be performed at the MOAs and affects a different region of influence. For these reasons, and because no specific action has been formally proposed with regards to the MOAs, it would be inappropriate to evaluate these actions together except as cumulative effects of existing, proposed, and reasonably foreseeable NAS Fallon activities. Separate NEPA documentation, including public participation as required by NEPA, will be prepared for the airspace action once an action is formally proposed.

aaaaaa) Comment: See Comment T-7
Response: As stated in Sections 4.2.2, 4.2.10, and 4.2.11, the Navy will compensate holders of valid existing rights subject to congressional approval and authorization.

bbbbbb) Comment: See Comment T-8
Response: This map is intended to provide a generalized depiction of NAS Fallon landholdings in Churchill County. Maps associated with resources elsewhere in the document provide more detailed depictions of roads and other features of the area.

cccccc) Comment: See Comment T-9
Response: Department of Defense decisions regarding training realignments are beyond the scope of this document. Base closures throughout the west have resulted in increased mission activity at all remaining Department of Defense facilities.

dddddd) Comment: See Comment T-10
Response: As stated in Section 2.2.3, NAS Fallon is the only regional facility capable of supporting the 1,500 to 2,000 personnel during the four-week carrier air wing training. No other regional DOD facility has the available operational infrastructure, such as hangar and ramp space or maintenance facilities, for F/A-18 aircraft. The statement is not meant to infer that the capability to perform maintenance does not exist at other facilities; rather, other facilities cannot accommodate entire carrier air wings with their current workloads and training requirements.

eeeeee) Comment: See Comment T-16
Response: As discussed in Section 5.5.2.10, airspace designation and use in the area has affected civilian aviation. No change in airspace designation or air training is proposed under the land withdrawal action, so no new impacts to civilian aviation or medical flights would occur. The proposed land withdrawal would not result in changes in agreements between NAS Fallon and local agencies for providing emergency service assistance.

ffffff) Comment: See Comment T-17
Response: The Navy has no plans for large-scale land expansion eastward from Fallon. As discussed in Sections 1.3 and 1.4, Purpose and Need, the proposed land withdrawal is needed around existing NAS Fallon training ranges to provide for public safety from off-range ordnance hazards and for pilot training associated with the existing ranges. Reasonably foreseeable actions discussed in Chapter 5 do include airspace designations eastward to accommodate air-to-air training requirements. For the reasons discussed in response to comments Section 12e, these actions will be evaluated in separate NEPA documentation once the actions are formally proposed.

gggggg) Comment: See Comment T-18, T-81
Response: The proposed land withdrawal would not result in changes to air training around NAS Fallon training ranges or under other associated airspace; therefore, the risks from falling objects would not increase as a direct result of implementation of the proposed action. The best available data were provided to detail the probability of harm from falling objects. While it is true that increased proximity to the ranges, including travel along Highway 50 near the ranges, may seem to have an increased risk, experience has

not shown this to be true. Risks to areas of central Nevada are no greater than risks to other areas under which aircraft fly.

hhhhhh) Comment: See Comments T-19, T-20, T-24, T-28, T-39, T-68, T-75

Response: Roads are included on the maps to provide a reference for the information being presented. Major roads are included because of their meaning to the greatest number of people both within and outside of the project area. The exclusion of other roads is in no way meant to downplay their importance to local users.

iiiiii) Comment: See Comment T-22

Response: Chapter 1 of the EIS, which is intended to detail the purpose and need of the proposed action, presents a summary of studies and surveys that have been performed for the NAS Fallon training ranges. Existing conditions, including biological resources, are provided in Chapter 3 and impacts of the proposed action are provided in Chapter 4. No impacts to wildlife or wetlands from practice/inert off-range ordnance have been documented, nor are impacts from practice/inert ordnance expected to result from implementation of the proposed action.

jjjjjj) Comment: See Comments T-23, T-83, T-124

Response: As discussed in Section 1.4.3.3, off-range ordnance surface sweeps were performed in 1989 and 1990 and ordnance was found on lands adjacent to the training ranges. Due to the effectiveness of ordnance removal technology, approximately seven percent of the ordnance has not been identified. Lands identified as containing off-range ordnance were closed to the public in 1991. Because ordnance is dropped at B-17 by aircraft flying in a north to south direction, most of the off-range ordnance was found south of B-17. Highway 50 was not found to contain any ordnance and was not included in the closure area; therefore, no risk to travelers exists. The proposed land withdrawal would not result in changes in air operations and would not result in an increased off-range ordnance risk to users of Highway 50.

kkkkkk) Comment: See Comment T-25

Response: Training at the NAS Fallon training ranges has been modified based on computer generated models and on-the-ground sweeps to contain future potential off-range ordnance to within the areas already impacted by off-range ordnance.

llllll) Comment: See Comments T-26, T-35, T-124

Response: Public safety is addressed in Sections 3.13 and 4.2.13 of the EIS. The proposed land withdrawal does not propose changes in aircraft flight operations at the training ranges; therefore, no increased risk to public health and safety would result from the proposed action. Public lands located under Range Safety Zone A are proposed for withdrawal as Category A lands and will therefore be closed to public access.

mmmmmm) Comment: See Comment T-29

Response: The proposed land withdrawal is needed to protect the public from existing and potential safety hazards, such as off-range ordnance, and to provide land for military

activities, such as ground training, that the BLM Carson City District does not feel they have the authority to allow on public lands under FLPMA. The proposed land withdrawal would not result in an increase in air operations at the training ranges or in other military airspace. The MOAs would be used to accomplish military training resulting from new types of aircraft and new real world scenarios, such as rendezvous outside of a threat environment. Please see the response to comments Section 12e regarding the rationale for evaluating these actions separately.

nnnnnn) Comment: See Comments T-30, T-51, T-52, T-91, T-99, T-109, T-113, T-117, T-123, T-125, T-151

Response: As stated in Section 2.3.1, existing access roads and utility corridors will be used for site development wherever possible. In general, only EW and TACTS require utility hookups; visual cueing generally involves parking a vehicle or placing a stationary piece of equipment for pilots to locate from the air. Visual cueing devices are moved around to replicate combat scenarios where targets must be located; therefore, far fewer than the 50 cueing device sites will be in use at one time. The effects of locating five EW and TACTS sites and 50 visual cueing device sites were evaluated in the EIS as a worst case scenario so as not to underestimate impacts. The exact locations of the sites are not known at this time, but impacts are expected to be as presented in the Draft EIS regardless of where they are situated since sensitive resources will be avoided and standard operating procedures for siting these developments reduces the effects of these developments.

oooooo) Comment: See Comment T-31

Response: Recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, consultation is not required. See Newton County Wildlife Ass. v. Forest Service, 113 F. 3d 110 (8th Cir. 1997).

pppppp) Comment: See Comment T-32

Response: The reasons for the selection of the given alternatives and exclusion of other alternatives is expounded in Sections 2.2.2 and 2.2.3 of the EIS.

qqqqqq) Comment: See Comment T-33

Response: The proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed. Therefore, the primary focus of the EIS is on land-based resources and issues in Churchill County, such as the effects of the withdrawal on public use of the proposed withdrawal lands. As detailed in response to comments Section 12e, establishment of the MOAs will be evaluated in site-specific NEPA documentation when they are formally proposed. This documentation will include agency consultation and public involvement in the appropriate regions of influence, including Eureka County.

rrrrrr) Comment: See Comment T-34
Response: The second and third bullets refer to training conducted at the NAS Fallon ranges. Please see the response to comments Section 12e regarding the rationale for evaluating airspace and land withdrawal actions separately.

ssssss) Comment: See Comment T-36
Response: As discussed in Section 2.3.2, approximately 87,000 of the 127,000 acres proposed for withdrawal under the Preferred Alternative would be managed as Category B lands and would remain open to multiple uses. The majority of the remaining lands are now and would continue to be closed to public access due to off-range ordnance hazards. It was the Navy's intent when formulating their Preferred Alternative to keep as much land open to public uses, and therefore minimally disrupt the BLM mission to provide for multiple uses. Aircraft operations in military operation areas do not preclude multiple use of the land under the MOAs. Effects of airspace actions on public use of lands will be evaluated in separate NEPA documentation once specific actions are formally proposed.

tttttt) Comment: See Comment T-37
Response: The proposed action of this EIS only considers land withdrawals related to training and safety at the NAS Fallon training ranges. Under the proposed action of this EIS, no changes to airspace or air training are proposed. As the primary region of influence for this action, impact analysis was limited to Churchill County. Cumulative effects analysis of other regions was discussed in Chapter 5 at a level of detail commensurate with the level of detail available for potential future actions. Socioeconomic effects of future actions will be evaluated in separate NEPA documentation once specific actions are formally proposed.

uuuuuu) Comment: See Comment T-38
Response: The HAZARD mitigation report outlines areas of potential ordnance hazards resulting from air-to-ground ordnance delivery training at the NAS Fallon ranges. These areas are proposed for withdrawal as Category A lands that would be closed to public access. In addition to these lands, the Navy is requesting the withdrawal of Category B lands to support military training activities that the BLM Carson City District does not feel they have the authority to allow under FLPMA. These military training activities include EW, TACTS, and visual cueing device site development and the ground training portion of integrated air and ground training. See responses to comments T-29 and T-36 above.

vvvvvv) Comment: See Comment T-45
Response: No changes to airspace were considered as part of the proposed action; therefore, airspace relocation over Nellis AFR and the Nevada Test Site was not considered.

wwwwww) Comment: See Comment T-46
Response: The military is required to control or own land under new restricted airspace; no such requirement exists for establishment of military operation areas.

xxxxxx) Comment: See Comment T-47
Response: The EIS does not propose to withdraw land or designate airspace in central Nevada. Establishment of airspace is discussed in Chapter 5 as a reasonably foreseeable future action. Alternative airspace designation will be evaluated in separate NEPA documentation once a specific action is formally proposed.

yyyyyy) Comment: See Comment T-48
Response: Three rounds of base closure and realignment decisions have resulted in the closure of many western military facilities. Base closure decisions have resulted in the realignment of training missions to facilities, such as NAS Fallon, that were not slated for closure. This has made NAS Fallon and the Fallon Range Training Complex more strategically important for the combat readiness of the Navy. The purpose and need of the proposed land withdrawal are stated in Sections 1.3 and 1.4 of the EIS.

zzzzzz) Comment: See Comment T-49
Response: Closure of B-16 without the concurrent establishment of a comparable training range and associated airspace would conflict with the mission of NAS Fallon, as discussed in the bulleted items listed prior to the one referenced. In addition to these reasons, closure of B-16 would affect other DOD facilities that use B-16 to accomplish portions of their training missions. Taken together, it is not feasible for NAS Fallon to close B-16 at this time.

aaaaaaa) Comment: See Comment T-50
Response: The majority of the training performed at NAS Fallon is not a one-day training evolution; rather, units come to NAS Fallon and train over an extended period of time, using NAS Fallon accommodations and NAS Fallon maintenance personnel and facilities. They fly from the air station to the training ranges on a daily basis and not from their home facility. Training functions that use B-16 come from various bases with the goal of training in the Fallon Range Training Complex (FRTC) and only use B-16 if the commodore airspace (airspace associated with B-17, B-19, and B-20) is occupied by carrier air wing training.

As discussed in Section 2.2.3, replacement of B-16 requires a dedicated range at which the Navy could train when the FRTC is full. The Nellis Air Force Range is a testing and evaluation range with testing being the primary mission. The testing mission takes priority over other activities including Air Force training. An operations mission prioritizes the training aspect. Nellis currently has EW sites, but that does not mean that NAS Fallon could be scheduled into their current mission priorities; Nellis could not accommodate the levels of training currently conducted at B-16 with their own busy schedule.

The political climate of downsizing has resulted in the closure of multiple DOD facilities throughout the United States. One effect of these closures is the consolidation of mission activities to the facilities that have remained open. Regardless

of whether training is downsized, with fewer DOD facilities available for training, no decrease in training would likely be expected to occur at NAS Fallon and other remaining regional ranges.

bbbbbbb) Comment: See Comment T-56
Response: The chaff survey conducted by NAS Fallon (US Navy 1995a) found higher concentrations of chaff debris near Dixie Valley Road and in the northwest corner of the Dixie Valley area proposed withdrawal boundary (under the Preferred Alternative). These concentrations included caps and a chaff bundle that failed to disperse, not high concentrations of dispersed chaff. The least amount of chaff debris was found in the southwestern portion of the proposed Dixie Valley area withdrawal boundary. Table 3-11 in Section 3.13 shows the results of off-range ordnance surveys conducted in 1989 and 1990. The Navy does not feel that there is a significant public safety hazard from unspent practice/inert ordnance. Areas that pose a serious public safety concern are proposed for withdrawal under Category A status.

ccccccc) Comment: See Comment T-57
Response: No restrictions to property rights are proposed for Category B lands. Mitigation for restrictions on Category A lands are discussed under each separate resource in Section 4.2 and in response to comment Section 6.

ddddddd) Comment: See Comment T-59
Response: The effects of locating five EW or TACTS sites and 50 visual cueing device sites were evaluated in Chapter 4 of the EIS. The exact locations of the sites are not known at this time, but impacts are expected to be as presented in the Draft EIS regardless of where they are situated since sensitive resources will be avoided. The impacts of potential restrictions on Category B lands are discussed in Chapter 4 of the EIS under each resource area, as applicable.

eeeeeee) Comment: See Comment T-60
Response: The effects of electromagnetic radiation from EW site operation, detailed in Section 4.2.13, were not found to be harmful due to the low emission level, fencing around the sites, and warning lights when the site is operational.

fffffff) Comment: See Comment T-61
Response: It is the Navy's position that the BLM is better equipped to handle the management of grazing than the Navy. However, Congress ultimately will decide which agency manages Category B lands. There is a precedent for the BLM to assist in management of public lands withdrawn by DOD entities (e.g., lands withdrawn at Nellis Air Force Range under Public Law 99-606).

ggggggg) Comment: See Comment T-62
Response: The authority to revise existing mining laws resides with Congress; revision of provisions of existing mining laws has historical precedent with other military land withdrawals.

hhhhhhh) Comment: See Comment T-63
Response: The Navy will be notified of plans to ensure that the development would not pose safety risks for pilots or the public.

iiiiiii) Comment: See Comment T-64
Response: The BLM is best equipped to handle the issuance of easements and rights-of-way with consultation by the Navy to ensure public and pilot safety.

jjjjjjj) Comment: See Comment T-65, T-66
Response: The road designations specified are commonly used and familiar to those interested in the Navy's proposed action.

kkkkkkk) Comment: See Comment T-70, T-71, T-72
Response: No impacts to biological resources are expected from EW and TACTS site development. As discussed in Section 4.2.3, siting of EW, TACTS, visual cueing sites, and ground training areas will avoid sensitive habitats as identified by biological surveys conducted prior to site construction or activity. If habitat for sensitive species is identified, the sites or activities would be relocated.

lllllll) Comment: See Comment T-73
Response: While the proposed action would not involve any changes in aircraft flight activity at NAS Fallon, effects of overflight are discussed in Section 4.2.3. As stated in Section 4.2.3.1, ground training would have no significant adverse effects to wildlife, including birds. Recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, consultation is not required. See Newton County Wildlife Ass. v. Forest Service, 113 F. 3d 110 (8th Cir. 1997).

mmmmmmm) Comment: See Comment T-74
Response: Noise contours for ranges B-17 and B-19 are shown on Figure 1-6. Because flight operations at B-16 have changed since the source of this figure was generated, B-16 noise contours are shown in Figure 5-4. Rather than repeat information, these figures are incorporated by reference in Section 3.5. Apart from the residential areas around B-16 shown on Figure 5-4, lands around training ranges do not contain sensitive land uses.

nnnnnnn) Comment: See Comment T-76, T-102, T-103
Response: Helicopters are used in some integrated air and ground training events. The intent of ground training is covert insertion of troops to retrieve downed personnel or to demobilize an enemy target; areas with the tendency to be populated, such as roads, would therefore be avoided. In addition, most Navy use would occur on the weekdays. For this reason, no startle effects to passing motorists would occur. Ground training will occur at dispersed locations throughout the withdrawal area; the only land use in that area is undeveloped and unpopulated public land. To avoid startle effects to recreationists that may be utilizing the area, mitigation has been added

to the recreation section of the Final EIS to note that educational materials describing Navy training activities will be provided to local BLM, BUREC, and NDOW offices for dispersal to the public upon request. Please see response above regarding maps and land uses.

ooooooo) Comment: See Comment T-77
Response: The text has been revised as suggested.

ppppppp) Comment: See Comment T-78, T-86, T-126
Response: The proposed action evaluated in the EIS is a public land withdrawal; no changes to use or designation of airspace are proposed. For this reason, the affected environment description is limited to land-based resources that could be affected by the proposed action. Since the proposed action would not affect commercial airlines, revenues from airline tax are not described in this section. Inclusion of this information has been added to Chapter 5, but cannot be quantitatively assessed based on the existing level of detail of proposed and reasonably foreseeable airspace-related actions. Effects of airspace actions on revenues will be evaluated in separate NEPA documentation once specific actions are formally proposed.

qqqqqqq) Comment: See Comment T-79
Response: Tax revenues generated by NAS Fallon cannot be accurately compared to potential tax revenues generated from mining because mining revenues are generated by computer model and therefore speculative. In addition, tax revenues alone do not portray the economic benefits generated by NAS Fallon in the form of goods and services purchased by NAS Fallon personnel and other indirect economic effects. It is highly unlikely that mining-related revenues would come close to equaling economic benefits derived from NAS Fallon.

rrrrrrr) Comment: See Comment T-80
Response: The text has been revised as suggested.

sssssss) Comment: See Comment T-82
Response: This phrase has been deleted in the Final EIS. Table 3-11 presents the results of the 1989 and 1990 ordnance sweeps, including number of items found. Inclusion of the number of off-range ordnance mishaps that have occurred is not necessary since these lands are closed under a BLM emergency closure order and will remain closed to public access as Category A lands.

ttttttt) Comment: See Comment T-84
Response: As a result of the HAZARD report, the Navy implemented operational changes at B-17 to keep the weapons footprints within the proposed withdrawal boundaries, as indicated in the NAS Fallon Range Users Manual.

uuuuuuu) Comment: See Comment T-85
Response: Range safety zones are discussed in Section 1.4. The proposed action would not result in any changes to aircraft flight operations and would therefore not affect existing range safety zone designations.

vvvvvvv) Comment: See Comment T-87
Response: Text has been added as suggested.

wwwwwww) Comment: See Comment T-89
Response: Only lands south of Highway 50 are being withdrawn for safety reasons and have been designated Category A, closed to public access. Other lands referenced are being withdrawn for training reasons and are designated Category B, open to public use.

xxxxxxx) Comment: See Comment T-90
Response: Recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, this significance criteria has not be added to the section referenced in the comment.

yyyyyyy) Comment: See Comment T-92
Response: As stated in Section 4.2.2, Mitigation, holders of existing valid water rights will be compensated subject to congressional authorization and approval.

zzzzzzz) Comment: See Comment T-93
Response: No impact to migratory birds from chaff is expected because chaff is not deployed over B-16 or the Sheckler District.

aaaaaaa) Comment: See Comment T-95
Response: While the proposed action would not result in changes in aircraft overflights at the Dixie Valley, the potential effects of overflights on ungulates are discussed in Section 4.2.3. The closest antelope management area is over 50 miles away, though antelope may be found in the Dixie Valley. Figure 5 of "Monitoring the Effects of Military Air Operations at the Fallon Naval Air Station" (NDOW 1987) did not observe any antelope in the Dixie Valley. Some antelope may traverse the Dixie Valley, but they are not prevalent.

bbbbbbbb) Comment: See Comment T-96
Response: While the proposed action would not involve any changes in aircraft flight activity at NAS Fallon, effects of overflight are discussed in Section 4.2.3. As stated in Section 4.2.3.1, ground training would have no significant adverse effects to wildlife, including birds. Recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, consultation is not required. See Newton County Wildlife Ass. v. Forest Service, 113 F. 3d 110 (8th Cir. 1997).

ccccccc) Comment: See Comment T-97
Response: The proposed land withdrawal would not result in changes to aircraft flight patterns near Sheckler Reservoir. In addition, recent court rulings have indicated that federal agencies are not subject to the Migratory Bird Treaty Act. Therefore, no survey of migratory birds is required.

dddddddd) Comment: See Comment T-100
Response: Text has been revised as suggested.

eeeeeeee) Comment: See Comments T-101, T-111
Response: The proposed action would not result in an increase in air operations at NAS Fallon, as stated in Chapter 1 of the EIS, but is in part needed as a result of operational changes. Operational changes mentioned in the comment have been evaluated, where required, in appropriate NEPA documentation to assess the effects of the operational change.

ffffffff) Comment: See Comment T-104
Response: No significant impacts to visual resources would occur from the development of EW and TACTS sites because the Navy employs standard mitigations whenever these sites are developed. Standard operating procedures, described in Section 4.2.6.1, include using colors that blend with the background and avoiding sensitive viewpoints.

gggggggg) Comment: See Comment T-105
Response: The effects of chaff on wildlife are discussed in Section 4.2.3, Biological Resources.

hhhhhhhh) Comment: See Comment T-106
Response: As stated in the Draft EIS, appropriate surveys will be conducted before each EW or TACTS development is constructed to avoid sensitive resources.

iiiiiiii) Comment: See Comments T-107, T-114
Response: Loss of a resource in and of itself is an unmitigable impact regardless of compensation.

jjjjjjjj) Comment: See Comment T-112
Response: This issue is not quantifiable, merely possible, and as such has been disclosed in the EIS.

kkkkkkkk) Comment: See Comment T-118
Response: Mineral exploration on Category B lands would be managed subject to existing mining laws (Mining Act of 1872, Mineral Leasing Act of 1920, Mineral Lands Act for Acquired Lands of 1947). As discussed in Section 2.3.2.2, the Navy is proposing the right to approve permits to ensure compatibility with military operations. The authority to revise existing mining laws resides with Congress; revision to provisions of existing mining laws has historical precedent with other military land withdrawals (PL 99-606, Section 12(e) and (f)).

lllllllll) Comment: See Comment T-120

Response: The average of 30 AUMS was used only in determining the approximate number of AUMs that would be affected by development of EW, TACTS, and visual cueing device sites. Given the small area that they will occupy related to the total area of the grazing allotments, this estimate is reasonable. In evaluating the number of AUMs that would be affected by the closure of Category A lands to grazing, actual productivity rates of grazing allotments were obtained from the BLM and actual withdrawal acreages used to calculate lost AUMs. The impact to grazing from EW and TACTS site development is described in the first paragraph of Section 4.2.11.1 and the impact to visual resources is described in Section 4.2.6.1 of the EIS.

mmmmmmmm) Comment: See Comment T-123

Response: As no usage data is available, experience of NAS Fallon personnel has been used. In the experience of NAS Fallon personnel who access this area, few recreational users have been noted and therefore the number is not thought to be very high during the time training is occurring.

nnnnnnnn) Comment: See Comment T-129

Response: As discussed in Section 5.2, the primary effects region is that area that could be directly affected by Navy actions, while secondary effects are those areas that could be indirectly affected by Navy actions. The proposed action evaluated in this EIS has no direct impact on central Nevada. The airspace actions identified in Chapter 5 are only reasonably foreseeable and not yet under formal environmental review. Specific details are not available on the actions; therefore, only a broad level of analysis is provided.

ooooooo) Comment: See Comments T-130, T-133, T-144

Response: Airspace is not withdrawn, it is designated. No land withdrawals are proposed at this time for land under the reasonably foreseeable MOAs. If future sites would be required, they would be evaluated in site-specific NEPA documentation as discussed in Section 5.6. Such sites are not required for training conducted at the NAS Fallon existing training ranges or as a result of the proposed action.

ppppppp) Comment: See Comment T-131

Response: Towns have been added as suggested and road designations added.

qqqqqqqq) Comment: See Comment T-132

Response: Because of the scale of the map, towns are not depicted. County boundaries and mountain ranges provide a reference for what underlies the different airspace designations in the region.

rrrrrrrr) Comment: See Comments T-134, T-139, T-150

Response: As discussed in Section 5.2, the primary effects region (Churchill County) is that area that could be directly affected by Navy actions, while the secondary effects region (Eureka and Pershing Counties) is those areas that could be indirectly affected by

Navy actions. The proposed action evaluated in this EIS has no direct impact on central Nevada. The airspace actions identified in Chapter 5 are only reasonably foreseeable and not yet under formal environmental review. Specific details are not available on the actions; therefore, only a broad level of analysis is provided.

sssssss) Comment: See Comment T-135
Response: Text has been added to Section 5.4.2 as suggested.

ttttttt) Comment: See Comments T-136, T-140
Response: Section 5.4 presents the existing environment, not environmental effects of existing, proposed, or reasonably foreseeable actions. The effects of existing land withdrawals and airspace designations are discussed in Section 5.5.2. The potential effects of airspace designations on the resource categories are presented in Section 5.7.3. Effects of airspace actions on all affected resources will be evaluated in more detail in separate NEPA documentation once specific actions are formally proposed.

uuuuuuuu) Comment: See Comment T-137
Response: The purpose of this table is to indicate how much land is in a withdrawal status.

vvvvvvvv) Comment: See Comment T-138
Response: Airspace is not withdrawn. Rather, areas are designated and restrictions may be placed on the airspace between different flight levels. These restrictions may preclude the use of the airspace by nonmilitary aircraft on given days and between given times. The area is given in square miles because that is the common measurement used when designating airspace.

wwwwwwww) Comment: See Comment T-141
Response: Figures 5-2 and 5-3 are presented in part to provide a visual reference for the land area covered. This is a more meaningful expression than acreages or percentages.

xxxxxxxx) Comment: See Comment T-142
Response: The information has been added as suggested.

yyyyyyyy) Comment: See Comments T-143, T-145, T-146, T-147, T-149
Response: The potential effects have been included in Section 5.7.3 to the extent that the designation and use of the airspace MOAs have been defined. Effects of airspace actions, including the issues mentioned in the comments, will be evaluated in more detail in separate NEPA documentation once specific actions are formally proposed. Scoping for the action will provide opportunity for agencies and the public to identify issues of concern that the Navy should evaluate in such NEPA documentation.

zzzzzzzz) Comment: See Comment T-148
Response: The effects of reasonably foreseeable airspace actions are discussed in Section 5.7.3 at a level of detail commensurate with the currently defined nature of the actions. Effects

of airspace actions will be evaluated in more detail in separate NEPA documentation once specific actions are formally proposed.

aaaaaaaaa) Comment: See Comment T-151
Response: Cumulative impacts are discussed at a level of detail commensurate with the level of detail available on proposed and reasonably foreseeable actions.

bbbbbbbbb) Comment: See Comment T-152
Response: Grazing would not be allowed on Category A lands. Technically, grazing is a preference, not a right. However, the Navy will explore means to compensate for lost AUMs pursuant to congressional authorization and appropriation as stated in Section 4.2.11.

ccccccccc) Comment: See Comment T-153
Response: Section 5.8 discusses the cumulative effects of proposed and reasonably foreseeable actions at a broad level of detail commensurate with the details available on such actions.

ddddddddd) Comment: See Comment T-154, T-155
Response: Appendix D was included to provide the reader more information on the methodology and conclusions of the HAZARD report described in Section 1.4.3.1. This is a published document included for informational purposes only. The main intent of the report was to depict HAZARD boundaries, not area roads.

eeeeeeeee) Comment: See Comment JJ-5 to JJ-7
Response: The commenter's summary of the proposed action is accurate.

fffffffff) Comment: See Comment VV-1
Response: Only Category A lands are and would remain fenced; Category B lands are not and would not be fenced except for the up to five EW sites. Technically, grazing is a preference, not a right. However, the Navy has the latitude to compensate for lost AUMs on a case-by-case basis pursuant to congressional authorization and appropriation as stated in Section 4.2.11.

ggggggggg) Comment: See Comment VV-2
Response: As stated in Section 4.2.2, lost water rights and developments on Category A lands would be compensated subject to congressional authorization and appropriation.

hhhhhhhhh) Comment: See Comment XX-3
Response: Frenchman Flat is located on Category B lands; no restrictions to grazing are proposed under this land use management category.

iiiiiiiii) Comment: See Comment YY-1
Response: The proposed action does not propose any changes to the Navy's streamlined process of handling damage claims.

jjjjjjjjj) Comment: See Comment EEE-2
Response: Overflight areas are Category B and designated for military and public uses.

kkkkkkkkk) Comment: See Comment III-2
Response: Category B lands would remain open for continued public access and use.

lllllllll) Comment: See Comment JJJ-1
Response: The proposed withdrawal does not involve changes to existing aircraft operations. Effects of any actions proposed in regard to designation of the Smokey, Diamond, and Duckwater MOAs, discussed in Section 5.7.3, will be evaluated in separate NEPA documentation once specific actions are formally proposed.

mmmmmmmmm) Comment: See Comment JJJ-2
Response: This area is outside of the proposed land withdrawal area; the Navy is only considering compensation, subject to congressional authorization and approval, for lands affected by this proposal.

nnnnnnnnn) Comment: See Comment KKK-6
Response: The comment has been forwarded as requested.

ooooooooo) Comment: See Comment RRR-3
Response: No changes to existing flight patterns or operations are proposed as part of the proposed action.

ppppppppp) Comment: See Comment RRR-4
Response: Wildlife is discussed in Sections 3.3 and 4.2.3 of the EIS and in response to comments Section 13. Chaff is discussed in Sections 4.1.3 and 4.2 of the EIS and in response to comments Section 23. Minerals are discussed in Sections 3.10 and 4.2.10 of the EIS and in response to comments Section 18. Mitigations are provided for each resource area in Section 4.2 of the EIS and are discussed in response to comments Section 6.

qqqqqqqqq) Comment: See Comment SSS-2
Response: Biological resources are described in Sections 3.3 and 4.2.3 and in response to comments Section 13.

rrrrrrrrr) Comment: See Comment UUU-3
Response: The B-17 training range is an integral part of the NAS Fallon range training complex and is utilized extensively during carrier air wing training, as discussed in Section 1.2.2.3 of the EIS. Range utilization data is presented in Section 1.4.2 of the EIS.

sssssssss) Comment: See Comments UUU-4 and UUU-5
Response: No changes to flight patterns or operations or claim reimbursement are proposed as part of the proposed action. NAS Fallon has established a hotline, (888) 518-9472, to report damage from military activity and to file claims.

ttttttttt) Comment: See Comment BBBB-1
Response: The commenter's opposition to Navy actions is noted. American foreign policy is beyond the scope of this document.

uuuuuuuuu) Comment: See Comment IIII-1
Response: Current growth patterns are described in Section 3.8.4 of the EIS; however, county master plan and zoning designations are beyond the scope of the document.

vvvvvvvvv) Comment: See Comment KKKK-1
Response: The NEPA process allows for several opportunities for public participation as described in Section 1.5 of the EIS.

wwwwwwwww) Comment: See Comment PHF-11, PHR-55
Response: Airspace expansion maps were provided in Chapter 5 of the EIS.

xxxxxxxxx) Comment: See Comment PHF-13, PHF-14, PHF-15, PHF-32
Response: The warm water fishery was supported by the Navy in verbal communication with the Fallon Field Office of NDOW, indicating that the State could continue to use the ponds for the warm water fishery. The Navy in coordination with BLM and NDOW via an MOA is currently addressing public access and recreation at Horse Creek. Road and watershed improvements to rewater the original streambed at Horse Creek have been initiated.

yyyyyyyyy) Comment: See Comment PHF-22
Response: The use of the existing conditions (level of flight activity at time of preparation of the EIS) is appropriate under NEPA. Evaluating the proposed land withdrawal against any other baseline would either overestimate or underestimate the effects of the proposed action on the natural and human environment.

zzzzzzzzz) Comment: See Comment PHF-24
Response: NEPA specifies the incremental approach in 40 CFR 1508.7.

aaaaaaaaaa) Comment: See Comment PHF-25
Response: The best available data have been used in the preparation of the EIS.

bbbbbbbbbb) Comment: See Comment PHF-26
Response: The commenter's interpretation is correct. The intent of the statement was to express that the noise is a concern to fewer people in sparsely populated areas.

ccccccccc) Comment: See Comment PHF-27
Response: A small risk is a low probability of incident.

ddddddddddd) Comment: See Comment PHF-28
Response: The best available data were used in developing the EIS. No changes in flight patterns or number of operations are proposed as part of the proposed land withdrawal action.

eeeeeeeeee) Comment: See Comment PHF-29
Response: The best available data were included in the EIS. No data on mortality rates or developmental delay were found unless noted.

fffffffffff) Comment: See Comment PHR-25
Response: All major federal actions require the preparation of NEPA documentation to evaluate the proposed action.

ggggggggggg) Comment: See Comment PHR-35
Response: Ground training is described in Section 2.3.1 and evaluated in Section 4.2 of the EIS.

hhhhhhhhhh) Comment: See Comment PHR-47
Response: The commenter's friend's opinion is noted. However, the most accurate source of information regarding the necessity of the proposed land withdrawal is the Department of the Navy and NAS Fallon command.

iiiiiiiiii) Comment: See Comment PHR-54
Response: All chaff documents referenced in the Final EIS are available from NAS Fallon.

jjjjjjjjjj) Comment: See Comment PHR-56
Response: Text has been added in Sections 1.2.2.3 and 3.8.1.4 to describe the existing environment of the shoal site.

kkkkkkkkkk) Comment: See Comment PHR-74
Response: Existing air operations are not the subject of this EIS. The purpose and need of the proposed action are described in Sections 1.3 and 1.4.

27. Support for the Proposed Land Withdrawal

a) Comment: The Navy should be allowed to withdraw land as requested.
References: Comments N-1, O-1, P-1, ZZ-1, AAA-1, BBB-1, CCC-1, DDD-1, EEE-1, EEE-2, FFF-1, PHF-1, PHF-41, PHF-46, PHR-45, PHR-62, PHR-63, PHR-64, PHR-65, PHR-78
Response: The commenters' support of the Navy's proposed land withdrawal and military training activity is noted.

28. Opposition to Navy Actions

a) Comment: The Navy should not be allowed to withdraw land.
References: Comments Z-4, MM-16, OO-1, GGG-1, HHH-1, HHH-2, HHH-6, III-1, III-4, LLL-1, NNN-1, OOO-1, PPP-1, QQQ-1, RRR-1, SSS-1, BBBB-1, HHHH-1, PHR-41, PHR-57

Response: The commenters' opposition to the Navy's proposed land withdrawal is noted.

b) Comment: The Navy should not be allowed to establish additional airspace over central Nevada.
References: Comments NN-9, LLL-1, RRR-2, TTT-1, XXX-1, YYY-1, ZZZ-1, DDDD-1, AAAA-1, BBBB-1, EEEE-1
Response: The commenters' opposition to the Navy's reasonably foreseeable airspace designations is noted. The proposed action evaluated in the EIS does not propose any changes to existing flight operations. If any airspace actions are formally proposed, they will be evaluated in site-specific NEPA documentation

29. Miscellaneous and Other Comments

a) Comment: The necessity of the proposed withdrawal is questionable given the disappearance of the Soviet threat and the end of the Cold War. The Air Force actions in Kuwait showed that they have sufficient lands and airspace to carry out any mission. The Navy did their assigned mission without being hampered by the amount of their existing lands.
References: Comments Z-3, BB-9, HH-1, PHR-24, PHR-30, PHR-59
Response: Comment noted. As stated in Chapter 1, Purpose and Need, military tactics are constantly changing and require proactive responses to maintain military combat readiness.

b) Comment: The Draft EIS indicates that NATO allies will be using NAS Fallon. Public lands should not be removed from public use while foreign powers train there.
References: Comments BB-5, PHF-5, PHF-40
Response: Use of the Navy ranges by non-Navy forces is an ongoing activity coordinated with the Department of Defense. American foreign policy is beyond the scope of this document.

c) Comment: No known harm to civilians has occurred in the last 20 years caused by military activities on lands surrounding the training ranges.
References: Comments BB-10, PHF-9
Response: The BLM's position is that Category A lands present an unacceptable level of risk to the public and therefore must be closed to public access.

d) Comment: With military downsizing, more accurate weapons, and smart bombs it is difficult to understand why the Army, Navy, and Air Force continually want more land.
References: Comments CC-1, OO-8
Response: Three rounds of base closure and realignment decisions have resulted in the closure of many western military facilities. Base closure decisions have resulted in the realignment of training missions to facilities, such as NAS Fallon, that were not slated for closure. This has made NAS Fallon and the Fallon Range Training Complex more strategically important for the combat readiness of the Navy. Expansions of base population and mission require additional resources. The purpose and need of the proposed land withdrawal are stated in Sections 1.3 and 1.4 of the EIS.

e) Comment: CEQ regulations direct the preparation of EISs as a decision-making tool required to include all reasonable alternatives and the alternative of no action. The Draft EIS, as well as other EISs, dismisses the No Action Alternative, as unreasonable. This appears to represent a justification of a decision that has already been made.

References: Comment HH-12

Response: The No Action Alternative inequitably does not meet the needs of Navy training requirements, as described in Sections 2.2.1 and 2.2.2; therefore, it is unreasonable as a land withdrawal alternative.

f) Comment: With the end of the Cold War and closure of bases in more populated areas, training operations have been transferred to more politically weak areas of the country. The time has come to legally regain access to public lands closed for military uses.

References: Comment HH-13

Response: Base closure and realignment decisions are made at the Congressional level. Three rounds of base closure and realignment decisions have resulted in the closure of many western military facilities, including five Naval facilities in the San Francisco Bay area alone. Base closure decisions have resulted in the realignment of training missions to facilities, such as NAS Fallon, that were not slated for closure.

g) Comment: The issue of land use conflicts caused by expanding City of Fallon and NAS Fallon populations should have been evaluated prior to base closure and realignment decisions and prior to transfer of realigned programs, such as Top Gun.

References: Comment NN-5

Response: Closure decisions, made at the Congressional level, are exempt from NEPA; however, realignment decisions must undergo NEPA analysis. The realignment of Top Gun was analyzed in an Environmental Assessment prepared in 1994 and cited in the Draft EIS reference list (Chapter 7) as US Navy 1994.

h) Comment: The Navy and its pilots are historically callous to those under its airspace, behavior which is played off due to pilot personality or immaturity. Pilot actions should be tracked and disciplinary action taken when necessary to prevent such behavior. If pilots were accountable and obeyed the rules, then living under them would be more bearable.

References: Comments NN-9, PHF-43, PHR-58

Response: Most training is tracked and recorded to allow for evaluation of training scenarios. The Navy is attempting to place additional Tracking Instrumentation Subsystem (TIS) sites to aid in pilot safety and accountability. Disciplinary actions are a military matter.

i) Comment: The Navy should not destroy more property in the Dixie Valley or be allowed to take a beautiful part of Nevada away from citizens. Despite promises to the contrary, the Navy's use of this area would destroy hunting and ultimately result in restrictions or prohibitions on access as has happened in other areas of Nevada.

References: Comments OO-4, OO-5, MMM-1

Response: Recreation and access impacts are discussed in Section 4.2.12 and in response to comments Section 20. Dixie Valley lands would be designated Category B and would remain open to public access and use.

j) Comment: With implementation of the BRAC closure process, NAS Fallon has enjoyed significant expansion in recent years. With this expansion the question remains whether growth at NAS Fallon can be accomplished in a sustainable way that does not jeopardize environmental quality of the region.

References: Comment PHR-12

Response: Closure actions are exempt from NEPA analysis, but realignment actions must undergo NEPA evaluation to determine the effects of the realignment on the human and natural environment. For example, the realignment of Top Gun was analyzed in an Environmental Assessment prepared in 1994.

k) Comment: The BLM is a cooperating agency but was not represented at the public hearings.

References: Comment PHF-19

Response: The commenter's statement is noted. The proposed action is a Navy action, and therefore the BLM elected not to be part of the presentation. BLM personnel did attend the meetings, however.

l) Comment: The EIS uses mostly qualitative statements rather than quantitative measurements.

References: Comment PHF-23

Response: The nature of the resources being studied lends itself to qualitative analyses. Where it is possible to use quantitative analyses, such as with air quality, such analysis has been employed.

m) Comment: All of the studies are funded by the government and therefore include confirmation biases.

References: Comment PHF-30

Response: Many studies are funded by the government, though not necessarily by the same entity that is conducting the activity. For example, NDOW conducted a study in 1989 to monitor the effects of NAS Fallon air operations of the biota of Nevada, and the General Accounting Office is conducting a survey on chaff use by the military.

n) Comment: Navy air operations are disruptive to residents of central Nevada and are a concern of these residents.

References: Comments PHF-35, PHR-19

Response: The commenter's statement is noted. Any significant changes in NAS Fallon operations would undergo NEPA evaluation. For instance, the Supersonic Operations Area EIS, completed in 1985, evaluated all NAS Fallon airspace.

o) Comment: It seems that new technology would require less land, not more. If new technology will continue to require more and more public land, then the Navy will continue to request more and more land for withdrawal.

References: Comment PHR-76

Response: New technologies result in the need to use land differently, not necessarily in the need for more land. NAS Fallon training uses the original training range land withdrawal footprints, which were withdrawn in 1953. Training has evolved significantly since 1953, using a far different type of aircraft and new electronic tracking technology. As the Navy has not requested land withdrawals at the training ranges since 1953, it is not foreseeable that requests for additional land would occur with any frequency.

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NAS
FALLON

COMMENT LETTERS

List of Commenters

Letter Designation	Signatory	
A	David J. Farrel	US Environmental Protection Agency
B	Patricia Sanderson Port	US Department of the Interior, Office of Environmental Policy and Compliance
C	Jere L. Krakow	US Department of the Interior, National Park Service
D	Superintendent	US Department of the Interior, Bureau of Indian Affairs
E	Kenneth A. Hoar	US Department of Energy, Nevada Operations Office
F	Julie Butler	State of Nevada, Department of Administration
G	Michael J. Anderson	State of Nevada, Division of Water Resources
H	David R. Cowperthwaite	State of Nevada, Department of Administration
I	Catherine Barcomb	State of Nevada, Comm. For Preservation of Wild Horses
J	William Molini	State of Nevada, Division of Wildlife
K	Bill Durbin	State of Nevada, Division of Minerals
L	Mike Del Grosso	State of Nevada, Division of State Lands
M	James D. Morefield	State of Nevada, National Heritage
N	Ken Tedford, Jr.	Mayor, City of Fallon
O	James Regan	Office of the Churchill County Commissioners
P	Shirley G. Walker	Churchill Economic Development Authority
Q	Ken Conley	Eureka County Planning Commission
R	Pete Goicoechea	Board of Eureka County Commissioners
S	Carol O. McKenzie	White Pine County Board of County Commissioners
T	John Balliette	Eureka County Natural Resources Department
U	William E. Schaeffer	Eureka County District Attorney
V	Jim Baumann	Eureka County Public Land Advisory Commission
W	Jonathan Hicks	Walker River Paiute Tribe
X	Carrie Dann	Western Shoshone Defense Fund
Y	Grace Potorti	Rural Alliance for Military Accountability
Z	Charles S. Watson, Jr.	Nevada Outdoor Recreation Association
AA	Wayne Howard	National Pony Express Association, Inc.
BB	Gene L. Gerdes	Nevada Trappers Association
CC	Richard E. Franta	Nevada United Four Wheelers Association
DD	Rose Strickland	Sierra Club, Toiyabe Chapter
EE	Leta Collard	People for the West, Northeast Nevada Chapter
FF	Robert J. Edwards	Sierra Pacific Power Company
GG	Paul C. Beck	Paiute Pipeline Company
HH	Vernon J. Brechin	
II	Abigail C Johnson	
JJ	Rose Thomas	
KK	Marjorie Sill	
LL	Christine Smith	
MM	Melissa Smith	
NN	Ann S. and Tom C. Carpenter	

Letter Designation	Signatory
OO	David R. Wood
PP	Alice Schneider
QQ	Victor Williams
RR	Dan Walsworth
SS	E. C. Mueller
TT	John Peterson
UU	Dugan L. Huntsman
VV	John E. Marvel
WW	Ira H. and Bruce K. Kent
XX	Waymen and Judy Rosenlund
YY	Jo Geyer, Alpine Corners Ranch
ZZ	Lewis J. Munger
AAA	Mike Protani
BBB	Dr. W. Craig Bell, Navy League of the United States
CCC	William E. Stephens
DDD	Randy Goggin
EEE	Wilbur E. and Patricia A. Stephens
FFF	Donald T. Ten Eyck
GGG	Sally J. Cook
HHH	Virginia Carrington
III	Frances Spikes
JJJ	Stina E. Patnoude
KKK	Jay W. Santos
LLL	Clifford W. S. Talbot
MMM	Russell Stevonson
NNN	Vivian Olds
OOO	A Satisfied Citizen
PPP	John Green
QQQ	R. Damian Janssen
RRR	Lura Weaver
SSS	Jeffrey Gray Shelburg
TTT	Kenneth J. Washburn
UUU	Richard W. Smucker
VVV	Carl Slagowski, Jerry Todd, Jim Baumann, Jim Gallagher, Ken Conley, Laurel Etchegaray
WWW	Del L. Haas
XXX	Mr. and Mrs. Hodson
YYY	Susan J. Stevenson
ZZZ	Amanda Stevenson
AAAA	Lillian Darrough
BBBB	Smokey Valley Joe
CCCC	Gary Olander
DDDD	Krysta Stevenson
EEEE	Jerry L. and Trina L. Machacek

Letter Designation	Signatory
FFFF	Allyn Niles
GGGG	Ray and Irene Salisbury
HHHH	Tammy Manzini
IIII	Tomas Tuerino
JJJJ	Terry Kopts
KKKK	Verna Campbell

Transcript Designation	Speaker	
PHF-1	Steven Endacott	City of Fallon
PHF-2 to PHF-10	Gene Gerdes	Nevada Trappers Association
PHF-11 to PHF-19	Grace Bukowski	Rural Alliance for Military Accountability
PHF-20	Alice Schneider	
PHF-21	Ira Kent	
PHF-22 to PHF-30	Bonnie Eberhardt	
PHF-31 to PHF-33	Lynn Boyer	
PHF-34	Vernon Brechin	
PHF-35	Ray Salisbury	Lander County Land Use Advisory Planning Commission
PHF-36 to PHF-37	Nikki Reynolds	Lahontan Valley Trail Riders
PHF-38 to PHF-39	Robert Peirson	
PHF-40	Diane Woods	
PHF-41 to PHF-43	Joe Dahl	
PHF-44 to PHF-45	Johnnie Bobb	
PHF-46	William Stephans	
PHR-1 to PHR-8	Sandy Green	Board of Eureka County Commissioners
PHR-9 to PHR-18	Julie Butler	State of Nevada
PHR-19 to PHR-20	Heather Estes	Lander County Board of Commissioners
PHR-21 to PHR-25	Charles Watson	Nevada Outdoor Recreation Association
PHR-26 to PHR-30	Grace Bukowski	Rural Alliance for Military Accountability
PHR-31 to PHR-35	Thomas Myers	
PHR-36 to PHR-39	Marjorie Sill	Sierra Club, Toiyabe Chapter
PHR-40	Norvi Enns	Reno Gem and Mineral Club
PHR-41	Gayle Chudd	
PHR-42 to PHR-43	Dale Ryan	National Pony Express Association
PHR-44	Vernon Brechin	
PHR-45	Wendell Alcorn	Association of Naval Aviation, Sierra Nevada Squadron
PHR-46	Frank Lewis	
PHR-47 to PHR-57	Melissa Smith	
PHR-58	Lois Frazier	
PHR-59 to PHR-61	Jerry Lowery	
PHR-62	Minor Kelso	

Transcript Designation	Speaker	
PHR-63	Carl Peterson	
PHR-64	Donald Ten Eyck	
PHR-65	Craig Bell	Reno Council of the Navy League
PHR-66 to PHR-68	Christine Smith	
PHR-69 to PHR-77	Rose Strickland	
PHR-78	Clyde Porter	

Letter A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OCT 10 1997

Mr. Sam Dennis
Engineering Field Activity West
900 Commodore Drive
San Bruno, California 94066-0720

Dear Mr. Dennis:

The Environmental Protection Agency (EPA) has received the Draft Environmental Impact Statement (EIS) for the proposed **Withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon,** Churchill County, Nevada. Our review is based on the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) NEPA Implementation Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act (CAA).

The U.S. Navy proposes to withdraw federally administered public land adjacent to the NAS Fallon Range Training Complex (FRTC) in Churchill County, Nevada. According to the Navy, the withdrawal would not cause an increase in air operations or increase the size of the impact areas within the ranges, but is designed to improve the training conditions and to increase control and management of safety buffers and areas where off-range ordnance has been found. Lands proposed for withdrawal are currently administered by the Bureau of Land Management, Bureau of Reclamation, and the Department of Energy.

Three action alternatives are evaluated in detail in the Draft EIS. The alternatives would withdraw between 127,365 and 189,080 acres of public land. In addition, all lands known to be contaminated or having the potential to be contaminated with off-range ordnance would be withdrawn under all action alternatives. Withdrawn lands would be designated as Category A, Exclusive Navy Use, Potential Ordnance Hazard; or Category B, Navy and Public Use, Limited Land Use Conflicts. Category A lands would include approximately 40,000 acres under each alternative; Category B lands would comprise the remainder. Four alternatives to the proposed project are discussed briefly but rejected for not meeting the Navy's stated purpose and need. A No Action Alternative is fully analyzed as well.

Based upon our review, we have rated the EIS EC-2, Environmental Concerns - Insufficient Information (see attached *Summary of the EPA Rating System*). This rating reflects our conclusion that the Final EIS should provide additional information on several issues, including noise, chaff and ordnance concerns. Our detailed comments are enclosed.

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We appreciate the opportunity to comment on the proposed project and request that you provide this office (mail code CMD-2) with one copy of the Final EIS at the same time it is filed with our Washington, D.C. office. If you have any questions or wish to discuss any aspect of our comments, please contact me at (415) 744-1584 or Jeff Philliber of my staff at (415) 744-1574.

Sincerely,

Lorraine M. Payne for

David J. Farrel, Chief
Federal Activities Office

file:2466fiin.ds.jp

Attachments (2)

CC: Mr. Tad Williams, Tribal Council, Walker River Paiute Tribe

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

EPA DEIS COMMENTS, USN, WITHDRAWAL OF PUBLIC LANDS, NAS FALLON, CHURCHILL COUNTY, NEVADA, OCT 10 1997

NEPA

1. Page 2-10: The Draft EIS range of alternatives does not provide a wide margin of flexibility for decisionmakers to use in choosing, or perhaps crafting, an alternative that best meets the Navy's stated purpose and need while minimizing the controversial and environmentally degrading components of the project. All three action alternatives propose land withdrawals that vary in size by up to (approximately) 23 percent. Because the smallest of these similar proposed land withdrawals is also the preferred alternative, the public and decisionmakers are not left with any options that might reduce the scale or impacts associated with the proposed action. This is not in keeping with 40 CFR 1502.14, which requires the lead agency to "rigorously explore and objectively evaluate all reasonable alternatives" to provide "a clear basis for choice among options by the decisionmaker and the public." A-1

   For example, range B-19 borders the Walker River Indian Reservation and would be expanded (through withdrawal) under all three action alternatives. However, the only options for that expansion include withdrawing additional lands along the border of the reservation--east and west of Range B-19--rather than north of the existing range and away from the reservation. Providing such an option might allow for reduced project-related impacts to Walker River tribal members who may already be affected by air and ground activities at the range. Similarly, alternatives should be considered for Range B-16 which withdraw lands south and east of the range, thus minimizing potential new impacts to the residents near Sheckler Reservoir and the City of Fallon. A-2 4

Project Description / Purpose and Need

1. Page 1-18: The Draft EIS reports that the probabilities of a person being struck by falling ordnance or a "dropped object" from an aircraft are $1:10^{12}$ and $1:10^{15}$, respectively. The analysis contains an admission that "this generated analysis does not account for proximity to training ranges or airfields." The Final EIS should provide additional information to make this information meaningful. For example, the parameters of those statistical probabilities should be defined, such as what population is considered (Churchill County, U.S., or world-wide), the source of ordnance and "dropped objects" (NAS Fallon-originated sorties or all U.S. or world-wide aircraft). If risk-related information relevant to the areas close to the training ranges and airfields is available, that information should be included in the Final EIS. A-4

2. Page 2-6: Table 2-1, *Comparison of Alternatives by Acreage*, should include figures for Category A and B lands in the Final EIS. A-5

Cumulative and Indirect Impacts

1. Page 4-29: According to the Draft EIS, mitigation to compensate mining interests which would be deprived of patented mining claims by the proposed project would include Navy exploration of "means to compensate the holders" of such claims and patents. The Final EIS should provide more specific information about this proposed mitigation. If measures would include the granting of new mining claims in other areas, the potential secondary or "indirect" impacts of new mining in those areas should be discussed in this EIS pursuant to 40 CFR 1508.8(b). A-6

Noise/Land Use Compatibility

1. Page 1-4: Figure 1-1, *Location of NAS Fallon and the FRTC*, should illustrate the entire Walker River Indian Reservation or, at least, indicate that the majority of the Reservation's lands extend into Mineral and Lyon Counties. A-7

2. Page 3-19: The Draft EIS provides noise contour mapping for NAS Fallon-related activities based on an updated 1982 RAICUZ (Range Air Installation Compatible Use Zones) study (refer to Figure 1-6, *RAICUZ Study: Range Safety Zones and Noise Zones*). Similar mapping is not provided for projected impacts under the proposed reuse alternatives, with the exception of related modeling conducted for Range B-16 (refer to page 5-31). Because the proposed withdrawal areas would be opened up to air- and ground-based training exercises, we would expect that the noise contours would shift and expose new areas to heightened noise levels. This information should be mapped and included in the Final EIS. A-8

3. Page 3-21: The Draft EIS identifies that NAS Fallon-related aircraft noise are responsible for noise problems to "residents north of B-16 and west of the City of Fallon." This conclusion is based on RAICUZ noise contours and noise complaints from the identified neighborhoods. It has come to our attention that noise problems may also be experienced by some members of the Walker River Indian Reservation to the south of Range B-19. Substantial portions of the Reservation are in the elevated noise contours presented in the RAICUZ study (refer to Figure 1-6). Given that, the Navy should not rely merely on those unsolicited noise complaints in identifying areas where Navy activities have created noise impacts. A lack of complaints from tribal members and other rural residents may be due to the rural nature of the northern portions of the Reservation and outlying areas, a lack of telephones, a perceived lack of access to the Navy, or language, cultural, or socio-economic barriers. In keeping with Executive Order 12898,[1] the Navy should take proactive steps to establish the extent of noise impacts in rural and reservation areas surrounding its current and proposed test ranges. This may entail meeting with tribal representatives and members, conducting surveys, or holding meetings at or nearby the Walker River Indian Reservation. The results of such information gathering should be included in the Final EIS analysis. A-9

4. Page 4-25: The Draft EIS reports that "the withdrawal does not involve Native American land and ... Navy operations near the lands would not increase." Nevertheless, by increasing the Naval training area along the Walker River Reservation border, the geographic area of effect on Walker River tribal members may be increased even though the number of operations in the Range remains the same. The Final EIS should discuss this issue. A-10

5. Page 5-31: We applaud the Navy's proposed use of modified flight approach patterns for Range B-16 in response to noise complaints from nearby residents. To ensure that such mitigation measures are fully implemented, and to keep the Navy apprised of future problems as they may arise, the Navy should install and advertise a complaint "hot-line" for area residents, such as those near Range B-16 and on the Walker River Indian Reservation. Such a "hot-line" would be useful to both the Navy and its neighbors and could be used by residents to alert the Navy of such problems as: incidents of pilots straying beyond designated test areas; acute or chronic noise problems; and discoveries of ordnance items in non-designated areas. A-11

Chaff and Ordnance

1. Page 2-24: The Draft EIS reports that the Navy is currently examining the feasibility of using biodegradable chaff, which includes biodegradable end caps. EPA strongly urges the Navy to implement this strategy as a component of this project and all on-going activities at NAS Fallon, where practicable. A-12

2. Page 2-25: The Draft EIS reports that "extremely wide dispersion patterns (of chaff) are produced." The Final EIS should discuss those patterns, the estimated geographic areas involved, and whether chaff disperses on lands outside of the designated test ranges and buffer zones. A-13

3. Page 3-65: The Draft EIS reports that off-range ordnance sweeps near Range B-19 resulted in finds of over 1.5 million live "ordnance items" between 1989 and 1990. The Navy describes these results as being approximately 91 percent effective (SEP = 91.5%). This suggests that, as of June 1990, there may have been many additional ordnance items remaining in the B-19 off-range areas. The Final EIS should provide the following information: A-14

   i) The percentage of live ordnance items found off-range of B-19 that were on Reservation lands;
   ii) An estimate of the quantity of additional live and inert ordnance items currently expected to be on reservation and on non-reservation lands (and what the current land uses of those lands are if they are not part of the withdrawal proposal);

We strongly encourage the Navy to meet with Walker River Indian Reservation representatives to determine how many live ordnance items may exist on the Reservation, how the presence of such potential explosives may affect the safety and land usability of the northern portions of the Reservation, and how the Navy may work with the Tribe to fully remove all live ordnance items. Because reservation lands by definition may not be part of the proposed withdrawal, we urge that this type of special effort should be incorporated into the project description. A-15

4. Page 4-3: In its discussion of aluminum chaff, the Draft EIS reports that "the period of time over which aluminum oxidizes depends on environmental conditions and the size and shape of the original aluminum." Nevertheless, no time estimates or ranges are presented. The Navy should include the following information in the Final EIS: A-16

   i) a specific discussion of how environmental conditions and aluminum size and shape affect the oxidation period;
   ii) a brief description of the composition (by dipole size) of the standard chaff bundle (e.g., what is the distribution of smaller [0.38-inch-long dipoles] to larger [2-inch-long dipoles] chaff in a standard 2.1-million-dipole bundle).
   iii) an estimate, given the above distribution of dipole sizes and known environmental conditions in the area, of the time necessary for complete or near-complete oxidation of chaff.

5. Page 4-3: The Final EIS should identify what becomes of chaff dipoles after aluminum oxidation and stearic acid biodegradation take place. In addition, the Final EIS should disclose how many chaff bundles are expected to be dispersed in each proposed new range area annually. A-17

6. Page 4-19: The Draft EIS provides little information regarding the visual impacts of chaff on the project area, including lands with high scenic values such as wilderness study areas. For example, the Draft EIS allows only that "long-term chaff use could result in visible aluminum litter." The Final EIS should include a more detailed description of how visual resources could be impacted. For example, the Final EIS should describe to what degree chaff might become concentrated in viewsheds over time (e.g., disclose concentrations of visible dipoles per acre), or how the chaff would appear to a viewer over time (e.g., whether, upon landing, chaff would be highly reflective and thus visually intrusive, or whether the oxidation process would render the chaff unnoticeable over time, etc.). A-18

[1] [Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, stipulates that an EIS should describe the measures taken by the lead agency to: 1) fully analyze the environmental effects of the proposed Federal action on minority communities and low-income populations, including Native American tribes, and 2) present opportunities for affected communities to provide input into the NEPA process. The intent and requirements of EO 12898 are clearly illustrated in the President's February 11, 1994 Memorandum for the Heads of all departments and Agencies.]

Letter B

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
600 Harrison Street, Suite 515
San Francisco, California 94107-1376

November 6, 1997

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 24
To Larry	From Sam
Co. Army	Co.
Dept.	Phone #
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ER 97/545

Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, California 94066-5006

Attention: Mr. Sam Dennis

Dear Mr. Dennis:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the Withdrawal of Public Lands for Range Safety and Training Purposes at the Naval Air Station, Fallon, Nevada. Comments were received from Bureau of Land Management, Fish and Wildlife Service, and National Park Service. The following comments are provided for your information and use when preparing the Final Environmental Impact Statement (FBIS).

Bureau of Land Management, Carson City Field Office, David Loomis, (702) 885-6000

Thank you for the extended opportunity to comment on the Draft EIS for the Fallon Range Withdrawal. We appreciate the additional time you provided to the Department of the Interior (DOI) bureaus to respond. DOI staff have worked extensively with Navy staff on this EIS over the last 12 years, with BLM serving as a cooperating agency. Many significant issues related to withdrawal have been resolved through cooperative efforts of our staffs. We appreciate the Navy's willingness to hear our concerns and modify parts of the proposal based on those concerns.

Since many of our concerns remained to be addressed by the time the Navy decided to release the DEIS, we are submitting them at this time. Clearly, significant issues remain to be resolved. DOI staff would be pleased to work with the Navy on those issues prior to the drafting of a legislative package. We have five general concerns; public involvement, joint management, range of alternatives, mitigation, and adequacy of impact analysis.

Public Involvement. There were significant delays in getting an adequate number of copies to Department of the Interior agencies. Also, we have received many complaints from individuals and organizations, including grazing permitees, directly affected by withdrawal, who requested copies of the DEIS, yet never received them or received them too late to

B-1

provide adequate comments. The phone and fax numbers listed in the document to request additional copies were incorrect. In addition, the document itself limits the ability of the public to adequately participate since it is vague, conclusory, outdated, and internally contradictory. For example, transportation/access is a key issues for the EIS, yet analysis of impacts of the preferred alternative on transportation is missing, despite that the proposal includes a significant withdrawal expansion along Dixie Valley road (see 4.2.14.2). B-1 B-2

Data are outdated, including livestock grazing information from 1983 (3.11.1). Other statements found throughout the document such as "lands will *generally* remain open" are vague and do not allow the public to understand what is actually being proposed. Other sections are in direct conflict with CEQ guidance, such as deferring cumulative impact analysis to a subsequent document (see 5.2). Other statements are conclusory or incorrect such as the statement that increasing airspace use over public lands south of B-16 "would have no impacts on land use" (5.6.4.3). B-3 B-4 B-5

Public involvement at the DEIS stage is particularly important for this EIS since the legislative EIS process limits public involvement at subsequent stages. Because of irregularities in document distribution and EIS narrative, we recommend the DEIS be rewritten and reissued as a Draft so that adequate public participation can be achieved. B-6

Joint Management. The type of military combat training activity that would occur on "Category B" lands is not compatible with public land management. This includes:

1. Use of visual cuing devices such as:
   a. SMOKEY surface-to-air missiles
   b. Actual Russian T-72 Battle Tanks, Infantry Fighting Vehicles, Howitzers, and Armored Personnel Carriers
   c. Simulated missile batteries
   d. Mobile SCUD missile launchers

B-7

2. Up to 500 ground troop combat training missions annually such as:
   a. Special forces (SEAL) covert operations
   b. Ground troop attack missions against enemy defended sites
   c. Combat search and rescue missions
   d. Other missions to be developed

B-8

3. Integrated air combat training such as:
   a. Low-level fighter and attack aircraft strikes on enemy positions
   b. Helicopter combat operations
   c. Parachute drops

B-9

4. Expanded air combat training facility development such as:
   a. Threat emitters with associated on-the-ground security forces

B-10

Areas proposed for "Category B" management are on the approach to an active bombing and gunnery range, B-17. Problems associated with attempting to provide for open public access to these areas became apparent on October, 29, 1997 when a Navy pilot fired live 20 mm rounds at two telephone workers on an observation tower near the active bombing and gunnery area on the B-20. Overall land management concern is that potential for future pilot errors will increase over time as increased visual cuing and electronic warfare threats add intensity and complexity to training missions. B-11

Neither BLM nor Bureau of Reclamation is equipped to manage dispersed recreation or any other public land uses while concurrently accommodating these combat training facilities and missions. While the number of projected short-term ground-combat training missions is relevant to the analysis, long- term use of these lands is most significant. B-12

Based on previous military withdrawals, intensity and type of military training activity can increase dramatically over time in response to changing real-world threats. For example, Sec. 1.4.2 of the DEIS notes that special forces and other ground combat training has recently begun to include NATO forces. The increase in use of FTRC by other non-Navy forces should be included in the analysis. B-13

Range of Alternatives. CEQ requires that in cases where there is a wide range of reasonable alternatives, such as for a withdrawal action, the full spectrum of alternatives must be analyzed in the EIS (46 Fed. Reg. 18026). Furthermore, partial as well as complete alternatives to a proposed action must be discussed. If adoption of an alternative means the proposed action may be reduced in scale, the partial alternative should be considered [Natural Resources Defense Council v. Hodel, 865 F. 2d. 288, 296 & n4 (D.C. 1988) ; Natural Resources Defense Council v. Calloway, 524 F2d 79, 93 (2d Cir. 1975); Natural Resources Defense Council v. Morton, 458 F2d 827, 836 (DC Cir. 1972]. B-14

5. One alternative that must be added is withdrawing only lands contaminated with off range ordnance (ORO). This would meet withdrawal criterion of protecting the public from these ORO areas. While this alternative would not meet 100% of the criteria for the Navy's purposes, it would meet many objectives. In evaluating reasonableness of an alternative, CEQ states that alternatives must be practical or feasible, rather than simply desirable from an applicant's standpoint (46 Fed. Reg. 18026). B-15

6. Based on thorough analysis of issues, the Department of the Interior has developed a preferred alternative that should be added (see attached Map 1). The basic structure of this alternative was identified during scoping/administrative draft review process by BLM, but was not included in the DEIS. The alternative includes withdrawal of lands described in the preferred alternative minus lands along Dixie Valley road and deletes a corridor along Eleven Mile Canyon road. B-16

7. This alternative resolves management problems and adverse impacts associated with odd jurisdictional patterns created by the "panhandle" and combat training along Eleven Mile Canyon road. This alternative would protect public land users from erroneous pilot attacks such as occurred on 10/29/97, since these lands would be under full control of the Navy.

For lands outside boundaries of the proposed withdrawal, the capability of this alternative to meet the Navy's #1 objective - *prevent incompatible land uses* - will be enhanced by adding other administrative mechanisms. Control of height of structures, residences, and recreation events can be achieved through the public land use planning process. A withdrawal is not needed to achieve these objectives. For lands within the proposed withdrawal, the full Navy control provided by this alternative maximizes Navy capability to restrict incompatible land uses and adjust to changing real-world threats by maximizing the Navy's flexibility to increase intensity and type of combat training activity. B-17

Compared to no action alternative, this alternative increases the ability of NAS Fallon to add visual cuing devices, conduct ground training and close air support, and locate new threat emitters and TACTS sites. It allows for effective and efficient use of training time while minimizing fuel consumption. It protects the public from safety hazards related to air-to-air and air-to-ground combat training and meets the requirements of the Navy Headquarters office "HAZARD" computer model output.

If additional lands are required for specific, short-term needs that do not cause long-term environmental damage, we recommend that the Navy request legislative authority for BLM to review and approve land use permits for such activities within outer boundaries of the area defined as Military Multiple Use Zone on the attached map.

Modifications to proposed action identified as part of this alternative are of major significance and are further justification for re-issuance of a Draft EIS.

Mitigation. This should include potential return of Navy-acquired lands in Dixie Valley and Horse Creek areas to administration of the Department of the Interior. These lands were acquired to eliminate residences under the Navy's supersonic operations area, not for Navy ground training activity. They do not provide a rational land management pattern. Navy concerns about potential future privatization of these lands could be addressed through the public land use planning process. A withdrawal or other jurisdictional change is not needed to accomplish this goal. **In addition, the Mt. Grant area of the Hawthorne Army Ammunition Depot should also be considered for return to DOI administration. This area is located within the cumulative impacts area analyzed in the DEIS and is not being used for military purposes. These measures would help to mitigate adverse impacts to public land uses caused by the proposed withdrawal.** B-18

Adequacy of the Impact Analysis. The impact analysis needs major improvements in order to fully inform the public, agency decision makers and Congress about direct, indirect and cumulative impacts of the proposed action. This includes an analysis of potential for spread of noxious weeds, an adequate analysis of impacts to public access and dispersed recreation opportunities, impacts of chaff fibers, and cumulative impacts of past, present, and future Navy action on the human environment of central Nevada. Since data used to develop baseline conditions were outdated, the impact analysis was based on an inaccurate description of affected environment, particularly for recreation opportunities. B-19

In addition, the Base Realignment and Closure process has resulted in an on-going increase in intensity and types of U.S. Armed Forces training on inland western military withdrawals, including NAS Fallon. In order for Congress to make a fully informed decision about the withdrawal, the EIS needs to adequately analyze cumulative impacts of projected short-term uses as well as potential for long-term increases in intensity and types of use. B-20

Detailed comments by page number follow:

ES-6 Purpose of Navy-acquired lands in Dixie Valley was to prevent habitation, not create Navy administrative area. B-21

ES-14 It is apparent that Category B lands would result in two levels of review and approvals of proposals. This is not consistent with good customer service. B-22

ES-15 Access would be required for maintenance of new and existing EW sites by Navy personnel contractors, etc. Training missions in panhandle would also require roadway use. B-23

1-14 The increased use of the FRTC for NATO and other foreign troops should be analyzed. B-24

1-18 If there is a risk of accidental dropping of ordnance, explain what it is. B-25

1-22 The conclusion that few incompatibilities would be expected in future is contradicted by the need for the withdrawal, as acknowledged by the Navy on page 1-17: "more people are using public lands for recreation, motorized off-road activities, wildlife viewing, hunting, horseback riding, and mining." B-26

1-25 The DEIS needs to quantify the likelihood of accidental drops are in this area. B-27

1-26 As a gesture of courtesy, we recommend that individuals and organizations that commented on previous Drafts/Scoping documents be notified about how their comments were used. B-28

Section 1.5 implies that the public recommended that the "panhandle" corridor be added to the proposed action. A careful review of public comments during scoping process found not one public comment recommending a "panhandle" concept. The EIS should make it clear that this was a Navy interpretation of public comments and that DOI has a different interpretation of those comments - that is limit training to existing ranges. B-29

2-1 Category B lands will "generally remain open" to public use? Explain what this means. Restrictions on public use should be identified specifically in the EIS and brought forward in legislation. B-30

2-2 The Navy is currently proposing to conduct military uses "outside of the withdrawal footprint." Since a primary purpose of the withdrawal is to conduct military uses, such as combat search and rescue, those proposals are connected actions and should be analyzed as part of this EIS. Piecemealing a series of clearly related projects is in conflict with CEQ regulations. This issue should be addressed through the proposed DOI alternative, which includes a provision authorizing BLM to permit such activities on public land. B-31

2-5 Lands are owned by the people of the United States not the Navy. B-

2-14 The rationale for excluding alternative sites for ground training activities appears weak. A much stronger rationale could be developed if there were a comprehensive national service-wide needs assessment for ground troop training. Such an assessment would be particularly timely in light of changes in requirements associated with the Base Realignment and Closure process. B-33

2-23 We suggest that you delete the statement: "Any Navy training activity that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency." The BLM has repeatedly made clear that military combat training activities on open public lands are prohibited by the Federal Land Policy and Management Act and the Engle Act unless they are compatible with programs of the Department of the Interior. BLM is currently evaluating whether limited search and rescue training meets this criteria. Any other activities will be prohibited. In addition, withdrawal could result in many uses not specified in the proposed action, particularly if training requirements change. The Navy admittedly does not want to be confined to the footprint shown on the map in the EIS. B-34

2-24 There is an implication that ground troop combat training on the proposed withdrawal is confined to integrated air and ground training exercises listed on page 2-24. The DEIS needs to clearly state, that based on the preferred alternative, these missions could increase in future and that there are no restrictions on potential future increases B-35

in type and intensity of ground troop combat training. It should also be clarified that use of training ranges is year round, with visiting squadrons requesting at all times. B-35

2-28 "Category B" management places continued responsibility for another level of review and approval, thus reducing the public service element of land use authorizations. Para 5: It is questionable whether present access characteristics would be retained in future without interfering with the navy mission. What will happen in 5, 10 and 20 years when training scenarios change? B-36

2-29 The statement that public access for recreation use would be consistent with current BLM regulations is incorrect and should be removed. Current BLM regulations do not require Navy approval for recreation access as stated in the proposed action. B-37

2-32 The statement that there is no safety hazard from "inert" ordnance is incorrect. The Navy has indicated to BLM staff that this ordnance contains explosive spotting charges that cause a risk of public injury. This risk should be fully disclosed in the EIS. There is documented evidence of injuries from these explosive devices in the Fallon area. B-38

2-33 Table 2-4: under Category B, when would developed communication sites be opened to public use? The implication is that they may be. The EIS should explain what "generally" means. B-39

Table - Mining *Exploration* - The description under the Category B column is contradictory. It states the Navy will allow all exploration but reserves the right to review and approve mining developments. Is exploration a mining development? B-40

Table - Mining *Exploration* - the description under Category B column is contradictory. It states "Regulated under existing laws. Navy concurrence not required." Then states the "Navy reserves the right to review and approve mining developments".

This first statement is correct and holds for the second statement. Mining is regulated under the Mining Law of 1872 which gives an individual the right to explore for and develop minerals on public lands. Under section 2.3.2.2 - Category B lands, it states: "Where BLM manages the lands, it would continue to maintain jurisdiction over recreation, grazing, mining, and mineral, gas and oil leases and utility corridors." If the withdrawal remains open to the operation of the mining laws, mineral development cannot be denied and the Navy enjoys no reserved right of approval (or refusal) for any proposed mineral development. Approval of mining plans of operation for mineral development are regulated under 43 CFR 3809 and within the jurisdiction of the DOI - BLM. B-41

Under *New Claims* it states "Regulated under existing mining laws. Patenting claims is not permitted." This is contradictory. Patenting mining claims is allowable under the 1872 Mining Law and the Navy enjoys no right to approve or deny a patent application. Again, this is within the jurisdiction of the DOI - BLM. The only way to deny patenting of claims under the 1872 Mining Law is to close the withdrawal to the operation of the mining laws or have the withdrawal legislation contain language defining what is allowable or not allowable, such as patenting of claims or review and approval of mining plans of operation by Navy. B-41

3-8 The DEIS seriously underestimates the quality of the affected environment when it states "Much of the land is disturbed" to the point of being dominated by weeds. Such seriously disturbed land is less than 1% of the area. This error has resulted in a serious miscalculation of significance of impacts in Chapter 4, since most land in question is relatively pristine, rather than the degraded, weed dominated picture painted here. B-42

Russian Knapwood should be Russian Knapweed. It has been recently reclassified as *Acroptilon repeans* (not *Centaurea repeans*).

3-9 "Guzzlers have been installed . . ." ADD mourning doves (*Zenaidura macroura*) and DROP California quail, since these are so few out there. ADD small game guzzler locations of the Clan Alpine Mountains and the Lauderback Hills. DROP the Fairview Peak guzzler as being constructed for upland game birds. ADD big game guzzlers constructed in the Fairview Peak and Slate Mountain ranges. B-43

Bobcats are not hunted--they are trapped. Big difference.

3-10 Add words *non-game* to species of fish. B-44

3-12 Mammals: Bats: Townsend's big-eared bat and the Yuma myotis should be dropped from here and added to the Sensitive species discussion. Mule deer and Mountain lions should be dropped from here since they were discussed earlier. B-45

It is Nevada Division of Wildlife, not Department. It has been this way for six years.

3 13 There are several additional BAT species that should be added to this list. They were added by US Fish & Wildlife Service in 1996. Whoever created Table 3-1 was using outdated information. B-46

3-14 Wildlife: Category 2 candidate species no longer exists, per USFWS in 1996. Table 3-1 and this paragraph should reflect that. B-47

3-24 Please verify the existence of the "National Historic Corridor." F 3

3-55 The mining claim issues for Payne/Baughman have been resolved. The issues with Holden and McManus are pending. B-49

3-61 Add: "Special recreation permits are required for organized competitive or commercial recreational activities." B-50

3-56 Fig 3-10 under-represents the value of public lands for wildlife guzzlers. This error has resulted in an inaccurate analysis of impacts Chapter 4 by misrepresenting the significance of current wildlife habitat. There are 25 guzzlers within the map area that are not shown. BLM staff are available to work with your staff to correct this error. B-51

3-61 A discussion of past Navy land-related actions is needed in order to provide historic context for the impact analysis. This would include a discussion of the Dixie Valley buyout and electronic warfare complex. B-52

The public health and safety data are nearly ten years old. Since this is a major reason for the withdrawal, updated information needs to be used. B-53

4-1 The DEIS needs to analyze impacts of the withdrawal on surrounding public lands. This is particularly significant for the "panhandle", a mile-wide strip that would result in significant impacts to the public's use and enjoyment of adjacent public lands from visual cuing such as SMOKEY surface-to-air missiles, the transport of Soviet T-74 tanks, close air support related to integrated air and ground combat training missions. As mitigation for these impacts, the EIS should consider eliminating the "panhandle" from the Navy preferred alternative. B-54

4-3 The DEIS conclusion that chaff is safe for humans, livestock, fish, wildlife, and plants is incorrect. In fact, concerns about environmental and public health and safety impacts of widespread disposal of this fibrous material are so significant that Congress has launched an inquiry into the matter. DOI's previous efforts to ensure an objective analysis for this issue are not reflected in the DEIS. The analysis of chaff in this section should be replaced with the following: B-55

> '"Silica and its derivatives (the silicates) are some of the most widely recognized toxic materials when ingested or inhaled. Asbestos is an example of a fibrous silicate. Asbestosis and silicosis are serious diseases related to exposure of these types of fibers.
>
> Few studies on the environmental or human health effects of chaff have been undertaken. No studies have been conducted on the effects of chaff in an arid environment or on species that inhabit the Great Basin. No clinical studies on the long term human health effects of chaff have been conducted. Two studies

environment or on species that inhabit the Great Basin. No clinical studies on the long term human health effects of chaff have been conducted. Two studies contracted by the Navy were conducted on Chesapeake Bay marine organisms

B-55

by the University of Maryland and the University of Delaware. Both studies concluded that chaff was toxic to particular marine organisms. One short term study was conducted for the Canadian Air Force in 1972. It concluded that no toxic effects occurred to six cows that were fed chaff for two weeks.

A literature review on the effects of chaff was conducted for the Air Force in 1989. It concluded that there was 'a lack of definitive study of chaff impacts' on fish and wildlife; 'authoritative data concerning the impacts of chaff on land are lacking'; 'very little data regarding the impact of chaff on plant life'; 'There is no documentation of human exposure studies to chaff.'

A 1992 U.S. Army study concluded that 'there is a persistent risk of fiber inhalation.' And that 'suitable methods be developed to remove fiber deposits' in order to 'reduce inhalation risk resulting from resuspension of fibers.'"

B-55

4-14 In section 4.2.3.2, the "panhandle" land pattern could create major access problems for hunters trying to get to either guzzlers or real estate, on the west side of the Clan Alpines, if the Navy decides at some future time that they want to eliminate public access through the camel's neck. Hard hit would be access to Horse Creek, and Paiute and Dummy canyons (both of which have big game guzzlers) the Lauderback Hills, and area south of Horse Creek, which have four small game and one big game guzzlers. Access could also be adversely affected to the hunting public under the Alternative III (Figure 2-9, page 2-40), as the Eleven-Mile canyon road, which is THE access to the south end of the Stillwater Mountains, could be blocked.

B-56

Low-level helicopter use affects all wildlife, particularly big game species. Chalk Mountain, just east of the junction of Dixie Valley Road and US Highway 50, is a known desert bighorn sheep lambing area. As partial mitigation, no helicopter use should be allowed within 2500 feet vertically or horizontally of it between February 1 and May 1, the season when ewes and lambs are there.

Section 4.2.3.2 should state that helos spook bighorn rams. There was at least one situation in Nevada (Desert Game Range) where a helicopter, flying low-level, spooked a trophy bighorn just as the hunter was about to harvest it. The only Boone and Crockett desert bighorn to be harvested in this district came out of the north end of the Lauderback Hills two years ago. (Boone and Crockett is the organization that sets the minimum scoring of trophies, and periodically publishes updated books listing trophies, scores, and the hunters who took them.)

B-57

This analysis should note that when a sheep hunter is paying a guide several thousand dollars for a hunt, he doesn't need a low level helicopter to spook a trophy ram.

Also, as partial mitigation, no low-level helicopter exercises should be allowed (using parameters above) around Lauderback Hills/Stillwater and Clan Alpine Mountains during bighorn hunting season (November/December). B-57

4-18 In section 4.2.6.1, visual resource analysis is based on actual existing visual environment, rather than the "perceived" environment. Delete the word "perceived." B-58

4-28 "Casual Exploration" needs to be defined. B-59

4-30 In section 4.2.10.2, discussion of environmental consequences for mining under the U.S. Mining Laws for Category B lands is inadequate. The discussion fails to recognize overall negative impact from discretionary authorization afforded to the Navy. Existing U.S. Mining laws are, in general, non-discretionary in regard to developing a mine on public lands. The mining public is affected at all stages of mineral development in a scenario where the Navy has discretionary authority over timing, scope and extent of mining on Category B lands. It is inaccurate to state that staking a claim, exploration on a claim, and most mining activity is not affected by the proposed action, when ultimately the Navy can deny ultimate development of a mineral property. B-60

4-32 In Section 4.3.11.2, significant impacts to livestock grazing would occur in the "category B" area from cumulative impacts of visual cuing, ground troop training, close air support operations, and increased air combat training facilities. These activities occur over such a broad area and livestock water facilities are so well spread that it would be impossible to conduct these military activities if they were sited to avoid current watering areas. In addition, as the 10/29/97 strafing incident demonstrates, any areas with concentrated combat training are subject to pilot and troop errors. The cumulative impact of these activities in "Category B" would be a significant adverse impact to livestock grazing. B-61

4-13 Section 4.2.3.2 includes no analysis of potential invasion of noxious weeds. Under this "existing vegetation" section the DEIS acknowledges the presence of "nonnative invasive species" (some of which are noxious weeds) and further, "Species composition in disturbed areas is dominated by nonnative invasive species. Under the Navy preferred alternative, additional areas will be disturbed to blade in roads and create a fenced site for emitters. The DEIS needs to acknowledge removal of native vegetation for this activity, creation of a temporary bare area, and the problem of invasive noxious weeds taking advantage of the bare soil. This can be planned for some mitigation. B-62

4-22 The severity of impacts to future utility lines needs to be emphasized. Large power lines often have significant ground clearance requirements and may be precluded due to height restrictions. B-63

4-22 Last paragraph: Provision for permitting military uses on public lands would be accomplished through withdrawal legislation, rather than a revision of the Lahontan Resource Management Plan. That statement needs to be deleted from the EIS. B-64

4-33 The DEIS acknowledges under category B lands that military presence associated with integrated ground and air training may discourage use of lands for recreational use. Combat search and rescue (CSAR) training on open public lands would therefore not be compatible with public use and enjoyment of the land.

Rather than an objective analysis of potential restrictions caused by incompatible proposals, this section analyzes what would happen to recreation use if proposals are compatible with Navy training operations. Far more important is an analysis of what would happen to recreation use if proposals are not compatible with Navy training operations.

The statement that "recreation itself would not be restricted" conflicts with the #1 criterion for the withdrawal - to prevent incompatible land uses, such as recreation. Page 1-17 states that the withdrawal is needed because "more people are using public lands for recreation, motorized off-road activities, wildlife viewing, hunting, horseback riding and mining." These increased uses are related not only to the population growth in the Fallon area, but to explosive statewide population growth of Nevada, which is the fastest growing state in the nation. B-65

The statement that "the number of people in general is not thought to be very high" is incorrect and should be deleted. Portions of the proposed withdrawal area receive high recreation use and this contradicts the need for the proposed action as outlined on page 1-17 "more people are using public lands for recreation etc."

There is no basis for the conclusion that ground training would occur at times when encounters with recreationists would be least likely. This statement should be deleted.

The statement that the proposal would reduce "the frequency of potential impacts" is inaccurate. Clearly the proposal would result in a major increase in Navy visual cuing, air combat facilities and ground training activities. The frequency of potential impacts would increase greatly over current conditions.

Since data on the number of recreational users are lacking, there is no basis for the conclusion that impacts would occur to only a "small" number of individuals. Consequently reference to small should be deleted.

The analysis of impacts to the Pony Express Trail needs to be redone. The withdrawal could effect the trail since it is located on withdrawn lands. In addition, the proposed action states that recreational events, such as those that occur along the trail, would be B-66

subject to Navy denial (pg. 2-29). The statement in the DEIS that there would be no restrictions on the trail conflicts with the proposed action. B-66

The recreation analysis conflicts with the number one criterion for the withdrawal - prevention of land uses incompatible with military training (see pg. 2-3). B-67

4-36 In section 4.2.13.4, please describe the land use compatibility problems that would arise should this alternative be implemented. Also please describe which training activities would have to be curtailed and by how much. B-68

4-38 The DEIS includes methodology that conflicts with CEQ regulations for unavoidable adverse impacts. The DEIS states that these are impacts that cannot be mitigated to a less-than- significant level. CEQ regulations define these as "**any** adverse environmental impacts that cannot be avoided should the proposal be implemented," regardless of significance (1502.16). Therefore a summary of all adverse environmental impacts from the proposal needs to be discussed in this section, including those that would occur within the "Category B" lands. Please note that no mitigation was proposed for the loss of recreation opportunities on "Category B" lands. B-69

The DEIS does not include a discussion of potential conflicts with tribal land use plans, policies and controls as required by CEQ regulations (1502.16c). This would include the Walker River Reservation, which is immediately adjacent to the proposed withdrawal. B-70

5-1 CEQ guidance requires consideration of past, present, and future cumulative impacts. The DEIS is limited to only present and future impacts. Cumulative effects occur through accumulation of effects over varying periods of time. For this reason, an understanding of the historic context of effects is critical to assessing direct, indirect and cumulative effects of proposed withdrawal. Full disclosure of past impacts is needed for the public, agency decision makers and Congress to be fully informed about the impacts of the proposed action. Key cumulative past impacts that should be included in the analysis are location of F/A-18s to Fallon, establishment of supersonic operations area, piecemeal expansion of electronic warfare complex and the subsequent buy-out and razing of the community of Dixie Valley. B-71

The cumulative impact analysis should reference and summarize the environmental impact analysis from the Central Nevada Communication Site Environmental Assessment as follows: B-72

> "A detailed analysis of past cumulative impacts from the establishment and growth of the Navy's threat emitter complex within and adjacent to the proposed withdrawal areas is included in the Central Nevada Communication Site Plan Amendment Environmental Assessment (U.S. Bureau of Land

Management, March, 1996). That analysis identified adverse impacts to public land ecosystems and to the quality of life of central Nevada residents from the on-the-ground security force patrols and intensified air combat training associated with the threat emitter complex. These impacts include wildlife habitat disturbance, seasonal wild horse foaling disruption, disturbance to sites important for Native American cultural practices and traditional ceremonies, disturbance to the quality of life of central Nevada residents, potential harm to public health and safety, declining wilderness quality and recreation opportunities, degraded visual quality and adverse noise effects." B-72

At some point, the accumulation of these events and projected future ground and airspace expansions may warrant an overall base-wide analysis in a programmatic EIS. DOI staff would be available to provide assistance should such an effort be undertaken. B-73

5-2 The methodology used to develop this cumulative impact analysis is in direct conflict with Council on Environmental Quality guidelines. It is clearly inappropriate to defer cumulative impact analysis to future EIS as stated in the first partial paragraph on this page. B-74

5-8 The mining data used appear to be selected randomly for various years between 1988 and 1992. These data are from 5 to 9 years old and are inadequate for a thorough and comprehensive cumulative impact analysis. B-75

5-9 The outdated information used here and throughout the document has resulted in underestimating the significance of adverse impacts from Navy combat training. For example, recreational use in the area has nearly doubled since the 1989 data presented in the DEIS. Rather than a total of 15,000 visits to the Grimes Point and Hidden Cave area, use has expanded to nearly 24,000 visits annually. This confirms the DEIS statement on pg. 1-17 that "more people are using public lands for recreation, etc.." B-76

5-14 Section 5.5.1 This section is supposed to describe past, present, and reasonably foreseeable military facilities, yet there is no analysis of the threat emitter complex, which is the most extensive and intensive use of public lands for military combat training facilities in the nation. The following sentence should be added: " Since 1980, 69 Navy sites and more than 200 miles of associated power line, road and cable rights-of-way have been constructed. B-77

5-16 Table 5-2 fails to mention the supersonic operations area, which has had significant adverse impacts to public land ecosystems and the quality of life of central Nevada residents. B-78

5-22 First partial paragraph: The MOU has been ineffective in minimizing adverse impacts to recreation opportunities. Aircraft routinely fly below 3,000 feet AGL over the Clan B-79

Alpine and Desatoya Wilderness Study Areas, degrading primitive recreation and wilderness values. B-79

5-30 For section 5.6.4.3, increased noise levels would degrade recreation opportunities. Recreation use is the most widespread land use in the area, and includes use of the Pony Express Trail. B-80

5-34 The health and safety analysis for the change in B-16 flight paths is contradicted by the Navy's B-16 RAICUZ study which identifies a significant increase in safety hazard zone "B" on open public lands south of the bombing range. B-81

5-41 In section 5.8.3.3 replace the analysis of impacts to recreation with: "The cumulative impacts of overflights; air combat training facilities; air to ground strikes, air to air combat missions, integrated ground and air combat training, and ground combat training have adversely affected the full range of recreation opportunities from developed motorized to primitive and wilderness over a broad area for many recreationists. This trend will continue and intensify over time due to the rapid growth of recreation use in the region". B-82

Section 5.8.4 is limited solely to a discussion of income and employment. A discussion of social impacts is lacking. The following statement should be added: "Residents of the area prefer small towns or isolated ranches and homes rather than metropolitan areas. Amenities they find beneficial include the natural quiet of rural areas, lack of human intrusion and free access to remote public lands. Recreational pursuits are usually centered on outdoor activities including camping, hiking, fishing, off road vehicle travel, hunting and hiking. B-83

Significant cumulative effects from military combat training facilities and operations are an intrusion on the back country, communities, homes and ranches of central Nevada. These facilities and operations disturb the peace and quiet of the area that are so important to its residents and visitors."

5-43 A mitigation section for cumulative impacts needs to be added. This should include potential return of acquired lands in Dixie Valley and Horse Creek and the Mt. Grant area of the Hawthorne Army Depot to the administration of the DOI. B-84

Appendix H-5 - Table - This table should be updated to reflect changes with Payne/Baughman claims. B-85

Bureau of Land Management, Nevada State Office, Hazmat Specialist, Sue Skinner, (702) 785-6570

The analysis of noise and the option to change flight patterns is the level of analysis appropriate for all areas and alternatives. Some of the alternatives address Range B-20, yet it is not always shown on the maps. B-86

The tone of the EIS tends to only emphasize the military's needs in today's downsized environment. Perhaps (and this is a question for Congress) it is appropriate to weigh the needs and the desires of the public's use of their public lands equally to the needs of the military in the context of the "post cold war" era. As such, BLM's mandate to "maintain or improve the health of the land" would require that the "Off-Range Ordnance Withdrawal" once again be included as a separate alternative, however, it is recommended that the Shoal Site withdrawal be included in this alternative since public health and safety from both known and potential contamination would be addressed. B-87

Recommend that all references to off-range ordnance be referred to as "off-range ordnance contamination". This is still not consistent throughout the document. B-88

Page DDEIS-3, confusing and contradictory statements such as " The land near B-16 contained only inert ordnance, which contain small explosive charges." should be further explained. Explosive charges are not inert. It should be explained to clarify. Was this statement just dropped? B-89

Page DDEIS ES-5, chaff and flares are inconsistently addressed in the document. It is BLM's understanding that chaff and flares are used simultaneously for defensive purposes. The risks of chaff and flares should be addressed together. (see specific comments below) B-90

Page ES-7, under the No Action Alternative, today's simulator technology potentially allows for realism. The statement, " This loss of realism would result in incomplete training of combat pilots, thereby increasing the potential for loss of lives in combat situations." is a specularive statement. The withdrawal expansion does not guarantee no lives will be lost in a conflict. Speculation is not NEPA analysis. B-91

Page 1-10, The DOE use of the Shoal site should be described here, not just the Navy uses. B-92

Page 1-13, The current withdrawal does not provide sufficient terrain or area to simulate all threat environments. What training environments are covered under the current withdrawal and how would additional land cover all threat environments? A discussion of the number of chaff and flare deployments along with the sortie and ordnance deliveries is appropriate. B-93

Page 2-4, Why are land management objectives addressed as "should" versus "must"? Slight changes of verbiage potentially diminish the "equal weighing of the use of the land". B-94

Page 2-6,7 The difference of acreage withdrawn for the Shoal site between Alternative I and Alternative II should be explained. In addition, the whole relationship and potential future monitoring requirements of the Shoal Site should be discussed in this EIS, because the Navy/DOE roles and responsibilities were unfortunately not fully addressed in the DOE's "Environmental Impact Statement for the Nevada Test Site and Off-site Locations in the State of Nevada". Since the DOE EIS is already final, the NAS Fallon EIS needs to fully address the Shoal site withdrawal status change. It appears that both parties assumed the analysis would be in the other document. B-95

Page 2-11 DDEIS, Last sentence. Recommend the last sentence read "Alternative II includes all public lands closed to the public due to off-range ordnance contamination". DEIS-did not address. B-96

Page 3-65 BLM has had a positive experience with Ground penetrating radar technology for ordnance detection and removal in the Casper, Wyoming District. A surface sweep plus the Stoles technology, plus magnetometer new technologies could possibly along with surface administration requirements provide limited public access opportunities. What is at issue here is leaving lands contaminated with ordnance. The Navy should strive to minimize contamination past, present or future. B-97

Page 3-66 Recommend the MOA among BLM, the Navy, and State of Nevada, be included as an appendix. Overall the discussion and mitigation of Off-range ordnance contamination is weak. The expanded withdrawal addresses public health and safety, but does not fully address environmental degradation and contamination by off-range ordnance nor address future strategies to cleanup these ranges. If the long-term strategy is a "sacrifice zone" in perpetuity, then so state. Otherwise, a long-term strategy incorporating the use of current and R&D technologies to remediate the bombing ranges should be addressed. B-98

The DEIS did not adequately address the following comments on the DDEIS CHAPTER 4, Environmental Consequences. Chaff and Flares. This section needs to address both, as it is BLM's understanding that both are deployed simultaneously. During a 2 week period efforts were made to retrieve the documents cited in this section through BLM's technical assistance contractor. Except for the 1994 Electronic Warfare article, none of the references were found. The references cited in the draft EIS report should be made available to both BLM and the public for review and analysis. The following libraries were queried for these documents: the Library of Congress, the National Agricultural Library, the Department of the Interior's Natural Resources Library, the Environmental Protection Agency's Headquarters and Regional Libraries, the Naval Research Laboratory, the U.S. Army's Environmental Center at Aberdeen, Maryland, the University of Nevada at Reno, the University of Maryland at College Park, the University of Delaware at Newark and at Loews, and the University of Texas at Austin. None of the references cited were found. In addition to physical and on-line searches at these libraries, Online Computer Library Center searches were done for each of the references yielding no results. B-99

The Executive summary of the Naval Research Laboratory's rebuttal to the Electronic Warfare Digest was also found. Are there biodegradable alternatives to the chaff bundles? Is there research to develop biodegradable chaff? What are obscurants and how much of these are deployed? If biodegradable chaff is used the EIS should reflect this information and the emphasis of waste minimization/pollution prevention (e.g. use of biodegradable chaff) could be a mitigation measure. How many bundles are dropped at each Range and how many off-range bundles are deployed? The EW Digest article suggested that 500,000 bundles are dropped nationally. The article also suggests that chaff can be found as far away as 20 miles from their release point. B-100

RCRA regulation suggests that if a product is being used for its intended purpose, it is not considered a solid waste under RCRA. However, if the State regulator does not agree that this action represents the use of a product for its intended purpose, the chaff may be considered a solid waste under RCRA. The State of Nevada should be contacted formally and their determination documented in this EIS. Additionally, if excess chaff is being discarded or abandoned, this material is a solid waste. B-101

An EPA Headquarters' letter dated January 26, 1994 indicates that aluminum chaff bundles exposed to moisture can release hydrogen gas which is flammable and therefore a characteristic hazardous waste. Are there situations where chaff remains as a bundle, i.e., faulty deployment, etc.? B-102

Solid waste associated with spent flares are plastic tops and pistons which may be a regulated RCRA solid waste. Any flares that were duds may be considered hazardous wastes either from toxic, reactive or combustible characteristics. The major components of flares listed in the Material Safety Data Sheets for flares appear to be casings (typically Teflon or similar material), oxidizers (potassium perchlorate, sodium nitrate, barium chlorate:, and combustible material or mixtures(boron, magnesium) Several of the compounds listed in the MSDS's are reported in the EPA Toxic Substance Inventory including acetone, barium chlorate, boron, n-hexane, magnesium, potassium perchlorate, and sodium nitrate. Are there any studies regarding flares and impacts to wildlife, water or plants? Does the Navy use flares with different components? If so the MSDS's should be made available to the BLM for analysis and regulatory determination. B-103

Table 3-11 briefly references unspent flares in off-range ordnance sweeps. How many flares are deployed within each Range? How many flares are deployed off-range? How many flares will be deployed off-range in each Alternative analyzed? How many duds are predicted for each Alternative? B-104

Flares that are deployed below the minimum flight deployment ceiling are an obvious fire hazard. How many flare deployments occur where there is a risk of fire for each alternative? I assume that past experience will provide this data. B-105

Bureau of Land Management, Nevada State Office, Dennis Samuelson, (702) 785-6532

1. A discussion in the Purpose and Need section about withdrawals, rights-of-way, and cooperative agreements would be helpful to the public. Section 302(b) of the Federal Land Policy and Management of 1976 states that Federal agencies can only use public land by withdrawal, right-of-way, or cooperative agreement. A withdrawal is proper for ground troop training, tank maneuvers, etc. A cooperative agreement is used where the proposed use is similar to programs of the Secretary of the Interior. There should also be a discussion as to why a right-of-way or cooperative agreement would not be appropriate for the Navy's proposed use.

B-106

2. Under Alternatives I, II, III, the proposed withdrawal ranges in size from 127,765 acres to 189,090 acres. However, the original 1982 application and the three subsequent additions totals 199,667 acres.

10/21/8	47 FR 46892	181,323 acres	original application
09/21/92	57 FR 43468	7,750 acres	ordnance contamination
01/25/96	61 FR 2261	7,584 acres	Dixie Valley corridor
06/13/96	61 FR 30092	3,010 acres	approach to Bravo 16
		199,667 acres	

B-

What happened to the 10,577 acre difference? (Note: It appears that the maps accurately depict the 199,667 acres).

3. Category A and B lands is misleading to the public, i.e., Category B lands "generally will remain open to public use and mining." The Navy will still have some type of control over the lands. If the legislation that withdraws these lands is similar to Public Law 99-606, there would be a provision for the Secretary of the Navy to close the Category B lands to the public if military operations, public safety, or national security warrants closure. Also, the Secretary of the Navy could determine that Category B lands are not suitable for opening to mining or mineral leasing. (The Nellis Range and Bravo 20, which were renewed under Public Law 99-606, have remained closed to public use and mining. No regulations or procedures have been developed for mining on lands withdrawn by Public Law 99-606).

B-108

Is the Navy committed to making all Category B lands available to the public for as many uses as possible? It would seem that until a resource management plan is completed, lands that are suitable/available for Category B can not be determined. Depending on the level of public use allowed, one could argue why the Category B lands need to be withdrawn in the first place?

Applications for use of Category B lands filed by individuals, groups, and corporations would have to be coordinated with the Navy, thus creating confusion for the public.

Suggest the Navy consider that all the lands be Category A. If there are provisions in the withdrawal legislation similar to Public Law 99-606, then the lands could still be opened to the public or to mining if the resource management plan so finds. B-108

4. In alternatives II & III, the concept of a withdrawal corridor in Dixie Valley to link Bravo 17 with the private lands acquired by the Navy is unusual for a withdrawal. If the main reason for the corridor is access to their Dixie Valley properties, then the Navy only needs a right-of-way. The Navy states the "panhandle will facilitate better use of withdrawn public land." This may be true for the Navy, but a withdrawal corridor would result in management problems for the public land on either side of the corridor. The corridor would be more like a barrier. B-109

The Navy's justification for a withdrawal corridor is that not only will it be used for access to their Dixie Valley properties, it will also be used for ground training, etc. It would seem that the area north of the existing Bravo 17 proposed for withdrawal is large enough to provide for ground training without the withdrawal corridor. B-110

Suggest the Navy consider an alternative without the panhandle, including the lands intermingled with the Navy acquired lands.

5. Page 1-7, Integrated Air and Ground Training. This paragraph suggests that in addition to combat search and rescue training, there is close air support training. The combat search and rescue training is quantified, i.e., how many people involved, etc. However, the close air support is not quantified. On page 1-14, second paragraph, integrated air and ground training is described as close air support, combat search and rescue, and intelligence gathering missions. B-111

Suggest the Navy consider different types of integrated air and ground training be discussed separately so that the reader has a clear idea of what is involved in each type of training.

6. Page 1-11, 1.3 Purpose, (2), provide safety buffer zones around the training ranges, including Navy control of lands containing off-range ordnance. However, on pages 2-33 and 2-34, Table 2-5, any buffer areas other than off-range ordnance are not identified. B-112

7. Page 3-32, Shoal Site (3.8.1.4) The Shoal Site was withdrawn by the Secretary of the Interior on September 6, 1962, by Public Land Order No. 2771. This order is still in effect and the withdrawal is administered by the Department of Energy (DOE). Our records show that the withdrawal is for 2,560 acres. Where does the 2,765 acre figure used in the draft EIS come from? B-113

Suggest that the 2,560-acre figure be used.

Where does the 7,405 acre figure come from? During the 1960's, a BLM special land use permit was issued to the Navy for 4,800 acres in the same area, but excluding the DOE withdrawal. B-113

Suggest the Navy explain that prior to 1976, they used public lands in the Shoal area, excluding the DOE Shoal withdrawal, under a special land use permit. With the passage of the Federal Land Policy and Management Act of 1976, the BLM could no longer issue special use permits to the Navy or any other Federal agency. B-114

The BLM has determined through the withdrawal review process that we will not take the 2,560-acre Shoal Site back from DOE. Withdrawal by the Navy would be appropriate. B-115

There is no reference to the DOE Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada. DOE will continue to conduct environmental restoration work and monitoring at Shoal. This use is expected to be long term. B-116

There needs to be a discussion about Shoal and the DOE Final EIS.

Fish and Wildlife Service, Region 1, Portland Oregon, Merle Richmond (503) 231-2068

GENERAL COMMENTS

The DEIS does not identify any significant adverse impacts to biological resources on public lands subject to withdrawal. However, how the public lands would be managed under the Resource Management Plan (Plan), yet to be developed, may be more important in determining such impacts. Therefore, we suggest providing the public and the resource agencies an opportunity to review a draft of the Plan prior to approval by the Bureau of Land Management. In particular, the Plan should identify and address the precise locations of the EW (electronics warfare) or TACTS (tactical aircrew combat training system) sites and the approximately 50 sites for visual cuing devices. B-117

The assessment of cumulative impacts in Chapter 5 of the DEIS may not meet the requirements of the National Environmental Policy Act. The DEIS correctly identifies the cumulative impact as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. However, the only past, present, and reasonably foreseeable future actions that the DEIS examines in the analysis appear to be land withdrawals and airspace designations. In addition to land withdrawals and airspace designations, the cumulative impact analysis should include effects of livestock grazing, mining, recreation, agriculture, and other land uses. B-118

The FEIS needs to include effects of these activities in the cumulative impact analysis. We suggest using the Council on Environmental Quality's January 1997 publication, Considering Cumulative Effects Under the National Environmental Policy Act, as guidance in developing this section for the FEIS B-118

SPECIFIC COMMENTS

Figures 2-1, 2-7, 2-8, 2-9, and 3-12. These figures consist of maps showing the location of the Stillwater marsh and the Stillwater National Wildlife Refuge. 3-12 shows the boundary prior to 1990 but not the present-day boundary. These figures should be corrected to show the current boundaries. B-119

Section 3.3.4.2. Sensitive Species: Wildlife. Page 3-14. The fourth paragraph in this section states a pair of peregrine falcons was observed near Carson Lake from 1985 to at least 1987. Biologists at Stillwater National Wildlife Refuge have documented 23 sightings of peregrine falcons, both adult and immature birds, in the refuge and Carson Lake areas from January 1990 to October 1997. The FEIS should reflect this information. B-120

Section 3.3.5. Sensitive Habitats. Page 3-15. The definition of primary wetlands in this section is not accurate. Primary wetlands are the wetlands located within the Stillwater National Wildlife Refuge, Stillwater Wildlife Management Area, Carson Lake and Pasture, and Fallon Indian Reservation. They make up the Lahontan Valley wetlands designated by Public Law 101-618. Not all of these wetlands are under the jurisdiction of the Fish and Wildlife Service. B-121

Section 4.2.2.1. Water Resources: Alternative I. Pages 4-6 and 4-7. The DEIS cites a study by the U.S. Army in which aluminum-coated chaff was submersed in salt and fresh water. In this study, an aluminum concentration of 1 mg/L was measured in hard to very hard water, but was below levels of detection in soft water after 21 days. In Nevada, water tends to be hard. Depending on environmental conditions (particularly pH), aluminum may be toxic to aquatic organisms at concentrations well below 1 mg/L. The FEIS should address potential aluminum toxicity to aquatic organisms occurring in withdrawal areas. B-122

Section 4.2.3.1. Biological Resources: Alternative I. Page 4-11 to 4-13. The FEIS should note a pair of bald eagles successfully hatched at least one eaglet at Lahontan Reservoir during the summer of 1997. The eaglet, however, did not survive. B-123

Paragraph 2 on page 4-13 discusses impacts of placement of EW, TACTS, and visual cuing device sites. Impacts include vegetation loss and some wildlife displacement over approximately 75 acres. Clearing of vegetation for development of these sites during the avian breeding season may result in destruction of nests and nest contents of migratory birds. Under B-124

the Federal Migratory Bird Treaty Act, active nests may not be harmed, and migratory birds may not be killed. Inactive as well as active nests of bald or golden eagles also may not be harmed. B-124

Land clearing should be conducted outside of the breeding season. If this is not feasible, we suggest a qualified biologist survey the construction zone prior to land clearing. If active nests are located, a temporary buffer should be placed around these areas, and the area should be avoided to prevent destruction or disturbance to the nests until they are no longer active. Clearing may take place if no active nests are found. B-125

Paragraph 3 on page 4-13 briefly discusses the toxicity of chaff to plants and wildlife. The discussion does not address effects on migratory birds. Upon ingestion, aluminum may be toxic to migratory birds. The FEIS should address the potential for migratory birds or other wildlife to ingest chaff or chaff particles. If it is determined that wildlife may ingest chaff, an assessment of potential risk to avian species should be conducted. B-126

The FEIS should clarify whether indirect impacts of the land withdrawal could include an increase in livestock grazing in other areas if withdrawn lands are taken out of grazing and livestock production. B-127

Section 4.2.10.1, Mineral Resources: Alternative I, Page 4-29. This section discusses the effects of the land withdrawal on mining activity. The narrative should clarify whether active mines or geothermal wells are present in the proposed withdrawal areas. Any active sites on the lands to be withdrawn should be reclaimed prior to their withdrawal. The FEIS should state the reclamation goal is the restoration of the native ecosystem to the greatest extent possible. Only native plants indigenous to the area should be used in the reclamation process. B-128

The National Park Service, Pacific West, Matt Wagers, External Compliance Specialist, (415) 427-1442 or Mark Rudo, Archeologist, (415) 427-1405.

The NAS developed the Fallon Naval Air Station Cultural Resource Management Plan (CRMP) to serve as a data base for existing NAS lands. The CRMP identifies cultural resources within NAS- managed lands as well as for a three mile buffer zone bordering areas proposed for withdrawal in 1982. An archeological site prediction model was developed and tested in 1995 by surveying 5 percent of existing NAS-managed lands as well as lands proposed for withdrawal. B-129

The NPS is concerned that the land identified for withdrawal has not been surveyed for archeological resources. Page 3-27 of the DEIS indicates professional archaeologists will conduct a survey of the lands to be withdrawn to update the CRMP. Should the proposed project be approved, we strongly recommend the CRMP be fully updated to include both the professional archaeologists' survey findings and the archeological site prediction model results for the area withdrawn.

We also request the NAS continue consultation with the Nevada State Historic Preservation Officer (SHPO) to facilitate the nomination process for surveyed resources that may be eligible for listing on the National Register of Historic Places (NRHP). B-130

Thank you for the opportunity to comment on this environmental impact statement.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEPC, w/original incoming
State Director, BLM, Nevada
Regional Director, FWS, Portland
Regional Director, NPS, San Francisco

Letter B
Patricia Sanderson Port, US Department of the Interior, Office of Environmental Policy and Compliance

Comment Designation	Response Location
B-34	10a
B-35	9c
B-36	26k
B-37	26l
B-38	26m
B-39	26n
B-40	26o
B-41	26p
B-42	26q
B-43	26r
B-44	26s
B-45	26t
B-46	26u
B-47	26v
B-48	26w
B-49	26x
B-50	26y
B-51	26z
B-52	26aa
B-53	26bb
B-54	26cc
B-55	26dd
B-56	26ee
B-57	26ff
B-58	20s
B-59	20t
B-60	26gg
B-61	26hh
B-62	26ii
B-63	26jj
B-64	26kk
B-65	26ll
B-66	26mm
B-67	26nn
B-68	26oo
B-69	26pp
B-70	26qq
B-71	26rr
B-72	26ss
B-73	26tt
B-74	26uu

Letter B
Patricia Sanderson Port, US Department of the Interior, Office of Environmental Policy and Compliance

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter B. Letter B has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter B comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
B-1	2a
B-2	2d
B-3	2d
B-4	2d
B-5	2d
B-6	2a
B-7	5a
B-8	5a
B-9	5a
B-10	5a
B-11	5a
B-12	5b
B-13	9a
B-14	1a
B-15	1a
B-16	1a
B-17	5c
B-18	6c
B-19	2d, 2g, 12a, 23a, 23b, 23c
B-20	12a
B-21	26c
B-22	26d
B-23	26e
B-24	9a
B-25	21a
B-26	26f
B-27	21a
B-28	26g
B-29	26h
B-30	26I
B-31	10c
B-32	26j
B-33	1e

Letter B
Patricia Sanderson Port, US Department of the Interior, Office of Environmental Policy and Compliance

Comment Designation	Response Location
B-75	26vv
B-76	26ww
B-77	26xx
B-78	26yy
B-79	26zz
B-80	26aaa
B-81	26bbb
B-82	26ccc
B-83	26ddd
B-84	26eee
B-85	26fff
B-86	26ggg
B-87	26hhh
B-88	26iii
B-89	26jjj
B-90	26kkk
B-91	26lll
B-92	26mmm
B-93	26nnn
B-94	26ooo
B-95	26ppp
B-96	26qqq
B-97	26rrr
B-98	26sss
B-99	26ttt
B-100	26uuu
B-101	26vvv
B-102	26www
B-103	26xxx
B-104	26yyy
B-105	26zzz
B-106	26aaaa
B-107	26bbbb
B-108	26cccc
B-109	26dddd
B-110	26eeee
B-111	26ffff
B-112	26gggg
B-113	26hhhh
B-114	26iiii
B-115	26jjjj
B-116	26kkkk

Letter B
Patricia Sanderson Port, US Department of the Interior, Office of Environmental Policy and Compliance

Comment Designation	Response Location
B-117	26llll
B-118	26mmmm
B-119	26nnnn
B-120	26oooo
B-121	26pppp
B-122	26qqqq
B-123	26rrrr
B-124	26ssss
B-125	26tttt
B-126	26uuuu
B-127	26vvvv
B-128	26wwww
B-129	26xxxx
B-130	26yyyy

Letter C

United States Department of the Interior

NATIONAL PARK SERVICE
CALIFORNIA, MORMON PIONEER, OREGON & PONY EXPRESS NATIONAL HISTORIC TRAILS
Long Distance Trails Office
324 South State Street, Suite 250
Post Office Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

September 30, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

Att: Samuel L. Dennis, Environmental Planning Branch, Code 1851
Re: Draft Environmental Impact Statement

Dear Sir:

I am writing in response to the draft environmental impact statement (DEIS) for the Naval Air Station near Fallon, Nevada. My particular interest is the Pony Express National Historic Trail, authorized by Congress in August of 1992, as an amendment to the National Trails System Act of 1968.

Presently there is a huge amount of interest in historic trails, especially those authorized as national historic trails. Many are following the historic routes and visiting specific sites associated with the trails. The Pony Express trail is no exception to this interest.

C-1

The route of the Pony Express crosses the Naval Air Station training area at Fallon in a west to east (or the obverse) direction, and thus is presently impacted by military activities, and will continue to be with the additional areas set aside as proposed by the DEIS. It is a severe restriction of public access for miles and miles of the trail, the corridor through which it passes, and the resources associated with the trail. It is more than just a two-track on the ground. When aircraft are practicing over the historic trail corridor, the sight and sound of such is a severe detriment to the experience of those following a nineteenth century trail route. Some coordination with visitors is necessary by the U.S. Navy, it would seem.

I understand at the present time the historic corridor is off limits due to potential live ordnance on and in the ground. If additional lands are to be set aside, it would seem that clearing of such ordinance would be a mitigation action to be taken. This however, is not noted in the DEIS on page 4-21, Section 4.2.7 of Cultural Resources. If the corridor and historic trail resources including the historic landscape is off limits, then some alternative way needs to be provided for

C-2

C-2

visitors to experience as they follow the historic trail.

At the present time a long range management plan is underway through the Denver Service Center of the National Park Service. This plan and EIS when completed in FY 99, will set direction for the next 15-20 years, and be the principal guidelines in collaboration with other land managing agencies and private landowners, for protecting and preserving cultural resources associated with the trail and providing for visitor use of those resources. As part of the comprehensive management plan, it identifies significant trail resources and the recommendations for protection and provision of public access. The trail corridor across Nevada is a significant part of the Pony Express trail extending from San Francisco to St. Joseph, Missouri.

C-3

I would urge the U.S. Navy to reassess the continued closure of the corridor and resources of the Pony Express National Historic Trail, and the extension of additional properties as part of the naval air station. Resources are significant portions of the experience for visitors to the national historic trail. And threats to those resources by ordnance used in practice sessions appears to be ongoing, and indeed expanding..

C-4

The conflict of uses and access is not assessed as an impact in the DEIS. It should be so addressed, as should the issue for protection of trail resources, and proposed mitigation. I believe the interests of constituencies for national historic trails are given short shrift in the assessment. It is my hope these matters will be addressed prior to finalization of the Environmental Impact Statement.

C-5

Sincerely,

Jere L. Krakow

Jere L. Krakow
Superintendent

cc: Dale Ryan, National Pony Express Association, Nevada Division
Wayne Howard, President, National Pony Express Association

Letter C
Jere L. Krakow, US Department of the Interior, National Park Service

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter C. Letter C has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter C comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
C-1	20n
C-2	20n
C-3	20n
C-4	20n
C-5	20n

Letter D

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
WESTERN NEVADA AGENCY
1677 HOT SPRINGS ROAD
CARSON CITY, NEVADA 89706

ER97/545

IN REPLY REFER TO:

Land Operations
(702) 887-3550

memorandum

FAX

Date: November 10, 1997

Reply To: Superintendent, Western Nevada Agency
ATTN: Patrick Williams, Land Operations Officer

Subject: Comments: Draft EIS: Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada

To: Patricia Port, Regional Environmental Officer
Office of Environmental Policy and Compliance
U.S. Department of the Interior
San Francisco, California
FAX: (415) 744-4121

Attached are the comments from this office regarding the above named document. Also attached is a request for cooperating agency status sent to the Navy by this office in November, 1995; the Navy never responded. To our knowledge, the Navy never consulted with the Indian Tribes that are impacted by the proposed action: the Walker River Paiute Tribe, the Fallon Paiute-Shoshone Tribes, and the Yomba Shoshone Tribe.

Please include our comments in the Department of Interior response to the Navy. Your positive attention to this matter is appreciated. Please feel free to contact Patrick Williams, Land Operations Officer, with any questions. He can be phoned at (702) 887-3550 or faxed at (702) 887-3531.

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 4

To | From

Dept./Agency | Phone #

BUREAU OF INDIAN AFFAIRS
WESTERN NEVADA AGENCY

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT:

WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES

NAVAL AIR STATION FALLON, NEVADA (JUNE 1997)

November 10, 1997

ISSUE	COMMENT	
Bravo 19	The Navy proposes to withdraw lands around Bravo 19, just north and adjacent to the Walker River Paiute Reservation. The BIA opposes any withdrawal of public lands which would increase the size of Bravo 19, as training activities have already resulted in the contamination by ordinance of approximately 6,000 of the Walker River Reservation. This has denied use by the Tribe and Tribal members of this land for grazing, mineral development or any other use. The BIA and Tribe have been negotiating with the Navy for some time (without success) for compensation for denied use. It is our opinion that with an increase of land withdrawals associated with Bravo 19, that ordinance contamination will occur on additional reservation lands and that the Navy will continue to fail to live up to its responsibilities in dealing with the contamination.	D-1
Management of withdrawn lands	The Navy insists that management of lands to be withdrawn remain with the current land management agency, which would be the Bureau of Land Management and the Bureau of Reclamation. The BIA opposes management responsibility for withdrawn lands remaining w/in the current land management agencies. This is an attempt by the Navy to avoid ultimate responsibility for any contamination on the withdrawn lands (ordinance, chemical, or other hazardous and/or toxic material), which would then fall to the agency with management responsibility. The BLM and Reclamation would then face the brunt of public criticism for contaminated public lands and would have to bear any costs associated with clean up. Clearly the Navy has to accept public responsibility as well as be prepared to absorb any clean up costs.	D-2
Cumulative impacts and the Western Shoshone	Much of the cumulative impact region is located within the area identified by the Indian Claims Commission in 1978 as the aboriginal territory of the Western Shoshone. The Western Shoshone have clearly stated their opposition to further military expansion due to the cumulative impacts of military facilities and operations. Specifically, the Western Shoshone objections are because of health concerns, aircraft noise during traditional ceremonies, and the suspected degradation of plant and animal resources caused by the placement of remote equipment and materials emitted during flights. Areas of concern include the Reese River Valley, Crescent Valley, Grass Valley, and Bald Mountain. The Western Shoshone have stated that they abhorred the disruption and noise associated with military operations in these areas. Impacted tribes include the Yomba Shoshone Tribe, located in the Reese River Valley.	D-3
Bravo 16	The Navy proposes to restructure airspace designation at Bravo 16 (pp. 2-27 to 29). Low-flying, high speed aircraft currently approach Bravo 16 from the north, and the Navy proposes to change the approach to be from the south. This would bring low-flying, high speed aircraft over the Walker River Paiute Tribe, which has already suffered contamination from spillage of ordinance at Bravo 19. The BIA opposes the change of approach to Bravo 16 from the north to the south.	D-4
Environmental Justice	This section, on p. 3-42, does not address the potential impacts of the land withdrawals on the Reservations located in the immediate area (Fallon Paiute-Shoshone Tribes and the Walker River Paiute Tribe), nor does the document address potential impacts to more distant reservations, such as the Yomba Shoshone Tribe located in the Reese River Valley, south of Austin, Nevada.	D-5

attachment to Letter D

Office of the Superintendent
(702) 887-3500

NOV 09 1997

Captain Scott Ronnie, Commanding
ATTN: Mr. Larry Jones
Public Works Department, Natural Resources Division
Naval Air Station
Fallon, Nevada 89406-5000

Re: NAS Fallon Land Withdrawal EIS--Cooperating Agency Status

Dear Captain Ronnie:

The Bureau of Indian Affairs (BIA), Western Nevada Agency (WNA) requests Cooperating Agency Status with respect to the Environmental Impact Statement (EIS) on the Proposed Master Land Withdrawal, Naval Air Station, Fallon, Nevada. We request this status under 40 CFR 1501.6, Cooperating Agencies.

The BIA has a fiduciary responsibility in respect to Indian Tribes and their lands and has a trust responsibility for these lands. The Land Withdrawal could have an impact on two Indian tribes within the jurisdiction of WNA: the Fallon Shoshone-Paiute Tribes and the Walker River Paiute Tribe. The tribes and the BIA have concerns regarding the following:

1. Safety: ordinance spillage on reservation lands, fuel jettisoning over reservation lands (RCRA, CERCLA, etc.).

2. Noise pollution: from Naval aircraft on the reservations (Clean Air Act).

3. Hazardous materials: possible contamination from radar chaff on reservation lands (RCRA, CERCLA, etc.).

4. Traditional cultural properties, archaeological sites, and burials: on withdrawn lands (Section 106 of the National Historic Preservation Act, National Park Service Bulletin 38, Native American Graves Protection and Repatriation Act, and other related acts, regulations, etc.)

The following members of my staff will be lead contacts if our request for cooperating agency status

is accepted::

Patrick Williams, Land Operations Officer and Agency Environmental Coordinator, (702) 887-3550

Curtis Millsap, Realty Officer and Agency Hazardous Materials Coordinator, (702) 887-3571

We look forward to working with you and your staff on this EIS and I appreciate your positive attention to this matter. If you have any questions please feel free to contact either Pat or Curtis.

Sincerely,

Superintendent

Letter D
Superintendent, US Department of the Interior, Bureau of Indian Affairs

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter D. Letter D has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter D comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
D-1	16c
D-2	5e
D-3	16d
D-4	16a
D-5	16e

Letter E

Department of Energy
Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

OCT 07 1997

Commanding Officer, Engineering
Field Activity West
ATTN: Mr. Sam Dennis, Environmental
Planning Branch, Code 1851
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5066

WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY & TRAINING PURPOSES, NAVAL AIR STATION, FALLON, NEVADA

The Department of Energy, Nevada Operations Office (DOE/NV), reviewed the subject Environmental Impact Statement (EIS). Our review was limited to the Shoal Site and we have the following comments:

Page 2-29, Section 2.3.2.2, paragraph 5, Future Development/Structures:

1. The DOE/NV does not agree that the Navy "obtain the right to approve new or modified developments" on the Shoal Site as currently withdrawn for DOE use. We do appreciate your need for a height limitation of 50 feet and we understand the nonconforming structures also might be allowed. We would like to point out that there may be a need for a nonconforming structure in order for DOE/NV to meet site characterization and remediation goals. E-1

2. The EIS should clearly state that at the Shoal Site access to the subsurface by drilling or any other means and/or removal of any subsurface material is prohibited without approval of DOE/NV. E-2

The DOE/NV appreciated the opportunity to comment on the EIS. If you need any further assistance, please feel free to contact Leslie A. Monroe, EPD, at (702) 295-1744, or Peter A. Sanders, Shoal Site Project Manager, at (702) 295-1037.

Kenneth A. Hoar, Director
Environmental Protection Division

EPD:LAM-8009

Commanding Officer -2- OCT 07 1997

cc:
S. A. Mellington, ERD, DOE/NV, Las Vegas, NV

Letter E
Kenneth A. Hoar, US Department of Energy, Nevada Operations Office

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter E. Letter E has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter E comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
E-1	8c
E-2	8d

Letter F

BOB MILLER
Governor

STATE OF NEVADA

JOHN P. COMEAUX
Director

DEPARTMENT OF ADMINISTRATION
Capitol Complex
Carson City, Nevada 89710
Fax (702) 687-3983
(702) 687-4065

October 10, 1997

Commanding Officer
Engineering Field Activities West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

Attn.: Mr. Sam Dennis, Environmental Planning Branch, Code 1851

SAI 95300152: Additional State of Nevada Comments on the U.S. Navy Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada.

Dear Mr. Dennis:

Below are detailed comments for the U.S. Navy's Range Safety and Training Land Withdrawal Draft Environmental Impact Statement (DEIS) for Naval Air Station Fallon. As you know, the State's oral comments were presented at the public hearing held on September 16, 1997, in Reno, Nevada at the Peppermill Hotel Casino. F-1

In those comments, we discussed issues concerning the expansion and continued use of the Bravo 16 air-to-ground bombing range; concerns regarding the Navy's compliance with the Presidential Executive Order on Environmental Justice (E.O. 12898); the Navy's "newly envisioned" integrated air and ground training program; the planned expansion of Electronic Warfare (EW) sites; the Navy's reasonably foreseeable airspace designations; and public participation through the Federal Advisory Committee Act process. F-2

Since the public hearing format for the DEIS provided limited time to delineate all of these concerns, we are taking this opportunity to elaborate on several of these points. As always, we hope the State's comments prove useful in developing the Final EIS and are considered by the Navy, the Bureau of Land Management, and Nevada's Congressional Delegation in the formation of a legislative proposal for the proposed land withdrawal.

These detailed comments are grouped by the following categories and are followed by a general set of recommendations. We have also attached comments from executive branch state agencies.

F-2

- Continued Use of the Bravo 16 Air-to-Ground Bombing Range;
- Navy's Compliance with the Presidential Executive Order on Environmental Justice (E.O. 12898);
- Navy's Newly Envisioned Integrated Air and Ground Training Program;
- Planned Expansion of Electronic Warfare (EW) and Tactical Aircrew Combat Training System (TACTS) Sites;
- The Navy's Reasonably Foreseeable Airspace Designations;
- Public Participation through the Federal Advisory Committee Act process;
- Recommendations; and
- Appendix -- Executive Branch State Agency Comments.

Detailed Comments

• Continued Use of the Bravo 16 Air-to-Ground Bombing Range

F-3

The continued use of the Bravo 16 air-to-ground bombing range is an issue the State of Nevada would like to see resolved, and yet, after years of expressed

objection by State officials, it appears the Navy is determined to retain the use of this range. The problem with Bravo 16 lies in the proximity of the range to urban and rural developments, recreational areas, fragile riparian ecosystems, and Native American sovereign lands.

Bravo 16 is located just west of the city of Fallon. The range is bordered by the Lahontan reservoir on the east; it lies just north of the Walker Indian Reservation; and it abuts the Sheckler farm district. For years, State officials have stated that the continued use of Bravo 16 would increase ongoing health and safety threats for local residents (*i.e., from low-level high speed jet overflights*). More recently, we have said the long-term use of the range is inconsistent with the principles of environmental quality, economic diversification, and overall community health for the citizens of Churchill County and the Native Americans in the region. F-3

In the State's September 16 public hearing comments, we said we were "disappointed with the Navy's decision not to address the abandonment of Bravo 16 as part of the land withdrawal proposal." While the Navy has finally admitted that a noise and safety threat exists for area residents who live near the range, the Navy's plan to "adjust"[1] the airspace to mitigate these safety threats may well represent a temporary solution to a long-term problem.

Appendix E of the DEIS contains a summary of the Bravo 16 RAICUZ (*Range Air Installation Compatibility Use Zone*) update study. The RAICUZ is essentially an air-to-ground noise study that is used in part to identify range safety zones. In the findings of the RAICUZ study, only 12 residential units (*31 people*) were identified as being beneath Range Safety Zone C. Zone C is defined as an overflight zone without armed overflight and "is the minimum restricted airspace required for aircraft to maneuver on the range."[2] F-4

This means that under the proposed airspace configuration for Bravo 16, private residential property would still be directly affected by high speed, low-level jet overflights. These residential properties are located southwest of Fallon, an area that has significant development potential. Thus, while this new airspace configuration will significantly reduce noise and safety threats over private property in the Sheckler district, where some 2,000 people were routinely affected, under the proposed airspace configuration, use of the range will continue to conflict with long-term regional land use in terms of urban and rural growth patterns in Churchill County. F-4

- **Navy's compliance with the Presidential Executive Order on Environmental Justice (E.O. 12898)**

We believe the new proposed airspace configuration for the Bravo 16 bombing range could have disproportionately high and adverse human health and environmental effects on lands belonging to the Walker River Indian Reservation. Yet the Navy flatly disagrees with this assumption by stating in the DEIS that the land withdrawal would not affect Native Americans because the withdrawal does not involve their lands, and because Navy operations near those lands would not increase (*DEIS, page 25*). This analysis avoids the connection between the Navy's land withdrawal and the new airspace configuration proposed for Bravo 16. F-5

The Navy's claim that airspace changes are a separate action from the land withdrawal (*DEIS, Page 5-2*) does not comply with the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (*i.e., CFR 1508.25(1)(iii), 508.25(2) and 1508.25(3)*). These regulations require federal agencies to assess connected and similar actions. According to CEQ, agency actions are connected if they are "...inter- dependent parts of large actions and dependent on the larger action for their justification [and actions are similar] . . .

when viewed with other reasonably foreseeable or proposed agency actions, [and] have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography."

F-5

While the Navy's DEIS does include a discussion about the airspace changes needed to facilitate a new airspace configuration and land withdrawal[3] for Bravo 16, the document does not provide a detailed evaluation of the environmental consequences, in terms of Environmental Justice considerations, for the new airspace changes. Although the Navy presents a table in the document that attempts to assess Navy compliance[4] with the Presidental Executive Order on Environmental Justice, no real assessment is disclosed in the document. It appears a detailed analysis was not performed because the airspace proposed is not considered part of the proposed action. The DEIS does state that "no increase in the number of flights over Walker River Indian Reservation would occur" (DEIS, Page 5-28), and yet the new airspace configuration calls for establishing a Military Operations Area (*MOA*) over the reservation and using an existing MTR (*Military Training Route*) to ingress the Bravo 16 target area.

F-6

State officials believe the Federal Aviation Administration is considering an action to implement the proposed airspace changes for Bravo 16. Because the airspace adjustments would involve restricted airspace to the ground level and the establishment of a MOA with an aboveground altitude of 500 feet, the action would trigger an environmental analysis as per the National Environmental Policy Act. At this writing, the FAA had not set a date for initiating the scoping process.

F-7

In any event, State officials contend that the land withdrawal is directly connected to the airspace action, and given the inadequate analysis of environmental justice issues presented in the DEIS, we believe the Navy must reevaluate the environmental justice considerations in the Final EIS for its land

F-8

withdrawal and airspace proposal at Bravo 16. Also, State officials do not believe this responsibility should fall to the FAA, since DoD's Strategy on Environmental Justice and its Implementation Plan call for "addressing any disproportionately high and adverse human health and environmental effects on minority and low income populations . . .[and] be implemented in connection with the NEPA process."[5] Such an evaluation must be accomplished because the land withdrawal and the proposed airspace changes are actions that are clearly connected and interdependent. F-8

- **Navy's Newly Envisioned Integrated Air and Ground Training Program**

During the 1995 scoping process for the DEIS, the State said that since bomb footprints apply only to the remote Bravo 17 and 19 air-to-ground bombing ranges, "we [were] unclear as to how the stated purpose and need for the proposed action (*i.e., provide noise, safety, and off-range ordnance hazard buffers around training ranges*) relates to the expansion of the proposed Electronic Warfare range and the Shoal site." We note the Preferred Alternative in the DEIS delineates a withdrawal of 71,365 acres for these areas. F-

We also said that, in order to accommodate the stated purpose and need for the proposed withdrawals, these buffer zones must be based on the need to prevent significant threats to the human and natural environments, such as threats caused by low-level overflights, sonic booms, off-range ordnance, electromagnetic radiation, etc. State officials then asked the Navy to clarify the specific threats concerning overflight activities at the Electronic Warfare range and the Shoal site.[6]

Not surprisingly, the State's review of the DEIS found no specific threats or significant impacts associated with overflight activities at either of these two sites.

What was found, however, was a new mission activity called the "integrated air and ground training program." While the need for this activity is an issue that cannot be assessed, given the limited information presented in the DEIS, State officials are nevertheless concerned that the Navy's Notice of Intent[7] for the withdrawal failed to mention this new integrated air and ground training program.

According to the DEIS, this new program would entail "small ground training operations, such as those conducted by groups of special forces personnel." The document says "the Navy will use the withdrawn land for integrated air and ground training operations . . . [and that] special desert patrol vehicles, modified dune buggies, may also be used by ground personnal [and] these vehicles will be used only on existing roadways and trails and will be used alone or in pairs primarily during airwing deployments." The DEIS further states that "under desert rescue scenarios, the most intensive integrated training event consists of four vehicles and up to 15 personnel." Finally, the document states that Sea-Air-Land (SEAL) units require large training areas so that they can prepare realistically for long range patrols [and that] the proposed panhandle area would provide the area for long-range patrols by linking together existing Navy-controlled lands, as well as allow for the placement of EW (Electronic Warfare sites) and visual cuing device sites" [in Dixie Valley]. Table 2-3 of the DEIS indicates that just over 500 integrated air and ground training activities would be conducted annually, and 200 of these training activities would be conducted in Dixie Valley.

F-9

Since the Bureau of Land Management will allow the placement of EW sites in the Dixie Valley area, as per a recently completed Plan Amendment, it appears the 68,000 plus acres in Dixie Valley is primarily needed for the Navy's new integrated air and ground training program.

In the State's 1995 scoping comments for the withdrawal, we stated that buffer zones around bombing ranges should be established strictly as buffer, and such zones should be specifically designed to address noise and safety issues. Since the need for buffer zones was to address public health and safety, the State strongly encouraged the Navy to focus the analysis in the DEIS on an assessment of noise and safety issues to support the establishment of buffer zones. It was also said that "the purpose and need for the proposed action — as defined in the May 12, 1995, Federal Register Notice — must be carefully linked to the amount of acreage that is actually needed; otherwise, legal sufficiency of the EIS may be questioned."

The State's review of the DEIS indicates the Navy has changed the proposed action for the withdrawal after the scoping process was concluded. It is believed this change constitutes a new mission activity that is directly linked to the need for the land withdrawal. F-9

Be that as it may, the National Environmental Policy Act (NEPA) requires agencies to "consider alternatives to the proposed action", and it requires agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources".[5]

Accordingly, the State contends the DEIS fails on both these counts. In fact, the document provides no alternative to the proposed ground training program, and it clearly states that "development of EW and TACTS sites and integrated air and ground training activities could adversely affect the quality of recreational experiences in the Dixie Valley area (*see Table 2.6, page 2-47*). Thus, while a proposed action has been disclosed in the DEIS, the Navy has failed to develop and evaluate alternatives to the ground training program. Development of alternatives

is a fundamental requirement and primary tenant of NEPA itself (*42 U.S.C. § 4332 Section 102 (c)(iii)*.

Finally, in the State's public hearing comments presented in Reno on September 16, 1997, it was said the Dixie Valley withdrawal was the only alternative considered for ground training activities, and the Navy should have evaluated the potential for co-use of other military lands, such as the northern part of the Nellis range, for its planned ground training program. It was also said that "had the Navy's plan for development of a ground training program been disclosed during the 1995 scoping process, the State would have insisted that the Nellis range be considered for such an activity." F-9

Accordingly, in the Final EIS or a revised DEIS as may be appropriate, the Navy must consider alternatives to the Dixie Valley ground training program, as well as provide a programmatic assessment of the proposed ground training mission itself. Such an assessment should include potential "siting alternatives" at other existing DoD facilities at both the national and regional levels. This new ground training activity should also be assessed in terms of its relationship, if any, to the congressionally required Base Realignment and Closure process.

- **Planned Expansion of Electronic Warfare and TACTS Sites**

In June 1996, the State of Nevada provided comments concerning the siting of military communications equipment (*primarily Electronic Warfare sites*) on public lands in central Nevada. The State's comments were prepared in response to a Bureau of Land Management (BLM) Plan Amendment Environmental Assessment (EA).[8] The comments took issue with past BLM decisions for permitting Navy EW sites on public lands and suggested that a cumulative review of the U.S. Navy's ground-based communication systems should be undertaken. F-10

The remarks were based on the assumption that a direct relationship exists between the expansion of EW sites and Navy plans to acquire additional military airspace in the region.

The State's letter to BLM concluded by suggesting that any further expansion of these sites could only be accomplished through preparation of an Environmental Impact Statement. The State's position was transmitted to BLM by Governor Bob Miller.[10]

State officials recognize the relationship between ground-based electronic communication facilities and the use of existing and/or new military airspace. With the construction of every new ground-based threat emitter site comes a more focused and intensified use of the military airspace in the vicinity of the site. BLM's Plan Amendment-EA carefully documented this relationship through a discussion of tactical and mission-related Navy flight training activities. State officials concurred with BLM's finding that these activities are responsible for both direct and indirect impacts on the human and natural environment.

F-

In consideration of these concerns, the Navy's land withdrawal DEIS notes that to achieve the most realistic combat training possible, Naval Air Station Fallon (*NAS Fallon*) must create representative threat scenarios. To accomplish this, the Navy is proposing to place visual cueing devices on the Fallon Range Training Complex (*FRTC*) and install additional EW sites on the lands proposed for withdrawal (*DEIS, Page 1-12*).

Specifically, the Navy is proposing to develop up to five EW or TACTS sites and up to 50 sites for placement of visual cueing devices. The cumulative impact of this action would affect about 75 acres on the proposed withdrawn lands.

What is disturbing, however, are repeated statements in the DEIS that state "any military use that becomes necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency" (*DEIS, page 2-2*). While the meaning of this statement is not at all clear, if the Navy is proposing additional EW sites outside of the Dixie Valley area, State officials contend that such actions could only be approved through a comprehensive or programmatic Environmental Impact Statement. We do note that placement of these sites outside of the Dixie Valley area is not part of the proposed action for the subject DEIS.

As it now stands, the BLM has "temporarily" prohibited future electronic threat emitter sites outside the Dixie Valley area. While the Navy has formally appealed this decision[11] and BLM has postponed action to resolve the appeal, these federal agencies should be aware that the State of Nevada remains firm in its position and would protest if the BLM authorizes any EW sites on public lands outside of the Dixie Valley area without a full environmental review. Because the expansion of these sites represents a permanent commitment of public lands, the State has argued that only the Congress should authorize such an activity.

F-10

In a related matter, the State has also argued that there is a direct relationship between the expansion of these ground-based EW sites and the Navy's long-term plan to double its existing airspace in the region. The Environmental Impact Statement outlines the Navy's reasonably foreseeable airspace needs, which include creating the Diamond, Duckwater, and Smokey Military Operations Areas. The combined area these MOAs would overlie totals more than 10,000 square miles. The DEIS is silent, however, on future plans for expanding its EW and TACTS sites in areas that would be covered by these MOAs.

The Navy's claim that airspace changes are a separate action from the land withdrawal is contrary to the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act. Placement of threat emitter sites is a connected action that should not be segregated from a proposal to expand Special Use Airspace in the region. Hence, the Final EIS should clarify the intent, scope, and meaning of the statement in the DEIS that says "any military use that became necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency." F-10

- **The Navy's Reasonably Foreseeable Airspace Designations**

The Navy's reasonably foreseeable airspace needs described in the DEIS include creation of the Diamond, Duckwater, and Smokey Military Operations Areas. The document also briefly describes several changes to NAS Fallon's existing military airspace. Because the DEIS provides only a brief appraisal of these airspace changes, it is difficult to assess the potential long-range cumulative effects these changes could have on the human and natural environment in the region. The document does state that "more precise impacts would be determined through project-specific NEPA analysis" (*DEIS, page 5-37*). While the DEIS is silent on the scope and content of these project-specific NEPA analyses, State officials believe that a programmatic EIS would be required to initiate these large scale military airspace changes. Such an analysis, moreover, must consider alternatives for co-use of other existing military airspace in the region, such as airspace assigned to the Nellis Air Force Base, Mountain Home AFB, Idaho, and Hill AFB in Utah. F-11

While agencies have some discretion in determining whether to prepare a programmatic EIS, such documents are clearly appropriate for assessing the impacts of joint actions when it is "the best way" to assess such effects. This is

particulary important when such effects are connected, cumulative, or considered sufficiently similar. More importantly, a programmatic EIS is required if an agency has several proposed actions pending at the same time and those actions will have cumulative or synergistic environmental affects. For the Navy, those actions include:

- A high-altitude bombing proposal;
- Planned strike aircraft rendezvous and stand-off "jammer" operations in the proposed Duckwater MOA;
- Proposed expansion of the existing supersonic flight area; and
- Proposed tactical low-level ingress from the proposed Smokey MOA to target ranges B-17 and B-19 .

F-11

It is worth mentioning that all of these new flight training activities are directly connected to the Navy's reasonably foreseeable airspace designations described in the referenced DEIS (*See pages 5-27 and 5-36*).

In a related matter, State officials are still unclear on how the Navy intends to comply with the requirements of Public Law 99-606, Section 5(2)(A). This law renewed the 3 million acre land withdrawal for the Nellis Air Force Range as well as authorized the original withdrawal for the Navy's Bravo 20 air-to-ground bombing range located north of Fallon in the Carson Sink. A reading of the law[12] suggests that the Navy must include all of its existing withdrawals in one comprehensive EIS document for consideration by the Congress by the year 2001. State officials have yet to receive a clear indication, however, on what the scope of the Navy's PL-99-606 EIS might be. This EIS is to be completed in 1998.

Given all of these uncertainties, State officials expect the Navy to present in the Final EIS a clear, concise NEPA strategy that specifically addresses all of the Navy's reasonably foreseeable airspace withdrawals for the FRTC. This strategy should also disclose how the Navy intends to comply with the NEPA requirements stipulated under PL 99-606. F-11

- **Public Participation through the Federal Advisory Committee Act Process.**

On October 11, 1996, the State of Nevada formally requested the Navy to establish a federal advisory board under the auspices of the Federal Advisory Committee Act (FACA).[13] In a letter to Admiral Smith, NAS Fallon, the State outlined the issues and benefits that could be addressed by a FACA committee. It was noted that, while NAS Fallon had not recently experienced significant natural resource management problems, there were other crucial human health, safety, environmental, and public land use issues that continue to impede military training at Fallon. F-12

It was suggested that environmental issues that remain controversial and either directly or indirectly affect military training activities include management of off-range ordnance, dispersal of chaff on public lands, and the possible expansion of electronic warfare sites in the region. Concerns about health and safety issues were also identified, such as jet noise caused by low-level overflights for residents living near the Bravo 16 air-to-ground bombing range and noise from sonic booms for residents who live beneath the FRTC complex. Finally, it was noted that important public land use issues remain to be addressed including those related to the Navy's proposed Master Land Withdrawal and the Navy's "envisioned" airspace needs in the region.

The State argued that by establishing a FACA committee, the Navy would demonstrate decisive leadership by promoting collaborative decision making to address controversial issues. It was also argued that because the Navy has embarked on expanded mission plans at Fallon (*e.g., Top Gun/Top Dome*) — with requisite needs for additional public land and airspace — it seemed clear that implementing a process that promotes collaborative decision making was an appropriate and reasonable activity to undertake. Finally, State officials offered direct assistance to the Navy in implementing such a process through development of a committee charter and criteria for membership selection. It was specifically recommended that such a committee "be charged with advising the Navy on a broad spectrum of issues and that the organizational structure be representative of rural and urban residents, Native Americans, the environmental community, and local governments with an ex-officio membership for State and federal agencies."

F-12

While the Navy subsequently declined the State's proposal to establish a FACA committee for NAS Fallon, actions were taken by the Navy to establish a citizens' committee of locally affected residents. Although State officials and other interested parties were excluded from participating in the informal committee process, press accounts[14] suggest the process has not been a positive and/or productive experience for the Navy.

Since the State of Nevada has been successful using the FACA process to formally interface with other federal agencies and the public on matters of mutual interest and concern, it was clearly discouraging to be denied a similar opportunity to assist the Navy. Nevertheless, because there remains considerable uncertainty about the Navy's plans in central Nevada, including how the requirements of NEPA may be applied to assess major program actions, let alone existing controversies over the use of existing military airspace and public lands, the State once again requests the Navy to establish a FACA committee for NAS Fallon.

Recommendations

1. The Bravo 16 air-to-ground bombing range: State officials believe the long-term use of the Bravo 16 bombing range is inconsistent with the principles of environmental quality, economic diversification, and overall community health for the citizens of Churchill County and the Native Americans in the region. While we concur that the new airspace configuration proposed for the range will significantly reduce noise and safety threats over private property in the Sheckler district, continued use of the range will still conflict with long-term regional land use in the area. The State's position on the continued use of Bravo 16 has not changed; the range should be abandoned and relocated. Moreover, because the Navy remains unwilling to address the obvious, inherent long-term conflicts posed by the continued use of Bravo 16, the State of Nevada strongly encourages the Congress to set a specific time period in the withdrawal legislation that specifies a date for abandonment of the range. F-13

2. Compliance with the Presidential Executive Order on Environmental Justice (E.O. 12898): In reference to the proposed airspace configuration for the Bravo 16 bombing range, State officials believe the Navy did not adequately evaluate compliance with Environmental Justice considerations. Changes in the airspace over the range could have disproportionately high and adverse human health and environmental effects on the people and lands belonging to the Walker River Indian Reservation. Because the land withdrawal is directly connected to the airspace action, the Navy must evaluate the comprehensive environmental justice considerations for both the land withdrawal and the airspace proposal at Bravo 16. Moreover, as per Navy regulations and DoD's implementation plan, State officials do not believe this responsibility can be delegated to the FAA. This is an important consideration, since it appears the Navy is attempting to move the noise and F-14

safety problem at Bravo 16 from the Sheckler farm district to the Walker Indian Reservation. F-14

3. NAS Fallon's Newly Envisioned Integrated Air and Ground Training Program: The State's review of the DEIS indicates the Navy changed the proposed action for the withdrawal after the scoping process was concluded. Because this change constitutes a new mission activity that is directly linked to the need for the land withdrawal, the Navy must consider alternative locations for the ground training program, as required by NEPA, Section 102(c)(iii). Siting alternatives at other existing DoD facilities at both the national and regional levels should be considered for the referenced program. Further, such an assessment should include a programmatic review of the proposed ground-training mission itself as well as consider the requirements, if any, of the Congressionally required Base Realignment and Closure process. F-15

4. Planned Expansion of Electronic Warfare (EW) and TACTS Sites: State officials have long argued that an expansion of the Navy's EW sites outside of Dixie Valley would represent a permanent commitment of public lands in central Nevada. State officials also believe that a direct relationship exists between the expansion of these sites and the Navy's long-term plan to double its existing airspace in the region. While the Navy claims that airspace changes are a separate action from land withdrawals, whether they be for buffer zones, ground training operations, or placement of EW sites, such claims directly conflict with federal regulations for assessing major "connected" actions that could cause significant effects on the human and natural environments. Furthermore, because these connected actions would be so significant, State officials believe that a programmatic EIS would be required to assess the impact on the human and natural environments. F-16

5. NAS Fallon's Reasonably Foreseeable Airspace Designations: With the publication of the Special Nevada Report in September 1991, the Navy disclosed its long-term reasonably foreseeable airspace needs in central Nevada, calling for an addition of 10,000 square miles. Appropriately, these foreseeable airspace needs are briefly described in the referenced DEIS. Because these foreseeable airspace acquisitions would have significant impacts in central Nevada, State officials have long argued that alternatives must be considered for co-use of other existing military airspace in the region, such as airspace assigned to the Nellis Air Force Base, Mountain Home AFB, Idaho and Hill AFB, Utah. These co-use alternatives should further be assessed through a programmatic EIS. Although the subject DEIS suggests that only "project specific" NEPA documentation would be developed, the State believes that federal regulations would require a programmatic analysis of these activities. F-17

6. Public Participation through the Federal Advisory Committee Act Process: The Federal Advisory Committee Act (*FACA*) process has been successfully used in Nevada to formally interface with federal agencies on numerous matters of public interest and concern. Since there remains considerable uncertainly about the Navy's plans in central Nevada, including how the requirements of NEPA will be applied to assess the expansion of training activities in the region, along with a host of other concerns, the State once again requests the Navy to establish a FACA committee for NAS Fallon. If such a request is again denied, State officials believe the Congress should stipulate creation of a FACA committee in the legislation for the Navy's land withdrawal. F-18

If you have any questions about these comments, or if you would like to discuss the list of recommendations, please contact me or John Walker (NWPO).

Sincerely,

Julie Butler

Julie Butler, Coordinator
Nevada State Clearinghouse

Attachment (State Agency Comments)
JB/jbw

cc: Governor Bob Miller
Nevada Congressional Delegation
Leo Penne, State of Nevada-Washington Office
Robert R. Loux, State of Nevada, NWPO
Pam Wilcox, State of Nevada, State Lands
Paul Liebendorfer, State of Nevada, NDEP
Nevada State Agencies
Elsie L. Munsell, Deputy Assistant Secretary of the Navy (Environment and Safety)
Linda Lance, CEQ
Captain Scott Ronnie, NAS Fallon
Colonel Michael F. Fukey, Nellis AFB
Les Monroe, DOE
Connie Lewis, The Keystone Center

-- ENDNOTES --

1. The Navy is proposing to flip-flop the jet run-in-line to Bravo 16. Instead of flying southeast over the Sheckler district and Highway 50 to the range target, jets would now fly north to the target area.

2. U.S. Navy, Naval Air Station Fallon, Nevada Range B-16, Range AICUZ Update, February 1997. Engineering Field Activity West; Naval Facilities Engineering Command,, Section 4.2, page 4-3.

3. According to the DEIS, the proposed land withdrawal for the Bravo 16 range (*10,400 acres*) is needed to facilitate both off-range ordnance contamination and integrated air and ground training activities.

4. SCNAV Notice 5090.6 -- Navy's procedures for implementing the National Environmental Policy Act.

5. Department of Defense, March 24, 1995. Strategy on Environmental Justice, Implementation Plan, Goal 2 Sub-section titled "Identify and Address, as Appropriate, DoD Programs, Policies and Activities That May Have Disproportionately High and Adverse Human Health and Environmental Effects on Minority and Low Income Populations at DoD U.S. Sites and Facilities".

6. In reference to the proposed withdrawal of the Electronic Warfare Range and the Shoal site, we asked the following questions:

   What are the noise, safety, and bomb footprint issues that need to be addressed at the Shoal site and the Electronic Warfare Range?

   Are we to assume that expansion of the Shoal site is needed to maintain institutional control of the old Atomic Energy Commission's underground nuclear test area? If not, what other buffer zone issues are relevant at this site?

   What are the noise and safety issues surrounding the proposed creation of the EW range? Since there are no bomb footprints at the site, what are the safety issues and what public health and environmental issues require buffer zones? Is overflight noise or electromagnetic radiation the issue? Is the withdrawal needed to comply with FAA requirements to own, lease, or control lands beneath restricted airspace?

7. Federal Register – May 12, 1995 (Volume 60, Number 92)

8. 42 U.S.C § 4332(2)(C)(iii)(1988) and *id.* § 4332(2)(E); see 40 C.F.R. § 1502.10(e)

9. United States Department of Interior, Bureau of Land Management, Carson City District and Battle Mountain District, March 1996. "Central Nevada Communication Sites Proposed Plan Amendment and Environmental Assessment," EA No-NV-030-96035.

10. Letter from Governor Bob Miller to Ann Morgan, State Director BLM, June 6,1996

11. United States Department of Interior, Bureau of Land Management, Carson City District and Battle Mountain District, June 24, 1996. "Central Nevada Communication Sites Final Plan Amendment."

12. PL 99-606, SEC 5: DURATION OF WITHDRAWALS. (a) DURATIONS.--The withdrawal and reservation established by this Act shall terminate 15 years after the date of enactment of this Act. (*The law specifies that "no later than 12 years after the date of enactment of this Act, [1998] the Secretary of the military department concerned shall publish a draft environmental impact statement concerning continued or renewed withdrawal of any portion of the lands withdrawn by [the] Act ...*")

    (2)(A) For purposes of such draft environmental impact statement published by the Secretary of the Navy, the term "lands withdrawn by this Act" shall be deemed to include lands withdrawn by Public Land Orders 275, 788, 898, and 2635 and lands proposed for withdrawal as specified in the draft environmental impact statement for the proposed master land withdrawal, Naval Air Station, Fallon, Nevada.

13. State Clearinghouse letter dated October 11, 1996 from Julie Butler, Nevada Department of Administration, to Rear Admiral Smith, Department of the Navy, NAS Fallon.

14. Nevada Appeal, October 6, 1997, page 1.

Letter F
Julie Butler, State of Nevada, Department of Administration

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter F. Letter F has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter F comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
F-1	26zzzz
F-2	26aaaaa
F-3	7a
F-4	7a
F-5	2e, 16a
F-6	2e, 16a
F-7	2e
F-8	16a
F-9	1e, 9b
F-10	5j, 10b
F-11	11a, 11b
F-12	4a
F-13	7a
F-14	16a
F-15	1e
F-16	5j, 10b
F-17	11b
F-18	4a

Letter H

NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
Blasdel Bldg., Rm. 200
(702) 687-4065
fax (702) 687-3983

DATE: July 15, 1997

97 JUL 16 PM 2:25

Governor's Office	Legislative Counsel Bureau	Conservation-Natural Resources
Nuclear Projects Office	Communications Bd.	Director's Office
Business & Industry	Emp. Training & Rehab Research Div.	State Lands
Agriculture	PSC	Environmental Protection
Energy	Transportation	Forestry
Minerals	UNR Bureau of Mines	Wildlife
Economic Development	UNR Library	Region 1
Tourism	UNLV Library	Region 2
Fire Marshal	Wild Horse Commission	Region 3
Human Resources	Historic Preservation	Conservation Districts
Aging Services	Emergency Management	State Parks
Health Division	Washington Office	Water Resources
Colorado River Commission		Water Planning
Indian Commission		Natural Heritage

Nevada SAI # E1997-008 Project: DEIS – Withdrawal of Public Land for Range Safety and Training Purposes at NAS Fallon

X Yes __ No Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:
See Related SAI # 95300152.

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than October 1, 1997. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. If you have any questions, please contact Terri Rodefer, Clearinghouse Environmental Advocate, at 687-6382, or Julie Butler, Clearinghouse Coordinator, at 687-6367.

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

___No comment on this project
___Proposal supported as written
___Additional information below
___Conference desired (See below)
___Conditional support (See below)
___Disapproval (Explain below)

AGENCY COMMENTS:

COMMENTS ARE ATTACHED

RECEIVED
SEP 18 1997
DEPT OF ADMINISTRATION
DIRECTOR'S OFFICE

Signature NDEP Clearinghouse Coordinator | NDEP Agency | 9/18/97 Date

TITLE: Draft Environmental Impact Statement - Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada

Throughout this document, the Project Shoal Site is being considered for withdrawal as part of the total withdrawal to allow the Navy to conduct ground training exercises. It should be noted that the reason the central part of the Shoal site was withdrawn by the Atomic Energy Commission (now the Department of Energy) was to conduct an underground nuclear test. This test consisted of a 12 kiloton yield and was conducted on October 26, 1963. This detonation produced a 171 foot in diameter chimney with a 36 foot void at the top of the chimney. The ground surface has not subsided and the current stability of the site has not been confirmed.

The Department of Energy is currently characterizing the underground hydrology at the site which includes well development and on-going sampling activities. DOE may be required to drill additional wells to adequately determine hydrogeologic conditions and potential contaminant migration. DOE will continue to monitor the site in future years to ensure that contaminants are not migrating off site and potentially may have to withdraw parts of the site permanently. H-1

The historic site conditions as well as the ongoing activities and future activities have not been addressed in the document. The extent to which this site is impacted may constrain the Navy's ability to utilize this area and this needs to be addressed in the EA.

Letter G
Michael J. Anderson, State of Nevada, Division of Water Resources

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter G. Letter G has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter G comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
G-1	6a
G-2	20r

Letter G

NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
Blasdel Bldg., Rm. 200
(702) 687-4065
fax (702) 687-3983

RECEIVED
AUG 14 1997
DEPT OF ADMINISTRATION
DIRECTOR'S OFFICE

DATE: July 15, 1997

Governor's Office
Nuclear Projects Office
Business & Industry
Agriculture
Energy
Minerals
Economic Development
Tourism
Fire Marshal
Human Resources
Aging Services
Health Division
Colorado River Commission
Indian Commission

Legislative Counsel Bureau
Commissions Bd.
Emp. Training & Rehab Research Div.
PSC
Transportation
UNR Bureau of Mines
UNR Library
UNLV Library
Wild Horse Commission
Historic Preservation
Emergency Management
Washington Office

Conservation/Natural Resources
Director's Office
State Lands
Environmental Protection
Forestry
Wildlife
Region 1
Region 2
Region 3
Conservation Districts
State Parks
Water Resources
Water Planning
Natural Heritage

Nevada SAI # E1997-008 Project: DEIS – Withdrawal of Public Land for Range Safety and Training Purposes at NAS Fallon

__ Yes __ No Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:
See Related SAI # 95300152.

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than October 1, 1997. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. If you have any questions, please contact Terri Rodefer, Clearinghouse Environmental Advocate, at 687-6382, or Julie Butler, Clearinghouse Coordinator, at 687-6367.

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

___No comment on this project
___Proposal supported as written
__/__Additional information below
___Conference desired (See below)
___Conditional support (See below)
___Disapproval (Explain below)

AGENCY COMMENTS:

The preferred alternative should have the lowest impact on the function of this office. Privately held water rights on public land, typically for stockwatering, should be allowed to be moved to a site where they can be utilized by the permittee, should have an easement for access by the permittee or should be acquired outright by the Navy. The north boundary of the area to be withdrawn north of Range B-16 appears to cross the embankment of Sheckler Dam. If this is the case access should be provided so that personnel from the State Engineer's office will be able to perform periodic inspections of the dam. G-1 G-2

If alternative I is chosen the State Engineer expects that the Navy will assume responsibility for the safe operation and future maintenance of Sheckler Dam and reservoir.

MICHAEL J. ANDERSON, P.E. DWR 08/13/97

Signature Agency Date

Letter H
David R. Cowperthwaite, State of Nevada, Department of Administration

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter H. Letter H has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter H comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
H-1	8b

Letter I

BOB MILLER
Governor

STATE OF NEVADA

CATHERINE BARCOMB
Executive Director

COMMISSION FOR THE PRESERVATION OF WILD HORSES

1105 Terminal Way
Suite 209
Reno, Nevada 89502
(702) 688-2626

RECEIVED
JUL 24 1997
DEPT. OF ADMINISTRATION
DIRECTOR'S OFFICE

July 21, 1997

Ms. Julie Butler
Clearinghouse Advocate
Nevada State Clearinghouse
Blasdel Bldg., Rm. 200
Carson City, Nevada

Subject: NAS Fallon Land Withdrawal - SAI# E1997-008

Dear Ms. Butler:

The Commission for the Preservation of Wild Horses has reviewed the Draft Environmental Impact Statement-Withdrawal of Public Land for Range Safety and Training Purposes at NAS Fallon. Military withdrawal of public lands proposes a threat to the Bureau of Land Management's ability to manage wild horses within the Horse Mountain, Clan Alpine and South Stillwater Herd Management Areas. I-1

Wild horses in the Horse Mountain Herd Management Area were totally removed during a recent drought. The action was not consistent with the wild horse management plan or present land use plan. In light that horses were dependent on water outside of the herd management area, the District should amend its land use plan to designate the area horse-free. I-2

Wild horses within the South Stillwater Herd Management Area appear to be sustaining itself at carrying capacity. However, any wild horse herd has the capability to recruit its numbers beyond management levels. Multiple use decisions have been issued that have determined the appropriate management level. I-3

It is our view that the Clan Alpine Wild Horse Management Plan is outdated and not consistent with federal regulations. The introduction of unadoptable wild horses into this herd management area proved to an error. Horses immigrated outside of the area and did not survive. Future problems with wild horses on Navy properties and the conflicts with airspace to census or gather are imminent. I-4

We suggest that if lands are withdrawn that the Navy amend its Natural Resource Plan to provide the support and funding to manage the Clan Alpine Wild Horse Herd. This would require proper census and gathers to achieve the appropriate management level. I-5

Thank you for providing this opportunity to provide comments to the draft document.

Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director

Letter I
Catherine Barcomb, State of Nevada, Commission for the Preservation of Wild Horses

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter I. Letter I has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter I comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
I-1	19c
I-2	19d
I-3	19d
I-4	19c
I-5	19c

Letter J

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WILDLIFE

1100 Valley Road
P.O. Box 10678
Reno, Nevada 89520-0022
(702) 688-1500 • Fax (702) 688-1595

BOB MILLER
Governor

PETER G. MORROS
Director
Department of Conservation and Natural Resources

WILLIAM A. MOLINI
Administrator

RECEIVED
OCT - 1 1997
DEPT OF ADMINISTRATION
DIRECTOR'S OFFICE

September 29, 1997

Nevada Division of Wildlife
Region 1 Ph 423-3171
380 West B Street
Fallon, Nevada 89406

Ms. Julie Butler
Nevada State Clearinghouse
Planning Division
Blasdel Bldg. Room 200
Carson City, Nevada 89710

RE: DEIS - NAS Fallon Withdrawal - SAI# E1997-008

Dear Ms. Butler:

The Nevada Division of Wildlife has received and reviewed the Draft Environmental Impact Statement for Withdrawal of Public Land for Range Safety and Training Purposes at Naval Air Station Fallon. As a result of the Department of Defense's downsizing, Fallon has enjoyed the benefits of Naval consolidation with considerable expansion of the Air Station. These new changes have increased the size, activities and personnel at Fallon above the predictions expressed in the "Spacial Nevada Report".

As proposed in the Preferred Alternative, outdoor recreation remains a principle concern of our agency. With population growth throughout western Nevada, outdoor recreation involving off-road vehicles, wildlife observation, fishing and hunting have increased proportionally. Churchill County supports a significant portion of the recreational economy of western Nevada. In response to this demand, the Division of Wildlife and Bureau of Land Management have made considerable investments in wildlife resources within the influence of the Navy.

CATEGORY A LANDS - (CLOSED PUBLIC ACCESS)

Bravo 17 withdrawal of 33,400 acres encompasses 70 percent of the delineated bighorn sheep habitat of the Clan Alpine Habitat Management Plan and Cooperative Agreement with the Bureau of Land Management. Presently, the proposed withdrawal has five water developments supporting bighorn sheep, chukar partridge and nongame wildlife. These projects were cooperatively constructed and funded by the Division, Bureau of Land Management and various interest groups. Excluding public access seriously impacts a major land use of this area and will impede the Division's ability to manage wildlife. J-1

Administrative needs of the Division will include helicopter surveys, ground surveys and project maintenance. J-1

CATEGORY B LANDS - (LANDS GENERALLY OPEN)

Dixie Valley and the Shoals withdrawals consist of 71,365 acres of high value wildlife recreational areas. Future conflicts with ground training activities are difficult to assess without defined actions by the Navy. Broad authority to permit public use on a case by case basis provides no long term assurances to the Division or recreating public. J-2

Primary hunting activities that occur in the following areas:

* Shoals - Approximately 22 water developments for chukar and non-game species. Navy activities could conflict with chukar brooding from July to September and public hunting from October to February.

* Stillwater Range - Chukar brooding and hunting conflicts may occur during seasons. Bighorn sheep and mule deer hunting occurs from August to November. J-3

* Clan Alpine - Chukar brooding and hunting conflicts may occur during seasons. Bighorn and mule deer hunting seasons occur from August to November. Big game and small game water developments are accessed through these withdrawn lands.

* Louderback Hills - Bighorn sheep lambing areas are critical during spring months.

The document states that the Navy will manage public use consistent with the present Bureau of Land Management land use plan. While the Division has no objection to this intent, the Navy could achieve its objective by agreement with the Bureau without the proposed withdrawal. J-4

SUMMARY

Wildlife resources and recreational impacts were not adequately assessed in the draft environmental impact statement. Detailed data and species delineations were provided to the Navy in the preparation of the Natural Resource Plan. The Preferred Alternative should provide specific proposed actions and assess all impacts. J-5

Memorandum of Understandings with the Division suggest possible pathways to mitigate impacts of the Preferred Alternative. The State of Nevada agreed to mitigate similar impacts caused by the Navy's Record of Decision, the Designation of a Supersonic Operation Area on July 12, 1995, by a Memorandum of Understanding. As a result of this effort, a series of agreements were made between the Navy and resource agencies. These agreements lead to a natural resource committee to review and advise the Navy of ongoing impacts and necessary mitigation actions.

Provisions of these MOU's were abandoned by the Navy. Enhancement projects for Carson Lake and Stillwater National Wildlife Refuge were not implemented. The Dixie Valley warm water fishery facility was abandoned. Sonic boom monitors were never installed or operated to assess wildlife and human impacts. Funding to conduct wildlife research and monitoring were discontinued. Public access of Horse Creek properties were not managed to assure recreation on Navy or public lands.

J-6

The Nevada Division of Wildlife objects to the Preferred Alternative of the draft environmental impact statement. We recommend that the Navy consider an alternative that amends the existing Bureau of Land Management land use plan to designate specific uses compatible with the Navy's defined mission. Public access should be assured to support present land use planning and uses. In the interest of cooperation, MOU's have not been conveyed through the changes in leadership at NAS Fallon. We would suggest that if the inadequacies of the environmental impact statement cannot be resolved that a broad and diverse committee of Nevada stakeholders should be established to advise the Navy on its present and future activities affecting public lands.

J-7

Sincerely,

WILLIAM A. MOLINI, ADMINISTRATOR

Richard T. Heap, Jr.
Regional Manager
Region I

CC: Habitat, Reno
Chris Hampson
John Walker, FAX 687-5277

Letter J
William Molini, State of Nevada, Division of Wildlife

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter J. Letter J has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter J comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
J-1	13c
J-2	5f
J-3	13d, 20m
J-4	5d
J-5	13a
J-6	26bbbbb
J-7	4a, 5d, 5f

Letter K

BOB MILLER
Governor

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF MINERALS
400 W. King Street, Suite 106
Carson City, Nevada 89710
(702) 687-5050 • Fax (702) 687-3957

LAS VEGAS BRANCH:
4220 S. Maryland Pkwy.
Suite 304
Las Vegas, Nevada 89119
(702) 486-7250
Fax (702) 486-7252

RUSSELL A. FIELDS
Administrator

September 30, 1997

Julie Butler, Coordinator
Nevada State Clearinghouse
Department of Administration, Planning Division
Blasdel Bldg., Room 200
Carson City, NV 89710

Re: Nevada SAI# E1998-008 -- Draft Environmental Impact Statement (DEIS) -- Withdrawal of Public Land for Range Safety and Training Purposes at NAS Fallon -- Due Date: October 1, 1997.

The Nevada Division of Minerals appreciates the opportunity to review the draft environmental impact statement (DEIS) for the proposed land withdrawal for the Naval Air Station, Fallon.

The Division would like to offer the following observations:

It is disheartening to see yet another large land area proposed for removal from the steadily diminishing public land pool in the State of Nevada. The opportunity for discovery, exploration, and development of mineral resources, and the opportunities for other "multiple-uses" of the public land is lost with every new military land withdrawal. We continue to urge the Navy and all other branches of the military active in land withdrawals in Nevada to be mindful of the loss of resources to the citizens of the state and to limit withdrawals and identify currently withdrawn lands for release at every opportunity. K-1

Division of Minerals comments and questions are as follows:

* Despite statements in the DEIS that the Navy won't increase the size of existing target ranges (Section 4.1.2, page 4.2, et al.) what assurances does the public have that this is really true? With the increased acreage proposed under any of the three withdrawal alternatives, a possibility would certainly seem to exist for target range expansion. Would these hypothetical expansions lead to additional "accidental" off-range ordnance incidents, fouling of areas having mineral potential or other uses such as recreation or grazing? Should the public anticipate, in 15 or 25 years (or whenever the next reauthorization comes along), a request from the Navy for an additional 100,000-plus acre "safety" zone? Please provide a statement in the final EIS or in a follow-up resource management plan (RMP) that responds to this issue. K-2

* Will movement of ground troops and equipment through the proposed Dixie Valley corridor result in contamination within or adjacent to the corridor that could result in additional withdrawals? K-3

* On page 2-23 (Table 2-4) under "Mining Exploration" the Navy reserves the right to approve development of mineral resources on Category B lands where exploration activities have been positive. The Navy should be required to follow the same guidelines as the BLM or Forest Service in permitting a mining operation. If Category B lands are open for exploration, they certainly should be open for mine development. K-4

* The Navy should look at opportunities to grant private industry the permits to develop sand and gravel/aggregate resources that might benefit the Navy in local site construction projects (p. 2-33, Table 2-4 "Leasable-Salable Minerals"). K-5

* Section 3.10.4 "Appraisal of Mineral Resources" — the Jet prospect is identified as a possible 1.8 million ton open pit gold property. Its location should be shown on Figure 3.9. K

* The Navy should make an effort to catalog non-mission critical lands that might be suitable for return to public land status. Please discuss in the final EIS. K-7

* The Navy should take steps to protect all identified areas of moderate and high mineral resource potential from ordnance contamination. K-8

* The Navy should make an effort to clean up areas of identified moderate and high mineral resource potential that have been contaminated in the past. K-9

Division staff look forward to the opportunity to review the final EIS once it becomes available.

Please contact the Division at any time for additional information or assistance.

Sincerely,

Bill Durbin

Bill Durbin
Geologist

bd\ea\980008

Letter K
Bill Durbin, State of Nevada, Division of Minerals

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter K. Letter K has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter K comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
K-1	18a
K-2	22c
K-3	21b
K-4	18b
K-5	18c
K-6	18d
K-7	6c
K-8	18e
K-9	22b

Letter L

PETER G. MORROS
Director
Department of Conservation and Natural Resources

PAMELA B. WILCOX
Administrator

BOB MILLER
Governor

State Land Office
State Land Use Planning Agency
Address Reply to:
Division of State Lands
Capitol Complex
Carson City, Nevada 89710
(702) 687-4363

STATE OF NEVADA

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Division of State Lands

September 30, 1997

MEMORANDUM

TO: Julie Butler, State Clearinghouse Coordinator

FROM: Mike Del Grosso, Planner

SUBJECT: DEIS- Withdrawal of public land for Range Safety and Training purposes at NAS Fallon (SAI E1997-008, due 10-1-97)

This agency is always concerned when appropriate uses which have historically occurred on any public lands are jeopardized. The restrictions proposed on the lands being requested for withdrawal by the Navy are no exception. Restriction of use should occur only for the best of reasons. Co-use or multiple use of public lands should be encouraged and allowed to take place wherever possible.

L-1

The creation of two categories of land to be withdrawn helps to alleviate some of the impacts that may be caused by the withdrawal. Category A lands, those already impacted by off-range ordinance, should be subject to "higher" standards of limitations because of safety concerns for other users. Category B land is not subject to the same hazards and the use of those lands should be more permissive.

While many of the proposals regarding the use or restrictions on both Category A and B lands appear reasonable and supportable, there does not appear to be any assurance that the mitigation measures being proposed will be implemented.

L-2

Regarding Category A lands. Livestock grazing and mineral development will be curtailed. This may be appropriate, however, there is no assurance that appropriate mitigation to compensate for these losses will be made. Mitigation proposed is that the Navy will "explore" means to compensate holders of affected grazing permits and holders of impacted mining patents and valid unpatented claims on Category A lands. Congressional support, which is always

L-3

questionable, is alluded to. We contend that there may be no compensation to those losing the right to use the land proposed for withdrawal they now have. The Draft Environmental Impact Report, therefore, does not tell us what the actual impacts to the users will be since there is no guarantee of mitigation. L-3

Overall management of Category B land is also indefinite. Management plans are to be worked out in the future. Guidelines and intentions are discussed in the DEIS but what management will actually be and the impacts on non-military use of the land are not clearly disclosed. Assurances in the DEIS that reasonable uses of the land to be withdrawn as Category B land, which do not interfere with ever changing Navy use, will be allowed, does not describe what will actually take place. Such promises of continued, reasonable use of land that has been previously acquired or withdrawn by the Navy has not usually occurred despite Navy assurances. Horse Creek and Dixie Valley are recent examples. L-4

We feel that actual management plans for the withdrawn lands must be included as part of the DEIS so that actual impacts and loss of use of the public lands can be better evaluated. Mitigation measures must be actions that can and will be implemented. All else is speculation. L-5

Letter L
Mike Del Grosso, State of Nevada, Division of State Lands

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter L. Letter L has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter L comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
L-1	5h
L-2	6e
L-3	6a
L-4	5f, 5g
L-5	5g

Letter M
James D. Morefield, State of Nevada, National Heritage

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter M. Letter M has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter M comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
M-1	13e

Letter M

NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
Blasdel Bldg., Rm. 200
(702) 687-4065
fax (702) 687-3983

RECEIVED JUL 17 1997

DATE: July 15, 1997

Governor's Office	Legislative Counsel Bureau	Conservation-Natural Resources
Nuclear Projects Office	Communications Bd.	Director's Office
Business & Industry	Emp. Training & Rehab Research Div.	State Lands
Agriculture	PSC	Environmental Protection
Energy	Transportation	Forestry
Minerals	UNR Bureau of Mines	Wildlife
Economic Development	UNR Library	Region 1
Tourism	UNLV Library	Region 2
Fire Marshal	Wild Horse Commission	Region 3
Human Resources	Historic Preservation	Conservation Districts
Aging Services	Emergency Management	State Parks
Health Division	Washington Office	Water Resources
Colorado River Commission		Water Planning
Indian Commission		Natural Heritage

RECEIVED
SEP 26 1997
DEPT. OF ADMINISTRATION
DIRECTOR'S OFFICE

Nevada SAI # E1997-008 Project: DEIS – Withdrawal of Public Land for Range Safety and Training Purposes at NAS Fallon

☑ Yes ☐ No Send more information on this project as it becomes available.

CLEARINGHOUSE NOTES:
See Related SAI # 95300152.

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than October 1, 1997. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. If you have any questions, please contact Terri Rodefer, Clearinghouse Environmental Advocate, at 687-6382, or Julie Butler, Clearinghouse Coordinator, at 687-6367.

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

☐ No comment on this project	☐ Conference desired (See below)
☐ Proposal supported as written	☐ Conditional support (See below)
☑ Additional information below	☐ Disapproval (Explain below)

AGENCY COMMENTS:

The DEIS does not address the effects that new or increased ground disturbances within the proposed withdrawal areas could have on the invasion and/or further spread of noxious weeds and other exotic species. We request that the final EIS include all measures necessary to avoid such effects. M-1

James D. Morefield
Signature

Natural Heritage
Agency

25 Sept. 1997
Date

Letter N

CITY OF FALLON
OFFICE OF THE
MAYOR

KEN TEDFORD JR
MAYOR

September 16, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006
Attn: Mr. Sam Dennis, Code 1851

RE: Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes in the vicinity of NAS Fallon, Nevada.

Dear Mr. Dennis,

My staff and I have reviewed in detail the draft EIS and would like to convey our unequivocal support for this public safety initiative as proposed in Alternate II, the Preferred Alternative. The proposed actions all occur within Churchill County and will positively impact our citizenry. My reasons for this endorsement are as follows:

- The redesignation of the small amount of federal land around the bombing ranges to category A is a prudent safety precaution for the residents of Nevada, especially considering the significant leaps in tactical aircraft performance which have occurred since these ranges were first designed.

- The remaining land redesignated for category B allows co-usage by our citizens while easing restrictions on important national defense training such as Combat Search and Rescue.

N-1

- The Navy has been a good neighbor to the citizens of Nevada. In contrast to other federal agencies, the U.S. Navy has continuously worked to meet fundamental national goals while minimizing, to the greatest extent possible, the total amount of land withdrawn from public use. Additionally, their willingness to work with the responsible citizens of Nevada has been demonstrated by the following recent U. S. Navy initiatives:
  - The realignment of the flight paths at Bravo 16, an action which will all but eliminate noise and overflight issues for the 2400 people in the Sheckler District.
  - The installation of sound monitors on the ranges near noise sensitive areas.
  - The re-routing of low level training routes in the local area.

55 W. Williams Avenue • Fallon, Nevada 89406 • (702) 423-0167

* The formation of a Citizens Outreach Group.
* The creation of a Bureau of Land Management advisory position at NAS Fallon.
* Attaining local authority to adjudicate noise damage claims, (a process that used to take months, now takes days).
* The Navy's request to extend the comment period for this EIS from 45 to 90 days to allow the widest possible participation by Nevada citizens, despite the fact that there are no airspace changes and this land realignment proposal only affects Churchill County.
* NAS Fallon Search and Rescue helicopter crews have saved the lives of numerous civilians throughout Northern Nevada and California, and currently hold the record for the highest number of helicopter rescues in the Navy. (44 in the last three years).

N-1

Local military issues are easy to demagogue and paid lobbyists from anti-military and environmental extremist groups have a history of successfully doing so. However, I am certain that if the citizens of the City of Fallon were to review the Navy's draft EIS in a rational, measured approach, they would conclude, like I have, that this proposal is prudent public policy and appropriate co-usage of our environment.

Sincerely,

Ken Tedford

The Honorable Ken Tedford, Jr.
Mayor, City of Fallon

Letter N
Ken Tedford, Jr., Mayor, City of Fallon

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter N. Letter N has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter N comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
N-1	27a

Letter O

Office of the
Churchill County Commissioners
10 West Williams Avenue
Fallon, Nevada 89406

October 2, 1997

Mr. Sam Dennis
Environmental Planning Branch, Code 1851
Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

Re: DEIS for "Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station, Nevada"

Dear Mr. Dennis:

The Board of Churchill County Commissioners offers the following comments in a spirit of constructive cooperation intended to foster a dialogue on the above-referenced DEIS ensuring that the concerns expressed about public and military safety around the training ranges is adequately addressed. We enjoy an ever strengthening relationship with NAS Fallon and must state that the Navy's efforts to enhance range safety for both the general public and those aviators training to ensure our nation's security is commendable.

The Navy's forthright disclosure of certain operational problems involving off-range ordinance and noise, while generating a level of controversy in some circles, has served to bring the issues before the public fostering a new level of awareness in an era of the "Right to know."

O-1

The Board of Churchill County Commissioners supports the Navy's presence in Northern Nevada and the significant contribution made to our regional economy and general well being. NAS Fallon, in turn, has demonstrated its willingness to accommodate public concerns such as the pending realignment of the run-in line to the B-16 practice bombing range. This proposal will have the effect of eliminating military overflights of residential areas experiencing rapid growth and has the full support of the Board of Churchill County Commissioners.

Mr. Sam Dennis
Environmental Planning Branch, Code 1851
Commanding Officer
October 2, 1997
Page 2

We have included more specific comments attached hereto. Should you have any questions, or require any further information, please do not hesitate to contact us.

Sincerely,

James Regan
Chairman

JR:wg
enclosure

Churchill County

Comments on the Draft Environmental Impact Statement (DEIS) for the Withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada.

Executive Summary

Pg. ES-5, 4th Para.-States that BLM published NOI and held open house on flight pattern changes. Should this be NAS Fallon or FAA? | O-2

Pg. ES-5, 5th para.- Along with identifying the action alternatives, no action alternative, and the Navy's preferred alternative, does the Navy intend to identify the "Environmentally Preferred Alternative". | O-3

Pg. ES-10, 2nd para., see Pg. 1-3, 4th para., and Pg. 2-10- The Executive Summary does not mention elimination of the old Sahwave Range or the status of the Nevada Air Guard designated air space in that vicinity.. | O-4

Chapter 1 - Purpose Of and Need For Action

Pg. 1-1, 3rd. para.- Section states that a formal resource management plan will be developed subsequent to withdrawal. Also see pg. 2-28, last para. and Pg. 3-1, para 3. As we read the regulation, 43CFR 2310.3-2(c) requires that prior to final action, the applicant shall prepare a resource management plan and implementation program regarding use and management of the public lands to be withdrawn. The management plan and implementation program will be implemented through a memorandum of understanding. | O-5

Chapter 2- Proposed Action and Alternatives

For clarification, it would be useful to identify the amount of category A & B lands in Table 2-1. | O-6

Pg. 2-27, 3rd para.- Will category A lands be fenced to preclude wild horse and livestock grazing? | O-7

Pg. 2-27, 4th para.- Not clear as to how the Navy intends to deal with the existing rights established under current mining law? | O-8

Pg. 2-29, last Para.- Would existing structures be grandfathered-in? | O-9

Chapter 3- Existing Environment

Pg. 3-19, Noise- Refer reader to figures 1-4 and 1-6 in the Existing Noise Conditions section. | O-10

Pg. 3-34, last para.- A Sierra Pacific Power Company's 230 Kv transmission line crosses the Dixie Valley withdrawal area from east to west, connecting to Utah Power and Light's power grid. | O-11

Land Use Pg. 3-28-It would be useful to reference category A and B lands in this discussion. | O-12

Pg. 3-34 Land Use Activites-Grazing occurs at Sheckler Reservoir as well. | O-13

Section 3.9-This description should estimate the number of persons living adjacent or in the proximity of B-16. | O-14

Pg. 3-40, 5th para.- Federal government administers 82% of the lands in Churchill County. Source: Churchill County Master Plan, 1994 | O-15

Pg. 3-54, 1st para.- Explain the difference in ownership between pre- and post 1955 mining claims. | O

Chapter 4- Environmental Consequences

Pg. 4-1, 3rd para.- The DEIS is confused as to when the resource management plan is to be prepared. Chapters 1 & 3 say after withdrawal, while chapter 2 and this section state prior to the withdrawal. It would clarify this issue if the schedule for the resource management plan and the associated implementation plan were included in this DEIS showing that these documents are to be completed prior to the withdrawal of the public lands. | O-17

Pg. 4-12, last para.- Will continued maintenance of the three watering troughs be continued? | O-18

Pg. 4-28, Mineral Resources- When legislation authorizing this withdrawal is written, could the Navy allow mining on the Category B lands without special mining regulations being promulgated? | O-19

Chapter 5- Cumulative Impacts

Pg. 5-7 Water Resources USGS Report 93-463, Maurer 1994 provides a much more detailed and accurate description of the groundwater aquifers in Lahontan Valley. | O-20

Pg. 5-7 Biological Resources- A map should be included overlaying wildlife habitat and military operations areas. | O-21

Pg. 5-6 & 5-18- Shouldn't Public law 101-618 be included in the cumulative impact section? | O-22

The cumulative impact analysis section provides three types of analysis; one of existing military activities and facilities, one of proposed activities and facilities, and yet another called *regional cumulative effects*.. Shouldn't a cumulative analysis include all past, present and reasonably foreseeable impacts in one analysis, including activities of other federal agencies? | O-23

Appendix A

Table A-1 indicates that in 1984 the Navy transferred approximately 500,000 acres to BLM. Is this date correct? | O-24

Letter O
James Regan, Office of Churchill County Commissioners

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter O. Letter O has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter O comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
O-1	27a
O-2	26ccccc
O-3	26ddddd
O-4	26eeeee
O-5	26fffff
O-6	26ggggg
O-7	26hhhhh
O-8	26iiiii
O-9	26jjjjj
O-10	26kkkkk
O-11	26lllll
O-12	26mmmmm
O-13	26nnnnn
O-14	26ooooo
O-15	26ppppp
O-16	26qqqqq
O-17	26rrrrr
O-18	26sssss
O-19	26ttttt
O-20	26yyyyy
O-21	26vvvvv
O-22	26wwwww
O-23	26xxxxx
O-24	26yyyyy

Letter P

Churchill Economic Development Authority

448 West Williams Avenue
Fallon, Nevada 89406

Phone (702) 423-8587
Fax(702) 423-0381

September 30, 1997

BOARD OF DIRECTORS

Chairman
Kelly Hiatt
A & K Earth Movers, Inc.

Vice Chairman
Willis Swan
Fallon City Councilman
Kennametal, Inc.

Secretary
Terri Laca
CEDA

Member
Ken McConnell
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Member
Frank Woodliff, III
Greater Fallon Area
Chamber of Commerce

Member
Gwen Washburn
Churchill County
Commissioner

Executive Director
Shirley G. Walker
CEDA

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California
94066-5006

Attn: Mr. Sam Dennis, Code 1851

RE: Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes in the vicinity of NAS Fallon, Nevada

Dear Mr. Dennis:

I have studied the draft EIS in depth and support alternate II, the Preferred Alternate for public safety.

Obviously the safety precaution assured to residences of Nevada is certainly worth while and the amount of land to be withdrawn to accomplish it is minusicule and will alow land redesignated for Category B to be used by citizens.

We are very aware of the steps you have taken to work with the citizens of Nevada, especially the creation of a Citizens Outreach Group, the installation of sound monitors and the realignment of the flight path over Bravo 16. These are but a few of the responsible steps taken by NAS Fallon.

P-1

NAS Fallon is an unusually good neighbor to our community and the monetary contribution to our development areas and Nevada are too numerous to list in this correspondence.

page 2.

We can only express our "thanks" for your initiatives to mitigate what seems to be a problem to just a few of our citizens. P-1

Sincerely,

Shirley G. Walker,
Executive Director

SGW/tl

Letter P
Shirley G. Walker, Churchill Economic Development Authority

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter P. Letter P has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter P comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
P-1	27a

Letter Q

EUREKA COUNTY
PLANNING COMMISSION
PO BOX 596
EUREKA, NV 89316

TELEPHONE: (702) 237-5372

FAX: (702) 237-5708

September 3, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

The Eureka County Planning Commission has directed me to respond to the Naval Air Station, Fallon, Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands, dated June, 1997. While the Board members are extremely concerned about the negative effects the overall plan will have on developmental planning within Eureka County, there are three main issues of concern.

First, because of complaints on limited distribution of the DEIS, the Commission is recommending a 60 day extension for the comment period. The current comment period ends October 10 and more time is needed to adequately address all the issues. Q-1

Second, there is a concern that rural areas are being left out of the planning process. These areas will experience the greatest impacts and should have more involvement in the public participation process. Hearings are scheduled in Reno (September 16) and Fallon (September 17). Additional hearings to include central Nevada residents would be desirable. Q-2

Third, we are requesting that the proposed Diamond, Duckwater and Smoky MOA's be included for analysis in sections 1-4 of the DEIS. Although No formal steps have been undertaken to withdraw air space for the Diamond, Duckwater and Smoky MOA's and the DEIS lists the proposed MOA's as being in the reasonably foreseeable future, many other documents and statements indicate these MOA's will be established. Q-3

We are extremely concerned about these issues and would welcome any support and assistance regarding this matter.

Sincerely,

Ken Conley

Ken Conley
Chairman

KC/lh

Letter Q
Ken Conley, Eureka County Planning Commission

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter Q. Letter Q has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter Q comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
Q-1	2c
Q-2	2b
Q-3	12e

Letter R

FAX
(702) 237-6015

TELEPHONE
(702) 237-5262
(702) 237-5641

BOARD OF
EUREKA COUNTY COMMISSIONERS
P.O. BOX 677
EUREKA, NEVADA 89316

October 6, 1997

Sam Dennis
Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Dr.
San Bruno, CA 94066-5006

Dear Mr. Dennis:

Our Commission has reviewed the Draft Environmental Impact Statement – Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada. Please address the following general comments

- At numerous locations in the document, the DEIS states the Navy will "explore means to compensate property owners subject to congressional authorization and appropriation." While this statement may have been intended to apply to the entire proposed action, the wording in the DEIS implies private property could be taken without compensation. The DEIS should clearly state that if the proposed action results in property takings, the owners will be justly compensated. R-1

- This Commission is very concerned with public health and safety issues related to the proposed and foreseeable actions. We feel the potential for increased risk due to falling objects and noise for major transportation corridors should be analyzed in the DEIS. R-2

- The DEIS should completely define the impacts of the proposed and foreseeable actions to commercial airlines. Because commercial airlines represent a portion of our tax base, we feel it is very important to have these potential impacts clearly defined. The DEIS and public hearings with the Navy have resulted in our confusion on just what impacts will be felt by commercial airlines. R-3

- The DEIS analyzes the impacts of EW and TACT sites without delineating a location. We are concerned the Navy may be piecemealing the NEPA process. These sites should be adequately analyzed in the DEIS. R-4

- We are very concerned about the Navy withdrawing category B lands and seeking Congressional authorization for BLM to provide the actual land management. This Board has on numerous occasions been required to supply BLM with financial or technical support to complete projects because BLM did not have the staff, money or time. We would encourage the Navy not to withdraw lands they do not want to manage. R-5

- The DEIS shows reasonably foreseeable MOA expansion that covers much of central Nevada. However, at recent public hearings in Reno and Austin, Navy officials indicate the actual foot print is much smaller. If this is true, the DEIS should analyze the actual foot print. R-6

This Commission has the following recommendations in selecting the final alternative action:

- The Navy should only be allowed to withdraw lands contaminated with ordinance and reasonable buffers. The final alternative should also include reasonable safeguards to prevent expanding contamination as well as provisions to hold the Navy accountable. R-7

- The final alternative selected should include the use of other existing DOD facilities to minimize impacts in central Nevada. R-8

Although we appreciate this opportunity to comment, we are still discouraged that public hearings were not held in Eureka. We are also discouraged with the low number of DEIS's distributed in Eureka County early in the process and request the comment period be extended.

Sincerely,

Pete Goicoechea
Chairman

PG/lh

Letter R
Pete Goicoechea, Board of Eureka County Commissioners

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter R. Letter R has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter R comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
R-1	6a
R-2	12f
R-3	12h
R-4	2e, 10d
R-5	5e
R-6	12d
R-7	22c
R-8	3b

Letter S

Julie C. Costello
Brent Eldridge
Carol O. McKenzie
Cheryl A. Noriega

953 Compton St.
Ely, Nevada 89301
(702) 289-8841
Fax. (702) 289-8842

White Pine County
Board of County Commissioners

September 22, 1997

Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

White Pine County is in receipt of an abstract concerning the Draft Environmental Impact Statement (DEIS) for the withdrawal of public lands for range safety and training purposes at Naval Air Station (NAS) in Fallon, Nevada.

The Board of County Commissioners would like very much to receive a list of local scoping meetings, or hearing dates. So this Board can better understand the impacts of the areas that will be affected by the withdrawal of lands, we would ask for a copy of the Draft Environmental Impact Statement. S-1

Due to the short notice on this matter, the Commission would respectfully request a 60 day extension period for comments to be presented. An extension of time would allow this Board to be better prepared when we attend the hearings.

Your prompt response in this matter would be greatly appreciated.

Yours Truly,

BOARD OF COUNTY COMMISSIONERS

Carol O. McKenzie

Carol O. McKenzie,
Chairwoman

COM/dm

Letter S
Carol O. McKenzie, White Pine County Board of County Commissioners

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter S. Letter S has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter S comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
S-1	2c

Letter A
David J. Farrel, US Environmental Protection Agency

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter A. Letter A has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter A comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
A-1	1a
A-2	1a
A-3	1a
A-4	21a
A-5	26a
A-6	6a
A-7	26b
A-8	14a
A-9	16a
A-10	16a
A-11	16a
A-12	23a
A-13	23a
A-14	16b
A-15	16b
A-16	23b
A-17	23a, 23b
A-18	23c

Letter T

EUREKA COUNTY
NATURAL RESOURCES DEPARTMENT
PO BOX 682
EUREKA, NV 89316

FAX: (702) 237-6012 TELEPHONE: (702) 237-6010

October 9, 1997

Mr. Sam Dennis
Environmental Planning Branch
900 Commodore Dr.
San Bruno, CA 94066-5006

Dear Mr. Dennis,

Attached are specific comments on the Navy's DEIS – Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station, Fallon. In addition to my own comments, the following includes comments from Eureka County Commissioners, Public Land Advisory Commission members, Planning Commission members, the District Attorney's Office and the general public.

I would recommend that the final EIS include:

- An expanded analysis of impacts on local governments especially in the cumulative impacts section. The impacts of existing, proposed and foreseeable actions occur over much of Central Nevada and analyzing impacts for only Churchill County is not acceptable. T-1
- The Public Heath and Safety sections should be expanded and include analysis on possible impacts to people using the major transportation corridors. T-2
- The mitigation language for property takings needs to be changed. Although the proposed action may be subject to Congressional authorization and appropriation, the document implies this is also true for compensating property takings. T-3
- The locations for EW, TACT and visual cueing sites should be delineated. The Special Nevada Report (page 3-13) shows existing and proposed locations. Without an actual location, it is impossible to analyze impacts. T-4

- Many of the maps and figures need to be changed and all should show official highway designations and the location of towns in central Nevada. T-5

Thank you for this opportunity to comment.

Sincerely,

John Balliette

John Balliette
Contractual Resource Manager

JB/lh

cc Eureka County Commission
Eureka County District Attorney
Eureka County Planning Commission
Eureka County Public Advisory Commission
Nevada Congressional Delegation

Attachment: Specific Comments – DEIS, Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada

Specific Comments – DEIS, Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada

Page 1-1, Section 1 Purpose and Need, 1.1 – The first paragraph states the withdrawal will not increase air operations or increase the size of the impact area within the ranges. However, the reasonably foreseeable future lists the Diamond, Smokey and Duckwater MOA's as reasonably foreseeable future withdrawals. This indicates increased air operations and increased impacts outside of Fallon NAS. We are concerned that the withdrawal of public lands for Fallon NAS is the gate to acquire more land and airspace for military uses. The three MOA's (Diamond, Duckwater and Smokey) are not independent of the proposed action and should be analyzed in this DEIS. T-6

Page 1-1, Section 1 Purpose and Need, 1.1 – The third paragraph indicates the Navy plans to withdraw public lands "subject to existing valid rights." However, in Chapter 4 the Navy will "explore means to compensate property owners subject to Congressional authorization and appropriation." The Fifth Amendment of the Constitution clearly states private property cannot be taken for a public use without just compensation. If the Navy does not have authorization or appropriation, they cannot take private property. T-7

Page 1-4, Figure 1-1 Locations of NAS Fallon and FRTC – This map should show SR839 - the Scheelite Road. Also, this map indicates SR121 terminates at the "Dixie Valley Land Holding" which is incorrect. This road goes beyond Dixie Valley. T-8

Page 1-6, Section 1.2.2.1 Naval Air Training Continuum - Battle Groups Work Ups – If aircraft are deployed from carriers, why should Fallon be the primary training area? Nellis and other existing military withdrawals in California should be considered before expanding operations in Nevada. T-9

Page 1-7, Section 1.2.2.3 Training Facilities and Capabilities – The first paragraph states no other DOD facilities in the region have the ability to maintain Navy aircraft. This is a frightening scenario. If the Navy cannot coordinate with other DOD facilities in peace time, what should we expect when our nation is in a war type situation? Please explain why other DOD facilities cannot or could not maintain Navy aircraft. T-10

Page 1-11, Section 1.3 Purpose – Providing necessary land so the Navy can change and improve training has a bearing on what actions are reasonably foreseeable. We contend the Navy has every intention of developing the Diamond, Duckwater and Smokey MOA's as part of their plans to change and improve training. These MOA's should be analyzed in Chapters 1-4 of this EIS. T-11

Page 1-12, Section 1.4.1 Introduction – This section notes that in order to create realistic conditions, large corridors of land with varying terrain are required. This also has a bearing on reasonably foreseeable actions and future airspace designations (such as T-12

the Diamond, Duckwater and Smokey MOA's) and should be addressed in Chapters 1-4 of this DEIS. T-12

Page 1-13, Section 1.4.2 Improve Realistic Operational and Strategic Combat Training – The last sentence of the third paragraph on this page points out the current topography on land available to the Navy does not provide sufficient terrain or area to facilitate their training. This also has a bearing on reasonably foreseeable actions and further indicates that the Diamond, Duckwater and Smokey MOA's should be analyzed in this DEIS. T-13

Page 1-14, Section 1.4.2 Improve Realistic Operational and Strategic Combat Training – The fourth paragraph states that changes in military training requirements have resulted in the Navy's inability to meet current training needs within the existing footprint of Fallon NAS ranges. This also has a bearing on reasonably foreseeable actions. Because the Navy wants more land and airspace to meet training needs, the designation of additional airspace (Diamond, Duckwater and Smokey MOA's) will be required. This DEIS should analyze the impacts of additional withdrawals of airspace in Chapters 1-4. T-14

Page 1-15, Section 1.4.2 – The first paragraph of this page notes that B-17, B-19 and B-20 are unavailable for non-CVW training when CVW's train at Fallon. The third paragraph on this page indicates demand for use of ranges often exceeds range availability. Again a strong argument can be made that Fallon NAS will expand and the expanded designation of airspace. The Diamond, Duckwater and Smokey MOA's should be analyzed in this document in Chapters 1-4. T-

Page 1-15, Section 1.4.2 Improve Realistic Operational and Strategic Combat Training – The last paragraph on this page states Fallon NAS "... does not interfere with major civilian airports." Does training at Fallon NAS interfere with minor airports, private flights and emergency medical flights? Will the Navy rely on the local services, such as Search and Rescue, and will Navy resources be available for non military search and rescue? T-16

Page 1-16, 17, Section 1.4.2 Improve Realistic Operational and Strategic Combat Training – The discussion on urban growth west of Fallon and the increased use and development of federal lands also has a bearing on reasonably foreseeable future actions. Because of these factors, the Navy will continue to expand eastward in terms of land withdrawals and airspace designations. The future and related designations of airspace should be analyzed in Chapters 1-4 of this DEIS. T-17

Page 1-18, Section 1.4.3 Increase Control and Management of Safety Buffers – The second paragraph on this page indicates the probability of people being struck by dropped objects is less than being struck by lightening. The EIS goes on to explain that this analysis did not include proximity to training ranges or air fields. This down playing of the possibility of people being struck by dropped objects is very offensive. Highway 50 T-18

is the major transportation route for people who live in Central Nevada. This EIS should note that people who use Highway 50 are more likely to be struck by dropped objects than people who do not use Highway 50. The EIS should analyze this important safety factor and the EIS should also analyze whether people who live in Central Nevada should be subjected to this safety hazard. T-18

Page 1-19, Figure 1-3 – State Routes 121 and 839 are not delineated on this figure. Is this oversight an attempt to down play the importance of these highways as important transportation corridors? T-19

Page 1-21, Figure 1-4 – Highway 95 was left off this map. Is this oversight an attempt to downplay the importance of this highway as an important transportation corridor? T-20

Page 1-23, Section 1.4.3.3 Off-Range Ordinance Sweeps, Sweep Findings – The first paragraph notes that the Navy and BLM agreed to withdraw approximately 7,750 acres because of off-range ordinance. If a private company or individual was responsible for contaminating 7,750 acres with hazardous ordinance they would undoubtedly face serious environmental and probably criminal violations. This document should list assurances that will avoid similar contamination and hold the Navy responsible for violations. T-21

Page 1-23, Section 1.4.3.3 Off-Range Ordinance Sweeps, Sweep Findings – The second paragraph of this section states 12,180 acres of BUREC administered lands contain off-range ordinance. Wetlands and migratory bird impacts should be addressed in this section. T-22

Page 1-23, Section 1.4.3.3 Off-Range Ordinance Sweeps, Sweep Findings – The fourth paragraph of this section indicates sweeps to clear surface ordinance are 92.7% effective. That means 7.3% of the land area is still contaminated. This section should mention possible impacts on public safety. For example, are people who travel Highway 50 subject to increased risks of encountering off-range ordinance? T-23

Page 1-24, Figure 1-5 Off-Range Ordinance Lands – This map should designate State Routes 839 and 121. Is this omission an attempt to down play the importance of these highways for local transportation? T-24

It is also interesting to note that BLM lands containing off-range ordinance and the weapon safety footprint (Figure 1-3) have such straight boundaries. It is also interesting that these boundaries coincide so well with the northern boundary of the Walker River Indian Reservation (B-16) and Highway 50 (B-17). These boundaries should be re-examined because they may indicate more contamination than actually exists in some areas and less contamination than actually exists in other areas. T-25

Page 1-25, Section 1.4.3.4 Armed Overflight Zones – While this section identifies Range Safety Zones (RSZ's) it does not discuss these zones in relation to Highways 50 and 95 and State Route 839. This section should note that Highways 50 and 95 pass T-26

through RSZ B and that SR 839 passes through RSZ's A and B. Public safety should be addressed in this section. T-26

Page 1-26, Section 1.5 Public Scoping – While nearly all of Central Nevada will be affected by the proposed action, the Navy focused their efforts on Western Nevada. Scoping, as well as notices in local papers, should have included hearings in Eureka, Ely, Elko, Battle Mountain and Hawthorne.

The Navy has also been remiss regarding distribution of the DEIS. When Eureka County requested 5 copies of the DEIS we were informed by Mr. Sam Dennis that copies were limited and we should try again in early October (right before comments are due). The Navy has not completed adequate outreach to local governments in Central Nevada concerning this major action. We are aware of two other counties in Central Nevada who did not receive a DEIS. This is inadequate and unacceptable. The schedule for comments should be relaxed and public scoping and hearings should be conducted in Central Nevada. T-27

Page 1 -27, Figure 1-6 RAICUZ Study:... – This figure should delineate SR's 121 and 839. Is this omission an attempt to down play the importance of these highways for regional transportation? T-28

Page 2-2, Section 2.1 Proposed Action – The second paragraph on this page indicates this withdrawal will not increase total air operations. If this is the case then why are the Diamond, Duckwater and Smokey MOA's listed as reasonably foreseeable future actions? We would argue that the Fallon NAS withdrawal is simply a piecemealed portion of a larger plan to withdraw considerable land and airspace in Central Nevada for military use. T-29

Page 2-2, Section 2.1 Proposed Action – The third paragraph on this page indicates up to five EW sites and up to 50 sites for visual cueing will be developed on withdrawn lands for a total disturbance of 75 acres. This figure does not account for access roads and utility corridors. How can the affect of EW and visual cueing sites be evaluated if no one knows where these sites are located? This document should state where each of these sites will be located in order to determine the impacts. The location of these sites was presented in the Special Nevada Report and the locations should be listed in the EIS. T-30

Page 2-2, Section 2.1 Proposed Action – The last paragraph in this section should include the Migratory Bird Treaty Act for consultations. T-31

Page 2-2, Section 2.2.1 Alternative Formulation Process – The bullets describing actions coordinated by the Navy are too brief and should be expanded. For example, the fourth bullet indicates there are land uses incompatible with military operations. What are these incompatible uses? Either in this section or an appendix, the results of consultation, identification and scoping should be expanded to aide in the readers T-32

understanding of why the Navy supports the proposed alternative and why other alternatives were not considered. T-32

Page 2-3, Section 2.2 Alternatives – The fifth bullet on this page indicates the Navy has consulted with local agencies with an interest in the action. The Navy has not been to Eureka County for at least three years. T-33

Page 2-3, Section 2.2 Alternatives – The second and third bullets under 2.2.1 suggest MOA expansion in Central Nevada. The Navy admits to planning land withdrawals and allowing for the most effective and efficient training. Again Eureka County would prefer that the Diamond, Duckwater and Smokey MOA's are analyzed in Chapters 1-4 of this EIS. T-34

Page 2-4, Section 2.2.1 Alternatives Formulation Process – Item 2 on this page indicates the action must protect the public from safety hazards. Discussions of the preferred alternative must include this fact that highways and state routes pass through Range Safety Zones A and B. Furthermore, possible effects on public safety should also be clearly defined. T-35

Page 2-4, Section 2.2.1 Alternatives Formulation Process – Item (3) indicates that actions should minimally disrupt the BLM mission to provide for multiple uses on public lands. The proposed action calls for the withdrawal of over 127,000 acres from multiple use. Furthermore, Chapter 5 lists the Diamond, Duckwater and Smokey MOA's as reasonably foreseeable future actions. How can this document honestly state that the withdrawal of 127,000 acres and the designation of an additional 10,000 square miles of airspace will not interfere with multiple use? T-36

Page 2-4, Section 2.2.1 Alternatives Formulation Process – Why was socioeconomic affects on rural governments not included in criteria to determine the purpose and need of proposed action? In FY 1995-96 the total assessed valuation of commercial airlines was $144,016,000 (State of Nevada Dept. of Taxation, Annual Report Fiscal 1995-1996). What impacts will the proposed action have on this tax base and is the Navy willing to compensate local government for lost revenues? These topics should be addressed in this DEIS. *(See copied pages)* T-37

Page 2-4, Section 2.2.2 Alternatives Considered in Detail – The acreages for withdrawal in this section conflict with acreages listed in the conclusions of the executive summary of the Hazard Mitigation Report in Appendix D. The executive summary concludes 20,300 acres will be needed for B-17 and B-19. However, Section 2.2.2 indicates much more acreage for all alternatives. Please explain why the proposed action and alternatives call for withdrawing more than was recommended by the Hazard Mitigation Report. T-38

Page 2-5, Figure 2-1 Comparison of Alternative Withdrawal Footprints – This map should designate SR's 121 and 839. Is this omission an attempt to down play the importance of these highways for regional transportation? T-39

Page 2-7, Section 2.2.2 Alternatives Considered in Detail – An alternative that should be considered is the withdrawal of only land contaminated with off-range ordinance. The DEIS is conflicting in defining the need for the proposed action. On one hand the DEIS states that the number of training missions will not increase. On the other hand the DEIS states that withdrawals are needed to improve realistic training. We contend that the mission of NAS Fallon can be met with minimum withdrawals of public lands and should be limited to such. T-40

Page 2-8, Section 2.2.3 Alternatives Not Considered in Detail – It appears that some of the alternatives were eliminated from further study for inadequate reasons. While the Navy contends training will not increase, their argument against the off-range ordinance withdrawal option is they need more land to change and improve. In the selection of reasonable alternatives, it appears that change and improve really mean expand and increase. The closure of other DOD facilities and the addition of training such as TOPGUN and ground maneuvers, indicate there has been and will be increases in training activities at Fallon and the proposed action is needed by the Navy to meet expanding training requirements. If the Navy is not increasing training then the off-range ordinance withdrawal should be analyzed in the DEIS. T-41

Page 2-9, Section 2.2.3 Alternatives Not Considered – The second paragraph under the second bullet has significant implications on reasonably foreseeable actions. The Navy is stating they do not have enough area to change and improve realistic training. This further suggests the increased likelihood of withdrawal for the Diamond, Duckwater and Smokey MOA's. Again, the designation of this airspace is clearly planned and should be analyzed in this DEIS. T-42

Page 2-10, Section 2.2.3 Alternative Not Considered in Detail – The first paragraph on this page indicates the Navy's need for expansion to simulate "real world scenarios." This has major implications on reasonably foreseeable future actions and also indicates the need to analyze the designation of the Diamond, Duckwater and Smokey MOA's in Chapters 1-4 of this DEIS. T-43

Page 2-10, Section 2.2.3 Alternatives Not Considered in Detail – The first paragraph on this page indicates the need for NAS Fallon expansion to provide for "real world scenarios." This has important implications on reasonably foreseeable future actions and indicates the increased probability of designating the Diamond, Duckwater and Smokey MOA's. The designation of these MOA's should be analyzed in Chapters 1-4 of this DEIS. T-44

Page 2-10, Section 2.2.3 Alternatives Not Considered in Detail, Relocate the FRTC – Why was airspace over Nellis AFB and the Nevada Test Site not considered for possible T-45

relocation? Roughly three million acres in Nevada are presently withdrawn for military uses. That airspace should be developed before additional withdrawals are made. This alternative should be considered in detail in the DEIS. T-45

Page 2-10, Section 2.2.3 Alternatives Not Considered in Detail, Relocate the FRTC – The last paragraph on this page indicates new airspace designation will require more withdrawals. How does this relate to the Diamond, Duckwater and Smokey MOA? Will more EW, TACT and visual cueing sites be necessary and if so how many and how much land is needed? The potential for more land withdrawals due to MOA expansion should be evaluated in Chapters 1-4 of this document. T-46

Page 2-11, Section 2.2.3 Alternatives Not Considered in Detail, Relocate the FRTC – The second paragraph indicates Nellis AFB was not considered because the ranges there are primarily test and evaluation (TE) rather than operations and combat (OTM) ranges. With millions of acres at Nellis and the Test Site restricted, why is that airspace not used prior to withdrawing additional land and airspace in Central Nevada? It seems that constructing the EW and TACT sites in Nellis would allow those ranges to be used for O & M. Furthermore, Nellis and the Test Site are more remote than Fallon and have similar basin and range topography. Please reconsider in detail relocating some NAS Fallon to Nellis and the Test Site. T-47

Page 2-11, Section 2.2.3 Alternatives Not Considered in Detail, Relocate the FRTC – The last sentence of the third paragraph notes that the political climate tends towards downsizing military facilities. Why then is the Navy attempting to expand Fallon NAS in terms of land withdrawals and airspace designations? Because of the political climate and future funding, the Navy's request for additional land and airspace should be limited to land that contains off-range ordinance. T-48

Page 2-12 Alternatives Not Considered in Detail, Close B-16 – The last sentence of the fifth paragraph on this page concludes closing B-16 without replacement would affect training operations throughout DOD. Would closing B-16 have a minimal impact that is easily overcome or is it a major impact that will significantly impair training throughout DOD? Please discuss the magnitude of the affect. T-49

Page 2-12 Alternatives Not Considered in Detail, Relocate B-16 Operations... – The reasons listed in this section to support not moving B-16 to Nellis need to be expanded and defined in more detail. The first argument is that en-route time needs to be minimized but the EIS also points out that B-16 is used by numerous training facilities in the west and even by carrier based aircraft. Please explain how this en-route time affects efficiency and exactly how much en-route time will be saved by not relocating B-16. T-50

The second bullet indicates other bases are reaching capacity and training time could not be guaranteed. With the political climate tending towards downsizing, will DOD training also be downsized?

The third bullet indicates Nellis cannot be used because it is a T & E rather than O & M range. If the 50 proposed EW's, TACTS and visual sites were built at Nellis, would that aide in making T & E and O & M more compatible?

The fourth point indicates B-16 in its present location is fuel efficient. This conflicts with the use of this range by other training facilities in the region as well as carrier based aircraft. Furthermore, much of the proposed MOA expansions lie just as far from NAS Fallon as DOD facilities at Nellis and the Test Site. This cost effective argument is not convincing. T-50

Finally the last reason indicates the Navy would have to purchase 10 square miles of land and 100 square miles of airspace. Is this accurate if the millions of acres in Nellis or the Test Site were considered?

Page 2-15, Section 2.3.1 Military Activities Common... – The second paragraph under the first bullet indicates five EW or TACT sites will be established on withdrawn lands if possible. How can the environmental impact of these sites be analyzed if their location is not known? The location of these sites should be delineated in this document in order to determine impacts. Furthermore, the proposed MOA expansions (Diamond, Duckwater and Smokey) will roughly double the airspace for NAS Fallon. Will this expansion also require additional EW, TACT's and visual sites? If 60 to 70 additional sites are needed, how many acres will be disturbed for the actual site, maintenance roads and utility corridors? Again, the expansion of airspace and the impacts to the lands underneath should be analyzed in Chapters 1-4. T-51

Page 2-16, Section 2.3.1 Military Activities Common..., Visual Cueing Devices –This section is not clear on whether visual cueing devices will be limited to withdrawn lands. Furthermore, how can potential impacts be adequately analyzed if the sites are not delineated? The location of these sites should be noted in this DEIS. T-52

Page 2-19, Section 2.3.1 Military Activities Common to All Military..., Active Visual Cueing Devices – The second paragraph under this heading is vague on whether any visual cueing sites will be located off existing Navy controlled ranges. If any visual cueing devices are to be located off existing ranges, the location should be delineated and analyzed in the DEIS. T-53

Page 2-24, Table 2-3 Integrated Air and Ground Training – Integrated air and ground training was not included in the scoping process and the Navy failed to announce their intent to study integrated air and ground training during scoping. This DEIS should include an analysis of alternatives to Dixie Valley ground training as required by NEPA. The DEIS is inadequate in the analysis of ground training. T-54

When the Navy condemned private property in Dixie Valley, the public was informed by the Navy that action was to acquire more airspace, not for conducting ground maneuvers. This is a major change from the Navy's announced intentions. This is also significant in T-55

how the Navy has developed a credibility problem What other future plans are not included in this DEIS and does this DEIS represent a piecemeal approach to NEPA? T-55

Page 2-25, Section 2.3.1 Military Activities Common to All Military..., Chaff and Flares – The second paragraph downplays the amount of chaff by averaging the amount of chaff across the entire area. Are there locations where chaff is more likely to fall? In those areas where high amounts of chaff are present, what are the concentrations (lbs. Chaff/acre) exist now and what concentrations are expected in 10 or 20 years? This needs to be addressed in this document. T-56

The last paragraph on this page discusses flares and concludes that all unspent ordinance and flares are rendered safe. However, this paragraph does not indicate how much unspent ordinance was found. Was a significant amount of unspent ordinance found off the range and are there possible public safety issues?

Page 2-26,27, Section 2.3.2 Land Use Categories, Livestock Grazing; Mining; Water Access and Developments; Leases, Easements, Utility Corridors and Rights of Ways – All these sections note that restrictions on the use of these lands will be implemented. These sections should also note that any taking of private property will include compensation. T-57

Page 2-28, Section 2.3.2.2, Category 3 Navy and Public Use,... – The second paragraph of this section describes a management system that allows BLM to manage but requires Navy approval. If the Navy withdraws the land then the responsibility to manage lies with the Navy. Is the Navy prepared to reimburse BLM for management and can BLM enter into such an agreement? The jurisdiction and responsibilities of the Navy and BLM should be clearly defined in this section. T-58

Page 2-29, Section 2.3.2.2, Category B Navy and Public Uses... – The first paragraph notes the Navy foresees the possible need for up to 5 EW or TACT sites and up to 50 visual cueing sites. The development of these sites seems more likely than foreseeable. These sites should be delineated in this document and analyzed in Chapters 1-4 of this document. T-59

The second paragraph of this section lists a variety of restrictions the Navy will impose on Category B lands. The relationship of these restrictions to BLM's mission of managing lands for multiple uses should be discussed in this section.

Page 2-29, Section 2.3.2.2, Category B Navy and Public Use,..., Public Access and Recreation – Will allowing public access near EW pose possible health threats from microwave emissions? T-60

Page 2-30, Section 2.3.2.2, Category B Navy and Public Use..., Livestock Grazing – The Navy will allow grazing and will let BLM administer permits. Because the Navy is withdrawing these lands the management responsibilities should also go to the Navy. Is T-61

the Navy willing to reimburse the BLM for managing these lands? Furthermore, many BLM people complain they do not have the time, money or personnel to adequately manage land they have now. Can we reasonably expect them to manage withdrawn lands? T-61

Page 2-30, Section 2.3.2.2, Category B Navy and Public Use..., Mining – In the first paragraph of this section the Navy wants to retain authority on permits regarding minerals. Is the authority on mineral permitting something BLM can relinquish to another agency? T-62

Page 2-31, Section 2.3.2.2, Category B Navy and Public Use..., Water Access and Developments – The first paragraph indicates the Navy wants approval authority for water developments. The State of Nevada is the responsible agency for permitting water. T-63

Page 2-31, Section 2.3.2.2, Category B Navy and Public Use..., Leases, Easements and Rights of Way – If Navy withdraws land, does BLM have the responsibility to issue leases, easements and right of ways, or other authorization for non-military uses on military lands? T-64

Page 2-36, Figure 2-7 Alternative 1 – The Sheelite Mine Road should be designated as SR 839 and the Dixie Valley Road should be designated as SR 121. If names other than official roads designations are used, perhaps Highway 50 should be changed to "The Lincoln Highway." T-65

Page 2-37, Figure 2-8 Alternative 11 – The Sheelite Mine Road should be designated as SR 839 and the Dixie Valley Road should be designated as SR 121. If names other than official roads designations are used, perhaps Highway 50 should be changed to "The Lincoln Highway." T-66

Page 2-39, Section 2.3.4 Summary of Environmental Impacts for Each Alternative – The second paragraph states the Navy will "...explore means to compensate holders of patented and valid unpatented mining claims, water rights and grazing permits, subject to Congressional authorization and appropriation." Pursuant to the Fifth Amendment of the Constitution, private property can not be taken for a public use without just compensation. If the Navy does not have Congressional authorization and appropriation, the Navy can not take private property. The taking of private property must be mitigated. T-67

Page 2-41, Figure 2-10 No Action Alternative – State Routes 121 and 839 should be delineated on this figure. T-68

Page 2-42, Section 2.3.4 Summary of Environmental Impacts for Each Alternative – The first paragraph on this page indicates adverse impacts to visual resources and recreation could occur. However, mitigation is not discussed and the loss of recreation is a mitigatable impact. T-69

Page 2-44, Table 2-6 Overview of Environmental Consequences and Mitigation Measures – The impacts to biological resources cannot be determined until the EW, TACT and visual cueing sites are delineated. Furthermore, mitigation cannot be determined until the actual sites are chosen. Mitigation measures must be described for takings in the water resources, socioeconomics and mineral resources mitigation column. T-70

Page 3-1, Section 3 Existing Environment – The third paragraph indicates the proposed action will not increase air operation or the size of the actual impact areas within the ranges. However, the document also indicates a reasonably foreseeable action of increasing airspace in Central Nevada. This section should also note possible increases in air operating and impact areas outside the existing ranges. T-71

Page 3-5, Sections 3.3.1.1, 3.3.1.2 and 3.3.1.3 Federal Endangered Species Act, Migratory Bird Treaty Act and Clean Water Act – How can this DEIS realistically assess impacts on endangered species, migratory birds and water if the EW, TACTS and visual cueing sites are not delineated? The exact locations of these sites as well as access roads and utility corridors should be delineated in this document so the impacts can be thoroughly analyzed before a decision is made. T-72

Page 3-14, Section 3.3.4 Sensitive Species – This section only analyses species as related to the Endangered Species Act. However, we have felt increasing pressures locally to consider Migratory Bird Treaty Act implications. Many of the birds listed in Section 3.3.3.5 are migratory and implementing the Preferred Alternative will undoubtedly have Migratory Bird Treaty Act implications. These implications should be discussed in this document. T-73

Page 3-20, Section 3.5.3 Noise Studies – This section includes a table that shows land use compatibly with noise levels. A map that shows existing noise levels in relation to existing land uses would be very helpful in this section. Figures 5.4 and 5.5 should be expanded to include all land uses and all bombing ranges. The relation of training activities to public rights of way, such as Highways 50 and 95, should be an important consideration for defining the existing environment. T-74

Page 3-29, 3-31, 3-33, 3-36, 3-37, 3-41, 3-46, 3-49, 3-56, 3-59, 3-60, and 3-64, Figures 3-2 through 3-13 – These figures should list highways by official designation. SR 121 and 389 should replace the Scheelite Mine Road and Dixie Valley Road. Figure 3-3 should also include the Shoal Site boundary. Figure 3-6 erroneously shows Highway 50 as Highway 5. Figure 3-10 has map symbols over Scheelite Mine Road. Figure 3-12 completely omits SR 839. T-75

Page 3-21, Section 3.5.4 Helicopter Noise and Page 3-22, Table 3-4 Estimated Noise Levels for Helicopters – The first paragraph indicates speech communication is difficult at 70 dBA and impossible at 85 dBA and above. Table 3-4 notes that Single Event Levels (SEL) for flyovers of helicopters ranges from 73.8 to 93.7 dBA. While averaging sound events may be useful for understanding the impacts of noise events over time, the T-76

importance of a SEL should not be overlooked especially as it relates to public transportation corridors (Highways 50 and 95, SR's 121 and 839) and public safety. Do flight paths for helicopters intersect or follow public rights of ways? Could the noise event suddenly startle or provide sufficient nuisance to motorists to be a public safety concern? A map that shows existing noise levels in relation to existing land uses should be included in this EIS. Figures 5.4 and 5.5 should be expanded to include all land uses and helicopter flight paths. T-76

Page 3-23, Section 3.6 Visual Resources – The second paragraph describes the BLM VRM process as a "sophisticated process." The adjective "sophisticated" as applied to the subjective classification process as required by BLM's VRM program indicates bias by the authors. The adjective sophisticated should be removed. T-77

Page 3-43, Section 3.9.4 Local Government – In describing the local government this section should also note that airspace used by commercial airlines is taxed and is a portion of the revenues received by local governments. The total assessed valuation of airspace used by commercial airlines in Nevada was over 140 million dollars in FY 1995-1996 (State of Nevada, Dept. of Taxation, Annual Report, Fiscal 1995-1996). The assessed valuation of airspace in Churchill, Lander, Eureka and Nye Counties for the same year were $3,277,158, $3,113,641, $1,558,173 and $14,623,576 respectively. Possible impacts on this tax base due to expanded and improved training should also be analyzed and discussed in the Cumulative Impacts sections of this document. The present analysis of local governments is too narrow and inadequate. T-78

Page 3-43, Section 3.9.3 Employment and Income – This section should indicate the amount of tax revenue the county receives as a result of NAS Fallon. The employment and tax revenues projected in section 3.9.5 indicate mining may provide a potential alternative to the economic benefits derived from NAS Fallon. T-79

For consistency, Section 3.9.3, 3.9.4 and 3.9.5 should all list the employment, tax revenue and percentage of the local economy that is derived from NAS Fallon, agriculture, mining and potential mineral resources.

Page 3-52, Section 3.10.8 Patented and Unpatented Mining Claims – At the end of the second sentence, "...as specified FLPMA..." should be changed to "...as specified in FLPMA...". T-80

Page 3-61, Section 3.13 Public Health and Safety – The second paragraph summarizes the likelihood of objects striking people or structures is small and cites SAIC 1991. However, the analysis did not account for the proximity to ranges and airfields. Several important public transportation corridors (Highway 50 and 95 and States Routes 121 and 839) either dissect or border training ranges. Because of proximity of these highways to training ranges, is there an increase likelihood of people being struck by objects? If so, is it a reasonable risk that should be subjected to people who must use these highways? This should be analyzed in the EIS. T-81

Page 3-62, Section 3.13.2 Off-Range Ordinance – This paragraph indicates ordinance has fallen outside the boundaries from "time to time". This terminology is too vague and because off-range ordinance is an important public safety issue, the exact number of off-range ordinance mishaps should be used in this section. T-82

Page 3-63, Section 3.13.2.2 Results of Sweep – For public safety concerns, the amount of ordinance and objects found in the proximity of major public right of ways should be discussed. Table 3-11 shows that from November/December 1989 through June 1990, 1,302 and 7,373 off-range items were found at B-17 and B-19 respectively. Additionally, 20,820 lb. and 16,410 lb. of scrap were found at B-17 and B-19 respectively for the same period. These amounts of off-range ordinance and scrap indicate serious considerations for public safety and should be addressed. T-83

Page 3-65, Section 3.13.2.3 Changes in Operations – The first paragraph of this section notes that operations were changed at B-19 because of off-range ordinance. Why were no changes proposed for B-17? T-84

Page 3-66, Section 3.14 Transportation – This section should also note that Highway 50 and SR's 121 and 839 pass throughout or are adjacent to RSZ's A, B and C. T-85

Page 3-67, Section 3.15 Airspace Designation and Use – The fifth paragraph of this section list existing civilian uses of airspace. However, it does not note that assessed valuation of airspace over Nevada is over $140 million and that counties tax the use of airspace. Do existing air operations have an impact on commercial airline routes and thus an impact on local tax bases? T-86

Page 3-68, Section 3.15 Airspace Designation and Use – The last paragraph of this section identifies airports in the region. Please include the airport at Eureka as well as small private airports in Duckwater, Current and numerous ranches and mines. T-87

Page 4-1, Section 4 Environmental Consequences – The first paragraph suggests the impact analysis is based on current training needs and scenarios. The purpose and need for the proposed action points out that more land and airspace are needed to improve training. We are concerned that MOA expansion in central Nevada is an integral part and condition of the preferred alternative. We are also concerned that the omission of these MOA's implies the Navy is piece mealing the NEPA process. The expansion of MOA's should be analyzed in chapters 1-5 of this EIS. T-88

Page 4-2, Section 4.1.2 Impact Significance Criteria – The first paragraph indicates lands having potential to be contaminated with off-range ordinance will be withdrawn. The preferred alternative indicates lands will be withdrawn on either side of Highway 50 and SR 839 partially because those lands have the potential to be contaminated. It seems highly possible these highways also have the probability to be contaminated. Should these transportation corridors also be withdrawn and rerouted for public safety purposes? T-89

Page 4-2, Section 4.1.2 Impact Significance Criteria – The first bullet under the third paragraph should include migratory birds. T-90

Page 4-5, Section 4.2.1.1 Alternative 1 – The second paragraph indicates a maximum of 75 acres will be disturbed for EW's, TACT's and visual cueing sites. However this figure does not include access roads and utility corridors. The impacts of those sites on geology and minerals cannot be realistically evaluated when these sites are not delineated. T-91

Page 4-6, Section 4.2.2.1 Alternative 1 – The second paragraph of this section indicates that loss of water rights can not be mitigated. This statement is not acceptable. Water rights are a species of property rights and according to the Fifth Amendment of our Constitution, private property cannot be taken for a public purpose without just compensation. The mitigation for lost water rights must include compensation. T-92

Page 4-7, Section 4.2.2.1 Alternative 1 – The first paragraph on this page discusses chaff in water and potential impacts. One impact that is absent is the potential impact to migratory birds. What is the potential for migratory birds becoming entangled (similar to fishing line) and drowning? This impact should be analyzed. T-93

Page 4-7, Section 4.2.2.1 Mitigation – The Navy must do more than explore a means of compensation to holders of water rights. If the Navy does not have Congressional approval or appropriation, they can not take property rights. The mitigation should clearly state that owners of property rights will be justly compensated if those rights are taken. T-94

Page 4-10, Section 4.2.3 Biological Resources – The fifth paragraph summarizes that aircraft over-flights are unpleasant rather than harmful to ungulates. How many antelope are in Dixie Valley at present, compared to the number of antelope prior to the Navy? Such information would assist the reader in determining whether over-flights are detrimental to ungulates. The DEIS should include this information. T-95

Page 4-11, Section 4.2.3 Biological Resources – The first paragraph summarizes that hawks not previously exposed to aircraft showed stronger avoidance behavior. This indicates migratory birds will be more affected by noise than non-migratory birds. The significance of aircraft noise on migratory birds during breeding and nesting seasons should be discussed. T-96

Page 4-12, Section 4.2.3.1 Alternative I – The fourth paragraph notes that biological evaluations will be prepared for the threatened and endangered species. This paragraph should also note that biological evaluations will also be prepared for migratory birds pursuant to the Migratory Bird Treaty Act. T-97

Page 4-13, Section 4.2.3.1 Alternative 1 – The first paragraph on this page indicates BLM will be granted access to Category A lands to study big horn sheep. Will Nevada Division of Wildlife, who is legally charged with the management of big horn sheep, also be given access to Category A lands? T-98

Page 4-13, Section 4.2.3.1 Alternative 1 – The second paragraph indicates EW, TACTS and visual cueing sites will not have a significant impact on biological resources. How can this conclusion be derived when the actual location of these sites are not delineated? This document should analyze the actual sites in addition to any access roads and utility corridors. This approach appears to be nothing more than piece mealing the NEPA process. T-99

Page 4-14, Section 4.2.4.1 Alternative 1 – The first paragraph of this section indicates eliminating mining and grazing may improve air quality. This is pure speculation and should be removed. Are you implying that increased training involving vehicles, increased fuel consumption, increased detonation of ordinance are more beneficial to air quality than livestock and mines? Please provide information to support this statement. T-100

Page 4-17, Section 4.2.5.1 Alternative 1 – The assumption that no significant noise impacts will occur because no increase in aircraft operations will occur, appears to conflict with Section 1 Purpose and Need. The addition of TOPGUN, Integrated Air and Ground Training, increased demands placed on NAS Fallon through base closures and the Navy's desire to "change and improve realistic operational and strategic combat training" all indicate an increase in operations. T-101

Page 4-17, Section 4.2.5.1 Alternative 1 – The second paragraph discusses noise as it relates to recreationist. What are potential noise impacts from integrated air and ground training on public safety for those who travel Highway 50 and State Routes 121 and 839? Public safety and major transportation corridors should be analyzed in this section. T-102

Page 4-17, Section 4.2.5.1 Mitigation – Re-routing highways and/or explicit warning signs should be considered in this section. T-103

Page 4-18, Section 4.2.6.1 Alternative 1 – The second paragraph in this section discusses impacts of EW's, TACTS and visual cueing sites on visual resources. These impacts cannot be evaluated if the sites are not delineated. T-104

Page 4-19, Section 4.2.6 Visual Resources – The fifth paragraph on this page indicates the long term use of chaff could result in an accumulation of debris. If a visual accumulation is possible, the effects on wildlife and migratory birds should be analyzed. T-105

Page 4-21, Section 4.2.7.1 Alternative 1 – The second paragraph on this page indicates EW's, TACTS and visual cueing sites will not have an effect on cultural resources. How can this conclusion be drawn when the actual location of these sites is not delineated? T-106

Deferring potential impacts to future consultation and coordination indicates the NEPA process is being piecemealed. T-106

Page 4-22, Section 4.2.8.1 Alternative 1 – The first bullet indicates impacts to public access, mining, grazing, ROW's, easements etc., are unmitigatable. This is not true. If the Navy takes private property they must provide just compensation. T-107

Page 4-22, Section 4.2.8.1 Alternative 1 – The second bullet in this section indicates BLM's RMP will be modified to include military use on withdrawn Category B lands. The RMP is for Federal Lands managed by BLM, not withdrawn lands. The Navy can not expect BLM to continue to manage withdrawn lands. If the Navy wants BLM to manage Category B lands, these lands should not be withdrawn. T-108

Page 4-23, Section 4.2.8.1 Alternative 1 – The second bullet of this section also discusses the impacts of EW land TACT's on land use. This document cannot adequately analyze the impacts EW's and TACTS on land use if the location of these sites is not delineated. T-109

Page 4-25, Section 4.2.8.1 Alternative 1 – The last bullet of this section indicates the RMP will be changed to address height limits on Category B lands. Once these lands are withdrawn, the RMP is not the governing document. The BLM should not and cannot be expected to provide management responsibility on withdrawn lands. If the Navy wants BLM to continue to manage Category B lands, the Navy should not withdraw these lands. T-110

Page 4-25, Section 4.2.9.1 Alternative 1 – The second paragraph indicates Navy operations near tribal lands will not increase. This conflicts with Chapter 1 and the discussions about TOPGUN and other training programs that have been transferred to NAS Fallon. T-111

Page 4-26, Section 4.2.9.1 Alternative 1 – The third paragraph on this page indicates development "...could slow down..." and the slow down "...probably would be short term..." This is speculation on the part of the authors and the DEIS should deal with factual information. If a slow down of development is expected, indicate the magnitude and duration based on facts. T-112

Page 4-27, Section 4.2.9.1 Alternative 1 – The first paragraph concludes no impacts to socioeconomic from EW or TACT sites. Unless the location for these sites is delineated, the impacts to socioeconomic cannot be adequately analyzed. T-113

Page 4-27, Section 4.2.9.1 Alternative 1 – The section on mitigation indicates the loss of mining and grazing are unmitigatable impacts and the Navy will explore means of compensation. If private property is taken for the public good, the Navy must provide just compensation. T-114

Page 4-28, Section 4.2.10.1 Alternative 1 – The impacts section indicates BLM will manage category B lands and the Navy will retain final approval authority. Once these lands are withdrawn, BLM should not be expected to provide management. Perhaps the Navy should not withdraw the Category B lands. T-115

Page 4-29, Section 4.2.10.1 Alternative 1 – The bullet covering development should note that any loss of private property or mineral rights will include just compensation. The second paragraph of this bullet indicates BLM will continue to issue permits for recreation, grazing, water and mining pending Navy approval. Once Category B lands are withdrawn BLM has relinquished authority and land management is the responsibility of the Navy. If the Navy wants BLM to manage Category B lands, the Navy should not withdraw these lands. T-116

The last two sentences in this bullet indicate EW and TACT sites will have no significant direct impact on existing developments. Until the exact locations of these sites are delineated, the impact on existing developments cannot be determined. T-117

Page 4-29, Section 4.2.10.1 Alternative 1 – The last bullet on patenting indicates the Navy will not allow any new patents. The process for converting unpatented to patented is set forth in statutes and neither the Navy or BLM has the authority to ignore that Congressional determination. T-118

Page 4-29, Section 4.2.10.1 Alternative 1 – The section on mitigation indicates the Navy will explore means to compensate holders of impacted patented and unpatented claims. If the Navy takes private property, they must provide just compensation. T-119

Page 4-31, Section 4.2.11.1 Alternative 1 – The impacts section uses a Resource Management Area wide average of 30 acres per AUM to determine impacts on livestock grazing. The actual withdrawal area should be sampled to determine forage production and a stocking rate. Assuming the withdrawal is consistent to a Resource Area wide average is poor science at best. Furthermore, the impact on grazing of EW, TACT and visual cueing sites should also be included in this section. T-120

Page 4-32, Section 4.2.11.1 Alternative 1 – If the Navy takes private property they must provide just compensation. T-121

Page 4-33, Section 4.2.12.1 Alternative 1 – The second paragraph on this page indicates the Navy will require approval of any recreation permits issued by BLM for category B lands. Once these lands are withdrawn, the BLM should not be expected to manage these lands for the Navy. If the Navy does not want management responsibility, the lands should not be withdrawn. T-122

Page 4-33, Section 4.2.12.1 Alternative 1 – The fourth paragraph on this page indicates the number of recreational users is "... not thought to be very high." This statement should be removed because it is only conjecture and this EIS should deal with facts. T-123

The fifth paragraph on this page indicates the Pony Express Trail will not be affected by EW's, TACTS or visual cueing sites. Unless the exact location of these sites is delineated, the impacts on the Pony Express Trail cannot be analyzed.

Page 4-34, Section 4.2.13 Public Health and Safety – This section should include discussion of potential impacts of the alternatives on the major transportation corridors (Highways 50 and 95 and SR's 121 and 839). Will people who use these routes be subjected to increased risks and are these risks reasonable? Have previous sweeps resulted in ordinance or aircraft parts found on these highways? T-124

Page 4-35, Section 4.2.13.1 Alternative 1 – The second paragraph indicates EW, TACT and visual cueing sites will have no affect on public health and safety. This cannot be determined until the exact location of these sites is delineated. T-125

Page 4-36, Section 4.2.14 Transportation – This section, as well as Section 4.2.15 Airspace Designation and Use, should include an analysis of impacts to commercial airlines. Commercial airlines are taxed and each county in Nevada receives revenues for commercial use of airspace. In fiscal year 1995-1996 the total assessed valuation on airlines was $144,016,000 for the entire state (State of Nevada Department of Taxation Annual Report, Fiscal 1995-1996). The EIS notes in several places that non military air traffic will be re-routed. How this may affect commercial flights and ultimately rural tax bases, should be analyzed as well as potential mitigation. T-126

Page 4-38, Section 4.3 Unavoidable Adverse Impact – The discussion in the second paragraph of this section indicates the impacts to mining and grazing are unmitigatable. This is not true. If the Navy takes private property they must provide just compensation. T-127

Page 4-38, Section 4.3.2 Possible Conflicts with Land Use Plans – Once the lands are withdrawn, BLM Land Use Plan is no longer applicable and management of these lands is the Navy's responsibility. If the Navy does not want to manage these lands perhaps the size of the withdrawal should be reduced. T-128

Page 5-1, Section 5.2 Cumulative Effects Region – Splitting the cumulative effects region into two categories (primary and secondary) and then only analyzing one category for cumulative effects seems inconsistent with NEPA. The cumulative impact definition in the CEQ regulations does not include primary and secondary categories. While the Navy may contend that future airspace designations are insignificant actions, collectively the impacts may result in significant impacts over a large portion of Central Nevada. The cumulative effects should be analyzed for the entire region that is affected. T-129

Page 5-2, Section 5.2 Cumulative Effects Region – The last paragraph of this section suggests that no withdrawal of land is associated with airspace designation. Will additional EW, TACT or TIS sites be required? If so, the EIS should also discuss future land withdrawals associated with the withdrawal of airspace. T-130

Page 5-3, Figure 5-1 Existing and Proposed Military Land Withdrawals in the Region – Hawthorne and Gabbs are not delineated on this figure. Also the highways and state routes should include the official numerical designation. T-131

Page 5-4 and 5-5, Figures 5-2 and 5-3 – Neither of these figures show the locations of Hawthorne, Gabbs, Kingston, Austin, Round Mountain, Eureka, Duckwater and Current. These towns are populated by the majority of people who will be affected and should be included on these figures. T-132

Page 5-6, Section 5.3 Methodology – Step 4 should discuss and verify no new EW, TACT or TIS sites will be associated with future airspace designations of the Diamond, Duckwater and Smokey MOA's. If future withdrawals of land are required, it must also be discussed in the subsequent analysis. T-133

Page 5-4, Section 5.4 Regional Baseline – This entire section is only a partial analysis of the actual region affected. The analysis seems to be primarily focused on Churchill County but the impacts of proposed and foreseeable actions include Lander, Eureka, Pershing, Nye, Elko, White Pine and Mineral Counties. T-134

Page 5-7, Section 5.4.2 Biological Resources – This section should also discuss migratory birds. T-135

Page 5-12, Section 5.4.10 Airspace Designation and Use – Airspace designation is not one of the eight major categories listed in 5.4. The designation of airspace is a foreseeable future action and the impacts should be analyzed in the eight major categories. T-136

Page 5-13, Table 5-1 – This Table is somewhat misleading because it implies 7.3% of the entire land in the region is used for military purposes. If the fee simple lands are included, 7.7% of the entire region is used for military purposes. T-137

Page 5-16, Table 5-2 – This Table, to be consistent with Table 5-1, should show the entire area of the region and what percentage of airspace could be withdrawn. T-138

Page 5-18, Section 5.5.2 Effects of Existing Land Withdrawals and Airspace Designation – The primary focus of the analysis in this section is focused on Churchill County. Mineral, Nye, Lander, Eureka and Pershing Counties are within the existing footprint of Navy operations. The subsequent analysis should be expanded to include all areas effected. T-139

Page 5-26, Section 5.5.2.10 Airspace Designation and Use – Airspace designation is not one of the eight major categories listed in Section 5.4. Airspace designation and use is a future action and the effects should be analyzed in the eight categories. T-140

Page 5-26, Section 5.5.3 Summary – The square miles effected by overflight activities should be followed by an example that helps the reader understand the magnitude of impacts. The 23,153 square miles should be converted to a percentage of the region or state. T-141

Page 5-32 and 5-33, Figures 5-4 and 5-5 – Both figures should show the location of SR 95 and the Fallon city boundary. T-142

Page 5-36, Section 5.7.2.2, 5.7.2.3 and 5.7.2.4 Diamond, Duckwater and Smokey MOA's – The designation of airspace in these areas indicates jamming activities, air traffic controlled airspace and low level flights. These are not discussed adequately in Section 5.7.3. For example, will jamming activities affect telecommunications and does this pose a public safety issue to rural folks who rely on cellular phone service? Will an ATCAA impact local airports and civilian air traffic? What restrictions are associated with the Smokey MOA and what are the impacts of those restrictions? T-143

Page 5-37, Section 5.7.3 Potential Effects of Reasonably Foreseeable Airspace Designation – This section should also discuss the possibility of future land withdrawals for EW, TACT or TIS sites. T-144

Page 5-37, Section 5.7.3.2 Biological Resources – This discussion should include endangered species and migratory birds. T-

Page 5-37, Section 5.7.3.3 Land Use – This section indicates possible impacts on land use may occur. These impacts to land use need to be broadly identified in the DEIS. Are height limitations for structures, loss of mining rights or restrictions similar to Category B lands possible future impacts? Will there be restrictions under the other MOA's? T-146

Page 5-38, Section 5.7.3.8 Public Health and Safety – This section indicates moving overflights will reduce the risk of people to dropped objects. While most of Central Nevada is sparsely populated, there are towns and communities despite them being left off numerous maps. Is moving overflights reducing risk or simply shifting the risk to another area? Collectively, the people of Central Nevada are being subjected to increased risk and, undoubtedly, socioeconomic impacts. Environmental justice implications need to be addressed in this DEIS. T-147

Page 5-39, Section 5.7.3.10 Airspace Designation and Use – The designation and use of airspace is a possible future action and not one of the eight major categories for analysis described in Section 5.4. The possible effects of airspace designation should be discussed in Sections 5.7.3.1 - 5.7.3.9. T-148

Page 5-39, Section 5.7.3.9 Transportation – This section should include a discussion on possible impacts to commercial airlines. If there are potential impacts to commercial flights, Section 5.7.3.4 should note tax bases may also be effected. T-149

Page 5-39, Section 5.8 Regional Cumulative Effects – The cumulative effects appear to be analyzed for mainly Churchill County. The region used for analysis appears to be too small and should include all effected areas such as Mineral, Lander, Pershing, Eureka, Nye and White Pine Counties. T-150

Page 5-40, Section 5.8.2 Biological Resources – This section should also note that EW and TACT sites will also reduce habitat by up to 75 acres and determining the impacts on biological resources is not possible because the locations were not delineated. This section is weak and does not adequately address cumulative impacts. T-151

Page 5-40, Section 5.8.3 Grazing – The last sentence of this paragraph indicates the proposed action will not result in significant adverse impacts to grazing. This may be true on a regional level, but the impacts will probably be significant to the individuals who actually loose AUM's to the withdrawal. T-152

Page 5-43, Section 5.8.10 Airspace Designation and Use – The designation of airspace and use should be analyzed in sections 5.8.1 - 5.8.9. T-153

Page D-3, Appendix D Summary of Hazard Mitigation Report – The overall quality of reproduction is poor making this appendix hard to read. The original document, rather than a fax, should be copied. T-154

Page E-3, Appendix D Range AICUZ Update – Many of the figures are poorly copied and difficult to read. T-155

Letter T
John Balliette, Eureka County Natural Resources Department

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter T. Letter T has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter T comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
T-1	12c
T-2	12f
T-3	6b
T-4	10d
T-5	25a
T-6	26zzzzz
T-7	26aaaaaa
T-8	26bbbbbb
T-9	26cccccc
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T-11	12e
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T-21	22c
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T-23	26jjjjjj
T-24	26hhhhhh
T-25	26kkkkkk
T-26	26llllll
T-27	2b
T-28	26hhhhhh
T-29	26mmmmmm
T-30	26nnnnnn
T-31	26oooooo
T-32	26pppppp

Letter T
John Balliette, Eureka County Natural Resources Department

Comment Designation	Response Location
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T-34	26rrrrrr
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Letter T
John Balliette, Eureka County Natural Resources Department

Comment Designation	Response Location
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T-116	5d, 5e

Letter T
John Balliette, Eureka County Natural Resources Department

Comment Designation	Response Location
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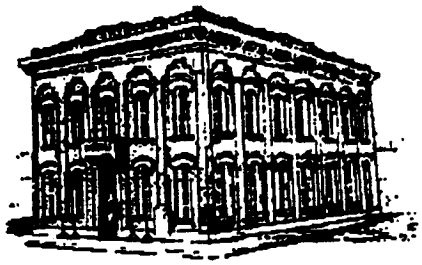
Letter U



William E. Schaeffer
Eureka County District Attorney

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(702) 237-5315 • FAX (702) 237-6005

September 16, 1997

Via facsimile to (415) 244-3007
Original via certified mail
Return Receipt No. P 560 822 476

Mr. Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

RE: Proposed Withdrawal of Public Lands for Range Safety and Training, Naval Air Station, Fallon, NV

Dear Mr. Dennis:

Eureka County has received no response from you to a letter (copy enclosed) from John Balliette, Contractual Resource Manager, dated August 18, 1997, concerning the Draft Environmental Impact Statement (DEIS) for the above-referenced withdrawal. This letter serves to renew the request of the Eureka County Board of Commissioners as set forth in Mr. Balliette's letter, and to make an express, separate request on behalf of this office.

The previous letter requested:

1) A 60-day extension beyond the present deadline of October 10, 1997, for comment on the DEIS;

2) At least one public scoping meeting in the Eureka area in addition to the meetings scheduled in Reno and Fallon;

3) That the proposed Diamond, Duckwater, and Smoky Military Operations Areas (MOAs) be analyzed in Chapter 1-4 of the Fallon NAS DEIS.

With reference to those three requests, this office would elaborate as follows:

EXTENSION OF COMMENT PERIOD. Notice of extension of comment

U-1

period must be published in the Federal Register at least 10 days prior to October 20, 1997. Therefore, a response to Eureka's request for extension must be addressed promptly if it is to be considered at all. U-1

EUREKA AREA PUBLIC SCOPING MEETING. The DEIS and proposed withdrawal will directly affect Eureka County because it will apply to lands which lie between Eureka and Fallon-Reno-Western Nevada. Fallon is 180 miles by highway from Eureka, and Reno is 240 miles distant; it is unreasonable to expect Eureka residents to travel so far to express their concerns at scoping meetings in Fallon or Reno. U-2

DIAMOND, DUCKWATER AND SMOKY MOAs. The DEIS lists the three proposed MOAs as within the reasonably foreseeable future. While no formal steps have been taken, so far as we know, to designate and withdraw airspace for the Diamond, Duckwater and Smoky MOAs, the "Special Nevada Report" indicates these MOAs would be used in connection with Salt Lake City ARTCC and Fallon NAS. Furthermore, the DEIS indicates the Navy will require additional training space beyond what is now under consideration for NAS Fallon. If there is <u>any possibility</u> (and obviously, there is) that Diamond, Duckwater and Smoky MOA designation is in prospect, that should be addressed in the current EIS. If that is not done, if the withdrawals and designations are done on a piecemeal basis, the overall impact on Eureka County and the rest of rural Nevada will not be properly evaluated. U-3

By copy of this letter I am asking Nevada's Congressional delegation to take steps to delay any withdrawal of lands for the Fallon NAS until the problems outline above have been addressed properly by the Navy and Eureka County residents have been afforded an opportunity to make meaningful comment.

Sincerely,

EUREKA COUNTY DISTRICT ATTORNEY
William E. Schaeffer, District Attorney

By Zane Stanley Miles, Chief Deputy;

cc: (with enclosures)

U.S. Rep. Jim Gibbons
c/o Claude Ackerman, Elko Office Fax No. 777-7922
501 Railroad St., Suite 202, Elko NV, 89801

U.S. Sen. Richard Bryan
c/o Tom Baker, Carson City Office Fax No. 883-5590
600 E. William St., Suite 304, Carson City NV 89701

U.S. Sen. Harry Reid
c/o Karen Denio, Carson City office Fax No. 883-1980
600 E. William St., Suite 302, Carson City NV 89702

Board of Eureka County Commissioners (4)

John Balliette, Eureka Natural Resources Manager

William E. Schaeffer, Eureka District Attorney

enc: Aug. 18, 1997, letter, Balliette to Dennis

Letter U
William E. Schaeffer, Eureka County District Attorney

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter U. Letter U has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter U comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
U-1	2c
U-2	2b
U-3	2e, 12e

Letter V

EUREKA COUNTY
PUBLIC LAND ADVISORY COMMISSION
PO BOX 682
EUREKA, NV 89316

FAX: (702) 237-6012 TELEPHONE: (702) 237-6010

October 9, 1997

Sam Dennis
Environmental Planning Branch
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

The Eureka County Public Land Advisory Commission has reviewed and concurs with comments submitted to you by the Eureka County Board of Commissioners and the Eureka County Department of Natural Resources concerning the DEIS for NAS Fallon expansion. Many of the comments submitted by the Department of Natural Resources originated from this Commission.

Of particular importance to this Commission is how the DEIS addresses property takings. In numerous locations the DEIS states the Navy will "...explore means to compensate property owners subject to Congressional authorization and appropriation." The DEIS should clearly state that property owners will be justly compensated if takings occur. V-1

This Commission is also very concerned with the Navy's plans to withdraw lands and then seek authorization to have BLM manage those lands. We constantly deal with the BLM on various land management issues and a common theme expressed by BLM folks is they do not have the manpower, time or money to adequately manage their lands. We feel it is not appropriate to have BLM provide management on withdrawn lands because that will lessen their ability to manage lands still under their jurisdiction. We suggest the Navy should not withdraw lands they do not want to manage. V-2

We are also very concerned with the foreseeable MOA expansion that covers much of Central Nevada. Although Navy officials have claimed the actual footprint is much smaller, the DEIS indicates Navy airspace will double and cover approximately 20% of Nevada. We are very concerned that Central Nevada was not included in the Cumulative Impacts Analysis. V-3

Last, we are very concerned with what appears to be a piecemeal approach to NEPA. Omitting Central Nevada from the cumulative impacts analysis and omitting the MOA expansion from chapters one through four of the DEIS are indications supporting our concern. Perhaps the analysis of TACT and EW sites without actually locating these sites is strongest indication that piecemealing is occurring. V-4

Although we appreciate this opportunity to comment, we are discouraged that no public hearings were held in Eureka. We are also discouraged with the low number of DEIS's distributed in Eureka County and request the comment period be extended. V-5

Sincerely,

Jim Baumann
Chairman

JB/lh

Letter V
Jim Baumann, Eureka County Public Land Use Advisory Commission

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter V. Letter V has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter V comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
V-1	6a
V-2	5e
V-3	12b
V-4	2e
V-5	2c

Letter W

Walker River Paiute Tribe
P.O. Box 220 • Schurz, Nevada 89427
Phone: (702) 773-2306
FAX: (702) 773-2585

November 26, 1997

Sam Dennis
Engineering Field Activity West
900 Commodore Drive
San Bruno, California 94066-0720

Re: Comments of the Walker River Paiute Tribe regarding Draft Environmental Impact Statement, Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada

Dear Mr. Dennis:

The Walker River Paiute Tribe ("Tribe") submits the following comments regarding the Draft Environmental Impact Statement, Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada (June, 1997) ("DEIS"). The Tribe's comments incorporate by reference the comments submitted by the Environmental Protection Agency, see Letter from Jeff Phillibar to Sam Dennis (Oct. 10, 1997), and the Tribe provides herein additional comments in four areas: 1) the United States' trust responsibility to the Tribe; 2) intended withdrawal of public lands that contain ordnance from public access; 3) noise issues; and 4) the environmental baseline required under the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370a ("NEPA").

I. BACKGROUND

The Tribe is a federally-recognized Indian Tribe organized under the Indian Reorganization Act of June 19, 1934 (codified as amended at 25 U.S.C. §§ 461, 462, 463, 464, 465, 466-470, 471, 472, 473, 474, 475, 476-478, 479) ("IRA"). The Walker River Indian Reservation ("Reservation") was created by action of the Department of the Interior on November 29, 1859. United States v. Walker River Irrigation Dist., 104 F.2d 334, 335 (9th Cir. 1939). The Reservation was formally confirmed by the Executive Order of March 19, 1874. See United States v. Southern Pac. Trans. Co., 543 F.2d 676, 681 (9th Cir. 1976); Walker River Irrigation Dist., 104 F.2d at 338. As initially created, the Reservation contained approximately 320,000 acres. The Act of June 22, 1936, 49 Stat. 1806-07, authorized the Secretary of the Interior to restore certain lands, that the Tribe had previously ceded to the United States, as an addition to

the Reservation. In accordance with that legislation, by Secretarial Order dated September 25, 1936, the Secretary restored to the Reservation 167,460 acres which had previously been relinquished under a 1906 agreement.

The Reservation today overlaps the counties of Churchill, Mineral and Lyon. It lies directly south of the Navy's existing training range B-19. "The entire reservation is located in the Walker River subbasin." Northern Paiute Nation v. United States, 8 Cl. Ct. 470, 472 (1985). The Reservation encompasses more than 300,000 acres. Pursuant to the Tribal Constitution, approved by the Secretary of the Interior in 1937, the Tribe's jurisdiction includes all of the territory encompassed by the exterior boundaries of the Reservation. WALKER RIVER PAIUTE TRIBE CONST. art. I; WALKER RIVER PAIUTE TRIBE CONST. art. VI.

The Navy has used lands north of the Reservation for an air testing and training range since 1953. DEIS at 1-10. The Navy uses Range B-19,

> for strafing, laser ranging and targeting, close air support, mortar, small arms, artillery spotting, and inert and live air-to-ground ordnance delivery using bombs and rockets. The range also has facilities to support simulated surface-to-air missile firing. Electronic bulls-eye scoring is available with the WISS. A strafing banner, a conventional bull's-eye, a high explosive impact area, and three spotting towers are contained within B-19. The run-in lines for the range run west to east for most operations and occasionally run from east to west. Live ordnance, up to 1,000 pounds, is dropped on the high explosive impact target area. The southern border of the range is adjacent to the Walker River Indian Reservation.

Id.

II. THE DEIS DOES NOT PROVIDE FOR PROTECTION OF TRIBAL TRUST RESOURCES

A. THE NAVY HAS NOT TAKEN STEPS TO PROTECT TRIBAL TRUST RESOURCES.

W-1

The United States owes a solemn trust responsibility to Indian tribes. All agencies and representatives of the federal government must uphold this duty. The Navy's "actions must not

merely meet the minimal requirements of administrative law, but must also pass scrutiny under the more stringent standards demanded of a fiduciary." Jicarilla Apache Tribe v. Supron Energy Corp., 728 F.2d 1555, 1563 (10th Cir. 1984) (Seymour, J. concurring in part, dissenting in part), aff'd in part, rev'd in part, 782 F.2d 855 (10th Cir.), modified, 793 F.2d 1171 (10th Cir.) (adopting en banc former concurring/dissenting opinion by J. Seymour), cert. denied sub nom. Southern Union Co. v. Jicarilla Apache Tribe, 479 U.S. 978 (1986). Furthermore,

> [w]hen the Secretary is acting in his fiduciary role rather than solely as a regulatory and is faced with a decision for which there is more than one "reasonable" choice as that term is used in administrative law, he must choose the alternative that is in the best interests of the Indian tribe. In short, he cannot escape his role as trustee by donning the mantle of administrator . . . .

Id. at 1567. The same responsibility to uphold the United States' trust responsibility to Indian tribes applies to the Secretary of the Interior as to the Secretary of the Navy, "as a representative of the federal government . . . ." Id. at 1563.

W-1

The DEIS states that the Navy consulted with the Bureau of Land Management ("BLM"), the Bureau of Reclamation, and the Department of Energy in formulating the Navy's environmental analysis of the proposed action. DEIS at 1-1. The Navy also consulted with the BIA regarding development of project alternatives. DEIS at 2-3. However, it is not clear whether the Navy consulted with the BIA regarding the proposed action itself. If the Navy did not consult with the BIA regarding the proposed action, it violated NEPA: "the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved." 42 U.S.C. § 4332(C).

The Navy admits that the proposed withdrawal of public lands under the preferred alternative will include "42,000 . . . acres [of Reservation land] . . . within the socioeconomic region of influence." DEIS at 3-42. However, nothing in the DEIS indicates that the Navy considered protecting Reservation lands from degradation in its land withdrawal proposal, even though it admits that the proposed withdrawal will affect tribal trust resources. Because there is nothing in the DEIS to indicate that the Navy has taken steps to ensure the protection of those tribal trust resources, it has breached the United States' trust responsibility to the Tribe.

Nothing in the DEIS states whether the Navy consulted with the BIA regarding the proposed action. Moreover, despite the fact that Range B-19 is adjacent to the northern boundary of the Reservation, the Navy did not consult with the Walker River Paiute Tribal Council regarding its plans to withdraw B-19 for testing and training operations. While the Navy held

several public meetings, DEIS at 1-26, it never held a public meeting on the Reservation to allow tribal members and Reservation residents an opportunity to voice their concerns relative to Range B-19 testing and training operations.

One of the purposes of the land withdrawals is to "[p]rovide safety buffer zones around the training ranges, including Navy control of lands containing off-range ordnance." DEIS at 1-11. Figure 1-6 shows that the Range Safety Zone A for Range B-19 extends onto Reservation lands. This is a zone "of maximum concern." However, the Navy cannot extend its activities onto Reservation land without congressional and tribal consent, which it has not obtained. The Navy's proposed withdrawal of Range B-19 for the uses described in the DEIS is contrary to law, and violates the United States' trust responsibility to the Tribe to protect tribal trust resources -- Reservation lands -- from degradation and interference. W-1

In light of the Navy's trust responsibility to the Tribe, it is an outrage that the Navy allows both live and inert ordnance to fall on Reservation lands. The Navy would never drop ordnance on private, non-Indian lands without being subject to severe consequences, see Eyherabide v. United States, 345 F.2d 565 (Ct. Cls. 1965), yet the Navy owes no trust responsiblity with respect to such private non-Indian lands. The proposed withdrawal clearly affects tribal trust resources since the impacts of Navy testing and training operations reach Reservation lands, but the DEIS fails to provide steps for protecting tribal trust resources consistent with the Navy's responsibility to carry out the United States' trust responsibility to the Tribe. The apparent lack of consultation with the BIA and the Tribe regarding the proposed withdrawal contributes to the Navy's breach of its trust responsibility to the Tribe. As a result, the DEIS violates federal law and the proposed withdrawal threatens to breach the United States' trust responsibility to the Tribe.

B. RESTRICTION OF PUBLIC ACCESS TO LANDS CONTAINING FALLEN ORDNANCE CONSTITUTES A FAILURE OF THE NAVY TO ACCEPT ITS RESPONSIBILITY FOR THE EXISTENCE OF SUCH ORDNANCE ON SAID LANDS; THE NAVY SHOULD INSTEAD CLEAN UP ANY FALLEN ORDNANCE. W-2

The Navy has been conducting tests and training exercises at its Fallon facility since 1953. DEIS at 1-10. During that period, it has dropped or allowed to be dropped substantial ordnance within the boundaries of the Reservation, and rendering the northern portion of the Reservation unusable by the Tribe and its members. DEIS at 3-62 ("From time to time, military ordnance inadvertently has fallen outside the boundaries of these ranges . . . on the Walker River Indian Reservation."), 5-25 ("Ordnance intended to be dropped on . . . B-19 has fallen on . . . the Walker River Indian Reservation adjacent to the[] training range[]."). The Navy admits that fallen ordnance may be live. DEIS at 1-8 ("Live ordnance training . . . provides the most realistic

conditions . . . Inert ordnance does not provide the full spectrum of these benefits.").

Figure 1-3 is inaccurate. If training and test flights result in ordnance dropped to the north and east of Range B-19, DEIS at 2-26, then necessarily such activities must also result in ordnance dropped south of Range B-19, that is on the Walker River Indian Reservation. In other words, if pilot trainees cannot always aim their fire within Range B-19 and sometimes drop ordnance to the north and east of the range, then they must also drop ordnance to the south. The Navy acknowledges that it drops ordnance on the Reservation. See DEIS at 3-62. And "[a]reas presenting the greatest risk of unexploded buried ordnance are those near B-19 . . . ." DEIS at 5-25. Accordingly, the safety footprint for Range B-19 should extend further south. Figure 1-6 in fact shows the range safety zone for Range B-19 as extending onto the Reservation. However, because the safety footprint and range safety zone for Range B-19 cannot include Reservation lands, the Navy should move Range B-19 further north to provide the requisite safety zone without breaching its trust responsibility to protect Reservation lands from degradation and preventing the Tribe from using the lands it is entitled to use.

Figure 1-5 is also inaccurate. It shows off-range ordnance existing only to the east of Range B-19. However, off-range ordnance is present on the northern portion of the Reservation, directly south of Range B-19. Compare DEIS at 1-22 ("Off-range ordnance sweeps conducted in 1989 and 1990 found surface ordnance on lands adjacent to the . . . B-19 training range[] . . ."), with DEIS at 3-62 ("military ordnance inadvertently has fallen . . . on the Walker River Indian Reservation."). The Navy should revise Figure 1-5 to show that off-range ordnance exists on Reservation lands. W-2

Because the Navy is bound to protect the Tribe's trust resources, it is bound to assume responsibility for removing the ordnance from the northern portion of the Reservation so that the Tribe and its members may use those lands. The Navy claims to have consulted with the Tribe regarding ordnance on Reservation lands, DEIS at 3-63, however any such consultation has not resolved the ordnance clean-up problem. The Navy expressly states that it signed a memorandum of agreement with BLM and the Nevada Department of Conservation and Natural Resources "requiring the Navy to conduct annual reconnaissance sweeps around the training ranges for off-range ordnance. The memorandum of agreement, updated in 1995, provides a process for the retrieval, transport, and disposal of off-range ordnance." DEIS at 1-23 (citation omitted). See also DEIS at 3-66 (describing clean up activities under memorandum of agreement with BLM and the state). The Navy also states that beginning in 1989, it began efforts to remove off-range ordnance pursuant to the memorandum of agreement, DEIS at 2-25, but the DEIS does not indicate whether the Navy took steps to remove off-range ordnance from Reservation lands, or that it consulted with the Tribe regarding the issue.

Thus, even though it admits that its activities adversely affect Reservation lands by dropping ordnance there, the Navy did not seek such a memorandum of agreement with the Tribe, nor include the Tribe among the signatories to the memorandum of agreement with BLM and the state. Omitting the Tribe from this process hardly constitutes "consultation" regarding ordnance on the Reservation. Omitting Reservation lands from Navy ordnance clean up efforts exacerbates the Navy's breach of its trust responsibility to the Tribe. Indeed, the Navy cannot withdraw Reservation lands from tribal use, nor can it "post signs and/or fence these areas," DEIS at 5-25, and such a measure is insufficient to uphold its trust responsibility to the Tribe. The Navy should initiate consultations with the Tribe regarding a memorandum of agreement regarding clean up activities on the Reservation, and should include the Tribe in all aspects of developing a "resource management plan . . . ." DEIS at 2-26.

The Navy's proposed plan to simply close lands littered with ordnance from access is untenable, and could very well be considered an unconstitutional taking with respect to Reservation lands. See DEIS at 3-62 (proposing withdrawal of lands in Range B-19 "to protect the public from exposure to off-range ordnance (Figure 1-5)."). The fact that the Navy's actions presently prevent the Tribe from using the northern portion of the Reservation is also likely an uncompensated taking, contrary to the Fifth Amendment of the Constitution, and without congressional authorization as required by 25 U.S.C. § 177. W

More importantly, the mitigation plan in Chapter 4 of the DEIS should provide for cleaning up ordnance on the Reservation. Only by removing the ordnance from Reservation lands will the Navy comply with its trust responsibility to the Tribe by restoring those lands to a condition in which the Tribe will be able to access and use them. Withdrawal of Reservation lands is illegal as Congress has not permitted the Navy to withdraw such lands, and failure to provide for their cleanup in the mitigation plan results in a deficient DEIS. See 40 C.F.R. §§ 1502.14(f), 1502.16(h). Indeed, the Navy's dropping of ordnance, some of which is live, impedes the Tribe's ability to use the northern portion of its Reservation for grazing, prospecting and other purposes in contravention of the President's purpose in setting the Reservation lands aside for the Tribe's -- not the Navy's -- use. Walker River Irrigation Dist., 104 F.2d at 335 (citing Executive Order of Nov. 29, 1859). See also DEIS Figure 3-8 (showing mining areas on the Reservation).

C. THE NAVY HAS NOT TAKEN SUFFICIENT STEPS TO MITIGATE INCREASED NOISE IMPACTS ON THE RESERVATION.

"The region of influence for noise issues in this DEIS is Churchill County, specifically the portions of the county surrounding the NAS Fallon training ranges." DEIS at 3-19. The Navy admits that "data indicate that areas outside the withdrawn ranges are experiencing noise from training activities." DEIS at 3-20 (citation omitted). The Reservation community already W' 3

experiences noise interference from Navy training and testing operations. The Tribe disagrees that "the number of sensitive receptors in these areas is insignificant, and effects are therefore relatively insignificant." DEIS at 5-24 (citation omitted). By withdrawing Range B-19 for additional testing and training, the Reservation community will experience increased noise from overhead flights. "[T]he delivery of explosive ordnance on B-19 produces a 65 dB contour 5.7 miles from the impact area." DEIS at 3-20.

The accepted maximum noise levels for different types of land uses are set forth in Table 3-3, "Land Use Compatibility with Noise Levels." The Reservation includes the following land uses: residential; school classrooms, libraries, playgrounds, parks, livestock farming, animal breeding, non-livestock agriculture, mining, fishing, and rights of way. According to Table 3-3, the noise interference generated by the Navy's training and testing operations cannot exceed the maximum levels set forth in that table (60 dB to 80 dB). Yet, ordnance delivery in Range B-19 produces noise at 65 dB, and Navy helicopter operations, for example helicopter flights, "make speech communication difficult and speech communication is almost impossible at noise levels over 85dBA." DEIS at 3-21. Helicopter noise may reach these interruptive levels. Id.

W-3

Despite the fact that the noise levels are admittedly higher than land use compatibility allows, the DEIS does not examine noise increases on Range B-19, but instead focuses only upon complaints received from the community of Fallon, near Range B-16 where the Navy intends take steps to reduce the noise impacts from its training and testing operations. See DEIS at 3-20 to 3-21. Nor does the Navy present any method for mitigating noise resulting from training and testing operations on Range B-19, where such noise does and will continue to affect the Reservation community. E.g. DEIS at 4-17 to 4-18.

Finally, the Navy made an effort to comport with local county noise ordinances, but made no effort to consult with the Tribe to ascertain whether Navy activities in Range B-19 will comply with or violate tribal noise or other environmental ordinances. This failure to consult with the Tribe and consider the laws applicable within Reservation boundaries permeates the DEIS and constitutes further breach of the Navy's trust responsibility to protect tribal trust resources from degradation.

D. THE ENVIRONMENTAL BASELINE IS DEFICIENT.

W-4

The environmental baseline analysis in Chapter 5 of the DEIS is deficient because it does not include tribal activities. It mentions the town of Schurz, on the Walker River Indian Reservation, in connection with discussion of the population of Mineral County, but omits discussion of potential tribal activities in the northern portion of the Reservation which the Tribe cannot utilize at this time due to Navy activities. The Tribe could conduct grazing, mining and

other activities. NEPA requires the Navy to "identify and develop methods and procedures . . . which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations . . ." 42 U.S.C. § 4332(B). Thus, merely because the Tribe cannot be active on the northern portion of the Reservation does not mean that such potential activities should not be included in the environmental baseline.

The cultural resource assessment included in the environmental baseline also appears to be deficient. The Tribe has cultural affiliation with an area much larger than the present-day Reservation, Edward C. Johnson, WALKER RIVER PAIUTES, A TRIBAL HISTORY 8 (1975), and therefore may have cultural ties to artifacts and sites outside the Reservation and Range B-19. The Navy states that "[o]nly a very small percentage of the region, however, has been surveyed for cultural resources. Areas of traditional Native American use are even less well-defined." DEIS at 5-11 (citation omitted). See also DEIS at 5-23 to 5-24. That cultural resources are not surveyed or well-defined does not relieve the Navy of its trust responsibility to conduct such surveys. Cultural resources and artifacts existing outside Reservation boundaries are nevertheless resources which the Navy is bound to protect. To the extent that existing surveys are deficient, the Navy should take steps to conduct its own surveys. It should also adhere to its intent to consult with Native Americans and the BIA during the scoping process. See DEIS at 4-21. W-4

E. OTHER INACCURACIES.

The DEIS indicates that the city of Fallon is the "community nearest to the proposed land withdrawal area . . . ." DEIS at 3-40. This statement is inaccurate; the community nearest to the proposed withdrawal of the lands in Range B-19 is the Walker River Indian Reservation. See Figure 1-1. W-5

Figures 5-2 and 5-3 are inaccurate. They show that the Walker River Indian Reservation to be much smaller than it is. The Reservation extends from its northern boundary directly south, east and west of Range B-19 down the length of the Walker River to Walker Lake. The Navy should revise Figures 5-2 and 5-3 to accurately depict the Walker River Indian Reservation. W-6

The DEIS refers throughout to the "Walker River Indian Reservation" as if it were the Walker River Paiute Tribe. See, e.g., DEIS at 4-25. References should be to the Walker River Paiute Tribe when referring to the governing body that operates within the land base known as the Walker River Indian Reservation. W-7

CONCLUSION

The Navy admits that the Tribe is the government with jurisdiction within the exterior boundaries of the Walker River Indian Reservation. DEIS at 3-30 ("Lands immediately south of B-19 are managed by the Walker River Indian Reservation."). However, the Navy consistently has excluded the Tribe from its consultation activities regarding the proposed land withdrawal in violation of 42 U.S.C. § 4332(C), and has failed to take steps to protect the Reservation from the adverse impacts associated with Navy training and testing.

The Navy concludes that:

> Impacts to members of the Walker River Indian Reservation and the Paiute-Shoshone Tribe of the Fallon Reservation and Colony were examined, given the proximity of these lands to the project area. The land withdrawal would not disproportionately affect these groups under [Alternative I] because the withdrawal does not involve Native American land and because Navy operations near the lands would not increase. In addition, Native American populations do not use the proposed withdrawal lands for grazing, mining, or recreation in a higher proportion than other segments of the population. The withdrawal would affect equally all members of the region of influence because any land management restrictions would be applied equally to all racial and income groups.

W-8

DEIS at 4-25 to 4-26. This statement misrepresents the impacts of the Navy's proposed land withdrawal. Mis-aimed ordnance has and will continue to fall on Reservation lands. Noise from Navy training and testing activities in Range B-19 does and will continue to adversely affect the Reservation community. In sum, the Tribe cannot use a portion of its Reservation lands due entirely to Navy activities and it is therefore inaccurate to state that the proposed withdrawal will not have any socioeconomic impacts in light of the fact that the Tribe cannot use the northern portion of the Reservation for income-generating, or any other, activities.

More importantly, the fact that the Navy's activities on the withdrawn lands will "affect equally all members of the region of influence" does not relieve the Navy of its special responsibility to protect tribal trust resources from harm, especially harm resulting from Navy activities. The Navy has an express trust responsibility -- one that does not extend to non-Indians in the region -- to take steps actively to ensure the protection of tribal trust resources

In the end, the DEIS is deficient and the Navy should revise it in accordance with these comments and those submitted by the Environmental Protection Agency, Letter from Jeff Phillibar to Sam Dennis (Oct. 10, 1997).

Sincerely,

Jonathan Hicks
Chairman

cc: Tad Williams
Jeff Philliber

bcc: Tod Smith
Alice Walker

Letter W
Jonathan Hicks, Walker River Paiute Tribe

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter W. Letter W has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter W comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
W-1	16f
W-2	16g
W-3	16h
W-4	16i
W-5	16m
W-6	25b
W-7	16n
W-8	16f, 16g, 16h

Letter X

WESTERN SHOSHONE DEFENSE PROJECT
PO Box 211106 Crescent Valley, Nevada 89821 ph: 702-468-0236 fax: 702-468-0237 email: wsdp@igc.org

Carrie Dann, Director
Western Shoshone Defense Project
Crescent Valley, Nevada

August 27, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Mr. Dennis,
After receiving the "Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada" Draft Environmental Impact Statement, I must ask you to both extend the public comment period on the document and hold additional public comment meetings.

The Western Shoshone Defense Project is a non-profit organization dedicated to affirming Western Shoshone rights and responsibilities to our homeland, Newe Sogobia. We are dedicated to protecting the health of our lands, waters and air for the future generations. Even though we have written several letters to the Navy and the Bureau of Land Management regarding other Navy activities and have met with the Navy to present Western Shoshone concerns regarding the proposed communication sites, we were not on the list of "Native American Groups" or "Organizations" to receive this document, nor were we consulted with as required by the National Environmental Policy Act. As a result of three telephone calls, we finally received a copy of the DEIS on August 24th. Under the October 10 deadline, we will only be allowed a little over one month to read and analyze the document. For this reason, we ask the comment period be extended. X-1

After briefly looking through the document, we have noticed several concerns that impact Western Shoshone lands and citizens. The DEIS mentions the "reasonably foreseeable" airspace expansion into the Diamond, Duckwater and Smokey Military Operations Areas. These MOAs are within the Western Shoshone Nation and include two communities, Yomba and Duckwater. We request an extension of the public comment period so we can fully analyze the implications of these "foreseeable" expansions. X-2

Additionally, we request that public comment meetings be held in the towns of Eureka and Austin, as well as Reno and Fallon. The latter two locations are approximately three hour drives from the communities in central Nevada that will be impacted by the DEIS. If the public meetings are sincerely intended to solicit the publics' comments, the meetings should be held in reasonable locations. Since no Native Americans were consulted in the planning process of this DEIS, it would seem even more imperative that an effort, however tardy, be made to include the Western Shoshone communities in the NEPA process. Again, I strongly urge you to hold additional meetings in Eureka and Austin. Thank you. X-3

Sincerely,

Carrie Dann

Carrie Dann, citizen of the Western Shoshone Nation
Director, Western Shoshone Defense Project

Letter X
Carrie Dann, Western Shoshone Defense Fund

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter X. Letter X has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter X comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
X-1	2c, 16j
X-2	2c, 16k
X-3	2b

Letter Y

THE RURAL ALLIANCE FOR MILITARY ACCOUNTABILITY

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8 October, 1997

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Regarding: Draft Environmental Impact Statement Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada

Dear Sir or Ms.,

The following are the comments of the Rural Alliance for Military Accountability (RAMA) on the Draft Environmental Impact Statement Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada

For nearly a decade RAMA has monitored the Navy's plan to withdraw public lands in central Nevada for military use. Generally RAMA supports the withdrawal of public lands which are contaminated with live ordnance. We believe the withdrawal of these lands will protect human health and safety. RAMA does not support the withdrawal of any additional lands in central Nevada. Specifically, the withdrawal of 33,400 acres for the Bravo 17 range and 12,200 acres for the Bravo 19 range are clearly warranted and should be enacted by Congress. Y-1

RAMA does not support the withdrawal of any additional lands surrounding the Bravo 16 bombing range. Bravo 16 is located between the City of Fallon and the Lahontan Reservoir. RAMA's opposition to the continued use of the range is based on the fact that low-level, high-speed jet overflights conducted at Bravo 16 represent a continued health and safety threat to hundreds of residents in Churchill County.

Unlike other military bombing ranges in Nevada, Bravo 16 is unique because the restricted airspace that overlies the range also overlies residential private property. As a consequence, low-level, high- speed jet overflights directly impact residential and commercial areas in Churchill County, creating an ongoing health and safety threat for local residents. It is vital to understand that nowhere else in Nevada is there a military bombing range that, because of its location and associated restricted airspace, directly impacts private property rights. More, importantly, the continue use of the range can only results in the degradation of the quality of life for hundreds of Nevadans and residents of the Walker River Paiute Reservation. Y-2

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RAMA is a project of the Tides Foundation

In reviewing the document Naval Air Station Fallon Range B-16 Range AICUZ Update, February 1977 I am disheartened to say that it is clear the Navy has not learned from their past mistakes discovered during "Operation Ugly Baby" as they are again planning to allow the bombing of BLM administered public lands. Please refer to figure 4 in the attached RAICUZ report and the discussion found on page 4-5. A review of these sections clearly documents that BLM administered public lands will be contaminated with off range ordnance. RAMA believes that the "armed" jet overflight activities that are clearly proposed outside of the withdrawn lands at B-16 will pose a direct significant health and safety hazards to users of these public lands. The RAICUZ report states:

> "Range Safety Zone B is the area of armed overflight. This zone, the intermediate level of safety concern, includes an area 1,500 feet either side of the centerline for the flight track and extends from the point of weapons systems arming to the edge of RSZ A. Arming the aircraft weapons systems refers to the release of the safety latch mechanism in readiness for ordnance release at the target. From the arming point until the release of the ordnance, an occasional inadvertent drop of ordnance is possible due to an electrical short, air turbulence, or other unexpected occurrence, The arming point for Range B-16 occurs approximately one mile south of the range boundary"

The issue at Bravo 16 is not merely a matter of aeronautical concern. This is unquestionably a serious public land issue for the BLM. Accordingly, we believe BLM should address the following questions as part of its review of the DEIS and Range AICUZ update document.

Will the BLM and Navy again allow ultra hazardous bombing activities to occur on BLM administered lands when they have received documentation that contamination with off range ordnance will occur?

What are the liabilities for the BLM if an accident were to occur and is it appropriate to allow these activities to occur on BLM administered lands? Can the BLM assure public safety on these lands and how will the BLM notify the public that they are using unsafe public lands being utilized as part of a bombing range?

Because of these concerns, RAMA continues to request that the Navy consider a long-term plan for abandonment of the range. And this is important since the Bravo 16 range issue will likely become the subject of federal legislation in the foreseeable future. As it now stands, the U.S. Navy at Fallon is developing a Environmental Impact Statement for the withdrawal of up to 130,000 acres of public land in Churchill County. A portion of the land withdrawal is needed to create safety and buffer zones around several existing Navy administered air-to-ground bombing ranges in central Nevada. And while these safety and buffer zone land withdrawals may be generally needed, they should not be granted unless the Navy begins to address the questions of abandonment of the Bravo 16 range.

In 1985, Nevada's Governor Richard Bryan provided written comments to the Navy concerning the land withdrawal proposal in question; at that time it was referred to as the Master Land Withdrawal - Environmental Impact Statement. And while the Environmental Impact Statement for the Master Land Withdrawal was eventually canceled, only to be followed by a second "supplemental" Impact Statement, which was also canceled, then Governor Bryan's and the State of Nevada's position expressed in 1985 has not changed. In the Governor's 1985 written comments to the Navy, he said that "the most serious shortcoming in the EIS is that portion which deals with the proposed withdrawal of land surrounding the Bravo 16 range."

The Governor's comments focused on potential economic development conflicts, conflicts with land uses, problems concerning private aviation, as well as the central issues of public health and safety. Referring to a finding by the Federal Aviation Administration, which suggested the range should be relocated to enhance air safety and to ensure the health and safety of area residents, Governor Bryan specifically recommended that Bravo 16 be abandoned.

Environmental organizations like RAMA, local residents in Fallon and State officials are aware that the U.S. Navy has long maintained the need for Bravo 16, siting the necessity to provide realistic military training to meet national defense objectives. However, the continued use of the range, let alone its expansion, has never been fully evaluated to assess threats to public health and safety, changing urban and rural land uses, as well as evolving technologies including air-to-ground warfare tactics and new weapon systems. Y-4

After more than ten years of controversy surrounding Bravo 16, the Navy has finally acknowledge that a public health and safety threat exists for more than 2,000 Fallon residents who live under the restricted air-space for the range. To address this issue, the Navy is proposing to change the way it uses the range. In essence, the Navy is seeking FAA approval to relocate 12 Military Training Routes (MTR) from Bravo 16 to Bravo 20. Moving the airspace would allow the Navy to change the flight approach to the range: moving it away from private property. The current flight approach is from north to south. The jets now fly down from the north over private property across Highway 50 to the range. Bravo 16 is located a few miles south of Highway 50 on this end of Fallon.

In any event, by changing the airspace and thus the approach to the range, jets would fly from south to north: a change in the approach of 180 degrees. Because the Navy has not released any details noise studies concerning this proposal, however, it is impossible to know if such changes would actually minimize existing health and safety concerns caused by low-level high-speed jet overflights. The proposed flight pattern approach to Bravo 16 will be less than one mile from our reservation boundary. The Navy is proposing to flip-flop the flight pattern from the Sheckler District, which is located north of Bravo 16, to the south of Bravo 16.

If approved by the FAA, this action will shift the noise impacts to Walker River Paiute reservation lands. These proposed actions call to question federal adherence to

environmental justice considerations as outline under Presidential Executive Order 12898. We were advised at a recent public meeting that the FAA will likely use the Categorical Exclusion provision under the Council of Environmental Quality regulations to justify this action. Yet it is not clear how environmental justice considerations will be addressed through the FAA process. We note that if a Department of Defense NEPA action were required, then at least an analysis of Environmental Justice consideration would be mandatory (see Department of Defense, Strategy on Environmental justice, dated March 24, 1995).

The residents of the Walker River Paiute Reservation have first hand knowledge of the impacts associated with operations from the Navy at Fallon, including habitual deviations from normal flight patterns. Their people and lands have been subjected to frequent ear shattering low-level military jet overflights, often at tree top level. Y-4

Additionally, the current contamination of the Walker River Paiute Reservation and the potential health and safety problems which exists on the reservation, due to off range ordnance, south of the existing Bravo 19 bombing range, has not been resolved to their satisfaction through a negotiated settlement. In any event, the cumulative noise impacts associated with continued flight patterns and operations at Bravo 19, along with the proposed flight pattern into Bravo 16, would only further degrade their sovereign lands and airspace. And it appears that no analysis by the Navy or the FAA of these cumulative impacts is anticipated or planned. To assess those impacts the Navy must comply with the Presidential Executive Order on Environmental Justice (EO 12898). This Order requires an evaluation of human health or environmental effects on minority and low-income populations.

Since the noise problems surrounding Bravo 16 appear to be unresolvable, we believe that congressional action is needed to direct the Navy to relocate the Bravo 16 bombing range away from the Lahontan Valley region. The Navy's Bravo 16 noise problems and health and safety threats that affect the residents of the Sheckler District in Fallon cannot simply be shifted to the Walker River Paiute Nation; such an action is not right, just, or acceptable.

Also, and unlike the bombing ranges in Dixie Valley or in the Carson-sink, the result of trying to fix the noise and safety problem around Bravo 16 would only produce a temporary solution. In fact, it would be like treating symptoms rather than addressing the cure. It is common knowledge that urban and rural development patterns are moving west from the City of Fallon toward the Bravo 16 range. And, since population density is a chief determinant of land use and airspace compatibility, the changing growth patterns in the area clearly preclude the continued use of the range for military bombing. Y-5

Compounding this problem, moreover, are changes in military technology. The most recent published noise study for the range relied on noise contours developed largely from A-7 jet aircraft, which is not the aircraft the Navy is flying today. The F-18, which is the predominant Naval fighter today creates more noise than the A-7 did and the situation will worsen as new, more powerful and noisier updated versions of the F-18 are deployed.

Because of all of these concerns, we believe the time has passed to allow the Navy to fly jet aircraft at 500 knots at altitudes of 1000 feet and lower over private residential property or for that matter near private residential property. And this is particularly relevant in a state like Nevada, where the federal government controls 85 percent of the land and 40 percent of the airspace. We are also disappointed with the Navy's decision not to address the abandonment of Bravo 16 as part of the land withdrawal proposal. Y-5

We are, however, not convinced that the Navy has clearly expressed the proposed action and alternatives for the requested 68,600 acres in Dixie Valley.

Until publication of this most recent land withdrawal Environmental Impact Statement, the public was
not informed of the Navy's planned use for an expanded withdrawal in Dixie Valley. According to the Navy, the 68,600 acres would be used for combat search and rescue, close air support, and other ground training operations, such as special forces training.

As proposed these lands would be managed through a regulated development program operated by the Navy in conjunction with the Bureau of Land Management. The lands would only "generally " remain open for public use. The proposal would also bring together all of the lands that were condemned in the former community of Dixie Valley to mitigate noise impacts for the Navy's Supersonic Operations Area. Y-6

RAMA is concerned that the Dixie Valley withdrawal was the only alternative considered for ground training activities. We note the Department of Defense and Department of Energy control
more than four million acres in Nevada. We believe that Navy must evaluate the potential for co-use of
other military lands, such as the northern part of the Nellis Air Force range. Furthermore since the Navy's plan ground training activities was not disclosed during the 1995 scoping, the RAMA and the public would have insisted that the Nellis range be considered for such ground activities.

RAMA is not persuaded that a co-management program with the Bureau of Land Management is workable
for the Dixie Valley area. The public has little confidence that military maneuvers would be halted when conflicts between multiple use activities would occur, as they most certainly have and will in the future. It is much more likely that those wishing to utilized the public lands in question will be run off. Public confidence in the Navy's and BLM's co-management of resources in Dixie Valley is highlighted over the controversy regarding the Horse Creek Ranch. This road has also been identified by the BLM as a potentially important public access point to the Clan Alpine Mountains Wilderness Study Area (WAS) located in Churchill County should the WAS be designated wilderness by Congress. The BLM has also recognized that the trout fishery of Horse Creek is a unique feature that is found in very few drainage's in Central Nevada. Combined with the natural beauty of the Horse Creek Canyon and the direct access it provides to the WSA and Y-7

other public lands we believe that a public easement across the private land at the base of the canyon should be provided. Limited access to our public lands is unacceptable. The State of Nevada is on record requesting the return of the Horse Creek Ranch to the BLM for public recreational use as a mitigation measure pursuant to the Special Nevada Report (State of Nevada, Department of Administration, Preliminary Mitigation Measures for the Special Nevada Report, April 18. 1990). In light of past and current conflicts with U.S. Navy actions in the Horse Creek area, we are formally requesting Naval compliance of this mitigation measure. Y-7

Regarding the proposed electronic warfare sites, RAMA fully agrees with BLM that the expansion of these sites represents a permanent commitment of public lands. We fully agree with the BLM that locating these threat emitter sites outside of the Dixie Valley area would be incompatible with the Bureau's requirements to manage public lands resource in a harmonious and coordinated manner. Allowing the placement of these sites outside of the Dixie Valley area would cause everlasting impairment of the character of the environment and productiveness of the land in north central Nevada.

We also believe that locating new threat emitters on public lands outside of Dixie Valley area, would be inconsistent with the Bureau's responsibility of maintaining the health, safety and the quality of life for rural residents and the public's use of our public lands. It is BLM's job to protect human health and the environment on all public lands and thus it is essential to limit harmful levels of electromagnetic radiation generated by threat emitter sites on the public lands. Y-8

We also have no doubt these threat emitter sites are blamable for both direct and indirect impacts on the human and natural environments. We are aware that these manned sites require extensive infrastructure such as power lines and fiber optic cables. Accordingly, a decision to allow the Navy to establish these permanent facilities on public lands in central Nevada represents a major federal action that would spawn long-term significant impacts to the human and natural environment. Moreover, establishing threat emitter sites in remote pristine valleys would cause a ceaseless and long term occupancy of military jet aircraft, resulting in direct and indirect impacts such as noise and sonic booms, dispersion of chaff and flares, and dropped military ordnance. Again we call on the BLM to fully implement the decisions contained in the BLM's Central Nevada Communication Final Plan Amendment.

Last October the State of Nevada formally asked the Navy to establish a citizens advisory committee under the authority of the Federal Advisory Committee Act. The proposed FACA Committee could have helped the Navy to involve the public in discussing issues and alternatives concerning the Navy's desire to acquire additional public land and airspace in the region. The Navy decided the State of Nevada's request and specifically eliminated participation of RAMA and the Sierra Club we wish to not e that RAMA has successfully participated in several government sponsored committees. Such as the Western Governor's Committee on Munitions, Versar's Committee on Streamlining Y-9

cleanup of Defense Environmental Restoration Act (DERA) projects, RAMA is currently the community co-chair of the Restoration Advisory Board at the Sierra Army Depot and is currently participating in the Ecosystem Management Strategy for Nellis Air Force Range.

Ecosystem Management

The DOD Instruction #4715.3, May 3,1996 requires that DOD installations and departments "Develop a Vision of Ecosystem Health: All interested parties (Federal, State, Tribal, and local governments, nongovernmental organizations, private organizations, and the public) should collaborate in developing a shared vision of what constitutes desirable future ecosystem conditions for the region of concern. Existing social and economic conditions should be factored into the vision, as well as methods by which all parties may contribute to the achievement of desirable ecosystem goals".

RAMA recommends that Fallon NAS become pro-active per the above noted directive, in encouraging sustainable economic development and ensuring sustainable ecosystem management. RAMA is urging the formation of the FACA board be pursued by the DOD immediately to assure legal and moral requirements for ecosystem management are fulfilled. This process should consider both natural processes and human activities including resources such as soils, biological diversity, mineral, water, climate, topography cultural identities, lifestyles, and livelihoods of people linked with the ecosystem.

Ecosystem management is an innovative natural resources management concept that has gained international attention since the 1980s. Ecosystem management calls upon federal agencies to consider problems and land management in the context of ecological rather than federal agency boundaries. It is crucial that the DOD from partnerships to consider the management of ecosystems that cross jurisdictional boundaries in order to sustain systems that are not only healthy, diverse, and beautiful, but economically productive and useful as well. Y-9

The Clinton Administration's Ecosystem Management Initiative embraces the idea that together these goals can be reached. This policy calls for a multi-agency approach and examination of ecological problems beyond the agencies boundaries. These agencies should include the State of Nevada, the Division of State Lands, Minerals, Wildlife, Parks, etc., the Bureau of Land Management (BLM) and the Fish and Wildlife Service. Resource management strategies once adequate on Fallon NAS could become obsolete, even if DOD has maintained its lands with consistency. Failure to adapt to these changes could lead to increased problems with the public, Indian Nations, regulators as well as federal laws and regulations.

The DOD is required under DOD Directive 4700.4 to revise the Resource Management Plan every five years. We note that this directive requires that component plans must include current ecological inventories that include a description of the condition of resources and potential for additional or future uses, such as fish and wildlife, forest management, recreational, and other special uses. Furthermore, the DOD Directive 4700.4 requires that management plans include management goals and methods, schedules of activities and projects, priorities, responsibilities, etc.

* The Marine Corps Air Station has proposed to upgrade their Tactical Air Combat Training System within the Barry Goldwater Range. The range will also be home to a new Measurement and Debriefing System.
* The National Guard has proposed a Colorado Airspace Initiative with "simulated target, surface to air threats, and simulated weapons delivery tactics."
* In Nevada, Nellis Air Force Base has proposed "Nellis Air Combat Training System Sites."
* Twenty seven additional EW and TACTS sites and one master site are proposed at Naval Air Station (NAS) Fallon, Nevada.
* In New Mexico. the USAF has proposed a new bombing Range for German Aircraft Operations at Holloman AFB.
* The Air Force has proposed doubling the size of the Lucin A & B MOAs at the Utah Test and Training Range (UTTR)
* Cannon Air Force Base in New Mexico has requested "Proposed Structure Changes and Related Actions."
*Enhanced Training in Idaho including a proposed 12,000 acre bombing range and expansion of SUA

Y-10

In addition, recently-approved proposals affecting military land- and airspace uses include:
* The 99th Electronic Combat Range at the UTTR;
* Roving Sands in New Mexico;
* The Theatre Missile Defense Project in New Mexico;
* The expansion of military activities at the White Sands Missile Range;
* The deployment of German Air Force Tornadoes at Holloman Air Force Base in New Mexico; and
* Linkage of the electronic warfare systems of Fallon NAS and Nellis AFB.

In February 1993, then-Chairman of the Joint Chiefs of Staff General Colin Powell acknowledged that, "An integrated test and evaluation range structure linking existing ranges across six western states and supersonic areas off the California coast would provide a land, airspace [and] sea area to accommodate a large portion of our joint training, test and evaluation needs well into the next century." Current expansion plans in the West, while conducted on a piecemeal basis, clearly demonstrate the DOD's effort to implement this consolidation. As such, the DOD's failure to prepare a Programmatic EIS which assesses overall needs for training and cumulative impacts of the training range expansions in the west violates the spirit and letter of NEPA.

Chaff and Flares

Chaff is an airborne radar-detection countermeasure consisting of extremely fine fibers of aluminum coated fiberglass. A typical burst chaff bundle contains approximately 2.1 million fiberglass strands which are the size of human hairs. After its dispersal during military training exercises, it turns into a waste material that falls to the ground.

Y-11

It is also omnipresent in some parts of the West. As a 1994 survey by Nellis AFB reported, "Over 10 trillion of these fibers have been dropped on Nevada alone over the last 20

years." Presently, rural residents and BLM officials are finding clumps of chaff on public and private lands throughout central Nevada. We have attached a BLM map of known chaff littering sites.

The DEIS states on page ES-14 that the use of chaff does not significantly impact public health and Safety. Yet is well known that no studies of human health impacts have ever been prepared by the DOD.

The fact is, this conclusion is inconsistent with the DOD's own findings. Section 4.4 of the April 1997 Record of Decision on the Final EIS on the Alaska Military Operations Areas made a commitment to "facilitate and encourage the continued study of chaff alternatives and biodegradable chaff." The earlier DEIS on the same proposal also found that: "The National Institute for Occupational Safety and Health (NIOSH) considers crystalline silica (as a respirable dust) a potential human carcinogen."

The DEIS claim that chaff poses no known risk to humans and animals is also in conflict with two other DOD reports, including the January 1992 DEIS for the Aircraft Conversions at the 103rd Tactical Fighter Group, Bradley International Airport, Connecticut, as well as for the Air National Guard Readiness Center, Andrews Air Force Base, Maryland. The earlier DEIS states, "Wind blown particles would tend to concentrate on the lee side of water bodies where nutrient levels are higher. Surface feeding wildlife, such as ducks, may consume chaff particles on the surface of their primary vegetation. These would either pass through the digestive system or form compacted pellets in the gizzard." Y-11

While other limited studies have been performed on the human health and ecological effects of chaff - including at the University of Maryland and the University of Delaware - the results are mixed, and some are not directly applicable to high desert, basin and range environments found in the western U.S.

The Nevada Division of Environmental Protection (DEP), for example, reviewed Defense Department documentation of the risks associated with chaff. Although the state's investigation "did not provide the Division with a definitive answer as to the environmental effects of chaff on public and private lands in Nevada," the DEP identified two primary concerns:

"The first concern is from inhalable particulate below PM10 which may occur from the decomposition and resuspension of fiber particulate by mechanical means. The Division's second concern deals with the physical deposition of what could be considered solid waste on public and private lands in the State of Nevada. There is very little information on the amounts of chaff currently deposited and how these fibers decompose in the environment."

The report concluded, "... the Division does not feel that adequate studies have been done to assure that there are no environmental risks posed by the fibers." In the opinion of RAMA, this should be the jumping-off point for the DEIS, instead of the reversed position that chaff poses no known risk to human health.

Indeed, the DEIS would do well to follow the lead of the Desert Eglin South Chaff Survey conducted by Nellis AFB in March 1994. Among the survey's findings: "More research is needed, especially concerning the behavior of chaff in anaerobic or acidic conditions found in wetlands".

> "This last category of environmental damage relates to the level of litter which is currently accumulating in some areas of the MOA from the use of chaff and flare debris. In most cases the litter from aircraft operations probably is not more deleterious to the environment than common roadside litter such as bottles and cans found in the area. In the case of WSA's, however, a case can be made that litter, fire scars, and debris detract from the naturalness, and infer human presence which is specifically identified in the Wilderness Act as negative impacts for wilderness areas.
>
> "Litter from chaff and flares, and other debris from Air Force aircraft operations has the potential to impact naturalness. So do fire scars started by flares. Jet overflights have the potential to impact solitude and incur human presence.
>
> "Potential environmental issues involve injury from falling debris, impacts to air quality, effects on soil and water, and effects on biological resources. Ingestion or inhalation of chaff by wildlife or livestock, physical effects on the skin or feet (i.e. birds using chaff as a nesting material, or chaff becoming embedded in the paws of animals), indirect effects on vegetation due to changes in soil chemistry, and indirect effects of changes in water chemistry on aquatic life are also potential environmental issues related to chaff.
>
> "Some small bundles of chaff were found as well as three large clumps of chaff fibers."

Y-11

While the long-term effects of chaff may be unknown, some of the immediate physical impacts are. In 1992, the Army found: "Glass and carbo fibers and, likely iron fibers deposited on soils are susceptible to wind resuspension until immobilization occurs. However, even those fibers immobilized on soil surfaces can be resuspended by physical forces such as foot and/or vehicular traffic. Thus, there is a persistent risk of fiber inhalation and mitigation efforts will likely be required for areas containing high fiber concentrations."

RAMA urges the DOD consider all of these reports before categorically discounting any impact of chaff on human health. Beyond that, we oppose the current and proposed use of chaff until sufficient independent analysis of the potential impacts has been completed. Given the amount of time that the problems with chaff have been known, residents of the rural west will no longer accept a lack of documentation as a claim of "no impact." On page 4-72 the DEIS for the Proposed Expansion of German Air Force Operations at Holloman AFB, NM, USAF, June 1997 states, "No studies on chaff consumption by wildlife have been conducted (U.S. Air Force, 1997). Hypothesized effects of chaff on wildlife have

included disruption of feeding, behavior of digestion, toxicity, and inflammatory response in the respiratory system, potentially resulting in silicosis".

Another important point is that the military is dropping chaff on private property throughout the West without permission of the landowners below. Regardless of environmental or health impacts, this may be a violation of private property rights, since it constitutes disposal of a solid waste.

But chaff represents more than garbage on the terrain. The DEIS for the Proposed Expansion of German Air Force Operations at Holloman AFB, NM, USAF, June 1997 (page 2-40) notes that "[pyrotechnic] chaff is considered to be a munition because it uses an explosive charge to disperse the chaff upon release." The DEIS for Enhanced Training in Idaho makes a similar finding: "The chaff is ejected from the plastic cartridge using a small pyrotechnic device that remains on the aircraft". If chaff is considered a munition in New Mexico isn't it also a munition in Idaho and Nevada? Y-11

The BLM has authorized the use of chaff in Idaho and Nevada over public lands associated with operations at Mountain Home AFB. In the opinion of RAMA, this raises serious questions. We believe the BLM has a mandate to protect public safety on lands it administers. But how can the BLM assure public safety on these lands where it allows the use of chaff and flares? How will the agency alert the public that the lands are being used as part of a training range? What are the liabilities for the BLM in the event of an accident involving chaff?

We would raise the same questions for publicly-accessible lands administered by the Department of the Interior (DOI). Since there is inconclusive evidence on the potential environmental impacts of chaff - including its effects on human health - RAMA believes the DOI and BLM should adopt a policy that the use of chaff be limited to lands which have been formally withdrawn for military uses.

Titanium Tetrachloride

The use of inert ordnance of Bravo 16 will result in the release of titanium tetrachloride. RAMA believes the DEIS does not fully describe the possible release, the potential for off-range contamination, or the environmental consequences of the use of titanium tetrachloride, including but limited to, potential ground, air and water contamination, impacts to human health and impacts to wildlife. Y-12

According to E.I. duPont deNemours & Co., the manufacturer of titanium tetrachloride: "Titanium tetrachloride ($TiCl_4$) is manufactured by the chlorination of titanium-bearing ores in the presence of coke as a reducing agent. Titanium tetrachloride is a colorless to light-yellow liquid with a pungent odor. Titanium tetrachloride is very susceptible to hydrolysis, and the liquid fumes strongly when exposed to moist air. The fumes are dense and persistent and consist of hydrochloric acid, finely divided particles of titanium oxychloride and hydrated oxides of titanium." In its description of health hazards, the company said: "Titanium tetrachloride is a powerful desiccant and contact with the liquid

product will cause burns from both chemical and thermal effects. The vapor is also hazardous and is extremely irritating to the skin, eyes, nose and throat. Overexposure to the vapor may cause burns to the eyes and lungs."

Based upon this description and effects of titanium tetrachloride, and the precautions which OSHA and other federal, state and health organizations recommend when working with the substance (see attached fact sheets and documents), RAMA believes the military must investigate this issue much more thoroughly.

Since filing these questions, we have learned of titanium tetrachloride's connection with vanadium, and would like to submit these additional concerns for full study: "Does the chemical makeup of titanium tetrachloride include Vanadium? If so, what are what are the potential health and environmental risks?" Y-12

These questions are not academic exercises, nor should they be treated as such. We believe there is the possibility of significant off-range contamination in the event that ordnance is used which releases titanium tetrachloride. In response to RAMA's investigation into the use of titanium tetrachloride at the 17,280 acre Bravo 16 Range located at NAS Fallon, Nevada DEP Administrator Lew Dodgion noted the potential dispersal of titanium tetrachloride off-range: "If the ordnance landed near a range boundary, then the potential would exist." RAMA points out that this range is currently 5,280 acres - or 30% - larger than that being proposed in Idaho. The potential for off-range contamination in Idaho is that much greater.

<u>Noise</u>

NEPA mandates the assurance of "scientific integrity" and "scientific accuracy" under 40 CFR 1502.24 of the material placed in an EIS. Use of ROUTEMAP and NOISEMAP to analyze proposed flight patterns into Bravo 16 is unacceptable and will not satisfy these requirements. The Defense Department has been aware of these flaws with the use of ROUTEMAP and NOISEMAP noise analysis tests for several years. New noise analysis test which remedy several of the known deficiencies, called Assessment System for Aircraft Noise (ASAN), should be utilized for analysis and is currently available as discussed during Noise Camp "95".

We recommend that the Defense Department undertake an updated analysis of the expected noise environment utilizing the newly developed Air Force computer programs (MR-OPS and MR-NMAP) for predicting noise in low level operating areas. Analysis should include terrain effects on noise prediction accuracy for low altitude flights and a comparison of noise information on expected and current noise environments to obtain an assessment of the expected magnitude of the changes in noise levels and noise environments. Y-13

We note the following reasons, discussed at "NOISECAMP 95" which clarify the necessity :

(1) NOISEMAP was designed for around airports with a large amount of traffic.

(2)NOISEMAP does not take into account topography in evaluating sound levels. It assumes everything is flat. Sound may be attenuated and shielded in some cases and be focused and much worse in others.

(3) ASAN Assessment System for Aircraft Noise is currently available and has been in development for 8 years.

(4) Reverberation will add to the duration of the sound and increase the energy dose. While it difficult to predict since it is influenced by everything form ground cover, geology topography, position of noise source and position of the listener. But difficult or not to calculate, it should be factored into the subjective affect of noise.

(5) Ldnmr as discussed by military experts at "NOISECAMP 95" found that the "startle response" as calculated by past noise analysis methods was outmoded. Therefore, the original "penalty" has been reevaluated by actual on-site measurements. Defense experts recommended doubling the current noise penalty for startle reactions. Y-13

(6) ASAN will introduce census figures for the impacted region which will better.

define impacts

The discussion of noise impacts must be inclusive of all expected noise impacts. The Defense Department simply assumes that if the DNL is less than 65 db, there will be no noise impacts. This is a clear reflection of Defense Department policy of selecting 65 db as an arbitrary cutoff for assessing noise. The "levelized" DNL measurement mean nothing to people hearing jet noise as they attempt to talk to friends, enjoy an outdoor barbecue or watch TV. People experience noise episodes, not day/night averages! Residents will not experience the noise impacts of a low-level overflight or sonic boom over a day, month or year, but in a matter of seconds. It is also important to acknowledge that even at a decibel level of 55 or less, jet noise intrudes into the human environment, particularly in rural areas where ambient noise levels are exceptionally low, obliterating the sense of peace and quiet that attracts people to such areas.

Conclusions:

In conclusion, it is important to recognize that a military withdrawal of public lands in Nevada will require direct congressional action, as under the Engle Act (PL. 85-337), all military land withdrawals in excess of 5,000 acres can only be granted by Congress. This means that the withdrawal decision in Churchill County, including the decision concerning Bravo 16, is not entirely in the hands of the Navy. To the contrary, the decision will be made by our elected congressional representatives.

RAMA is not persuaded that the 68,600 acres in Dixie Valley has been fully defined, and we continue to be disappointed in the Navy's inflexibility to address abandonment of the Bravo 16 bombing range.

Thank you for the opportunity to comment on the DEIS.

Sincerely,

Grace Potorti

Grace Potorti

Letter Y
Grace Potorti, Rural Alliance for Military Accountability

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter Y. Letter Y has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter Y comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
Y-1	1b
Y-2	7a, 7b
Y-3	7c
Y-4	16a, 16g, 16h
Y-5	7d
Y-6	1e, 9b
Y-7	5c, 6c
Y-8	5j, 10b, 10f
Y-9	4a
Y-10	3c
Y-11	23d, 23g, 23h, 23i
Y-12	21c
Y-13	7a, 14b, 14d

Letter Z

NEVADA OUTDOOR RECREATION ASSOCIATION, INC.

NATIONAL PUBLIC LANDS TASK FORCE

SOUTHWEST WILDLANDS EDUCATIONAL INSTITUTE (NORA)
NORTHERN ROCKIES BLM TASK FORCE (NORA)

AWARDS:
1974 Hillard Memorial Award (RONCOS)
1982 Desert Wilderness Conference Award
1987 Desert Protective Council Award
1988 Chevron Conservation Award
1991 Golden Spur Cone Award

Founded 1958

HONORARY LIFE MEMBERS
Charles h. Watson, Jr.
Carson City, Nevada
Alvin McLane
Reno, Nevada
Darwin Lambert
Luray, Virginia
Prof. Ron Smith
U.N.R., Reno, Nevada
Jeff Van Ee
Las Vegas, Nevada
Howard Booth
Las Vegas, Nevada
Lorna Hutchinson
Carson City, Nevada
Harold A. Kenyon
Interlaken, North Dakota
Hugh C. McMillan
Ballard, New York
C. Clifton Young
Reno, Nevada
Richard Pough
New York, New York
Maryann Hill
Reno, Nevada
Michael Frome
Moscow, Idaho
Oscar Rabenold
Reno, Nevada
Russell Peugeot
Heron, Oregon
John H. Avakian
Reno, Nevada
Clifton R. Merritt
Denver, Colorado
Bill Cunningham
Missoula, Montana
Dr. Richard Bergen
Gabbs, Nevada
William Siemers
Boise, Idaho
Amy Mason
Reno, Nevada
Bernie Weigand
San Ramon, California
Roger Schell
Reno, Nevada
Drummond Pike
San Francisco, California
George Earle
Naperville, Illinois
Charles H. Stoddard
Milwaukee, Wisconsin
Paul Clifford
Cleveland Heights, Ohio
Harriet Allen
San Diego, California

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attention: Samuel L. Dennis, Code 1851,
Environmental Planning Branch
900 Commodore Drive
San Bruno, CA 94066-5006

August 13, 1997

Dear Mr. Dennis:

For 39 years this organization has been doing a comprehensive wilderness and natural areas inventory of the Great Basin. In 1958, this effort has been known as the *Nevada Outdoor Recreation Resources Index & Survey*. Over this period, we have discovered numerous outstanding, fragile and unique natural resources in the subject area of this proceeding. In the Dixie Valley region of the Lahontan BLM Resource Area we have been investigating numerous sites and areas of outstanding and unique character on both the Public Lands in the area and certain phenomena on Navy acquired lands. We believe all the alternatives--except the *no action alternative*--in your Draft Environmental Impact Statement (DEIS) of June 1997 contain serious errors of omission concerning environmental degradation within the meaning of the *National Environmental Policy Act* (NEPA). There is no mention of a wilderness study area (WSA) that would be seriously impaired within the meaning of the Federal Lands Policy & Management Act (FLPMA) Section 603 and FLPMA Sections 102(a) & 201 (a) potentials for "*Areas of Critical Environmental Concern*" (ACECs) in Dixie Valley and the 40 Mile Desert area.

Z-1

Even the Navy's preferred alternative borders the *Job Peak WSA* (NV-030-127) whose eastern boundary for the most part follows Nevada State Highway 121 beginning approximately 8 miles north of its junction with U.S. Highway 50. Our volunteers have explored this WSA extensively since the late 1970s and have found such unique resources as (1) perhaps the grand champion (largest) as well as the probable oldest grove of ancient *limber pine*,(2) canyons with desert-bound waterfalls, (3) extensive threatened raptor habitat in pinnacles and tall rock formations of the eastern area of the WSA and (4) exceptional exposures of the 1954 Dixie Valley earthquake fault deserving of status as a unique geological area. The 2 other alternatives constitute major intrusions into and within the WSA and thus violates the "*nonimpairment*" guidelines and statutes of FLPMA Section 603. Failure to even mention this WSA in all the studies and alternatives makes the entire EIS document "*generic*" under NEPA law.

Z-2

The document violates Section 404 of the Clean Water Act and probably the Endangered Species Act (ESA) concerning wetlands and ponds extant on such acquired Navy lands as the Turley Ranch. These lands contain a possible endemic subspecies of *tui-chub* that is confined within Dixie Valley and dependent on minimal disturbance of its habitat for continued existance. This organization participated in an exploration of these ponds and wetlands with the U.S. Fish & Wildlife Service (Reno) and confirmed with on-site photographs in our archives the existence of this rare fish on Navy lands in Dixie Valley. Further, access to the public onto BLM Public Lands in Dixie Valley would be denied both on the valley floor (where NV Route 121 passes thru proposed withdrawals) and to western approaches to the *Gabbs Valley Range WSA*. This blockage of access is particularly serious at the approaches to Cow & Deep Canyons where there is a live stream that also may be a fishery habitat.

Z-3

The necessity for this withdrawal expansion is highly questionable given the disappearance of the Soviet threat. Clearly, the USAF in their 1990-91 actions in Kuwait and Iraq showed they have sufficient lands and air space to carry out any mission given new circumstances involving the end of the Cold War. The Navy did their assigned tasks with no evidence they were hampered by the 4 million-plus acres the Department of Defense (DoD) now has in Nevada alone. More expansion beyond existing Navy ranges would exacerbate the spread of (continued)

IN MEMORIAM

(NORA Founders)
Norman L. Lewis, Sparks, Nevada
George Lund, Minneapolis, Nevada
Ernest Johnson, Empire, Nevada
James G. Hulse, Sr., Pioche, Nevada
Charles H. Callison, Jefferson City, Montana
George Kell, Sparks, Nevada
Charles Hope, Reno, Nevada
Howard Driggs, Carson City, Nevada
Richard Holmes, Helena, Nevada
Bill Vincent, Las Vegas, Nevada

(NPLTF Founders)
Paul M. Tilden, Bethesda, Maryland
Cornelius Heeney, St. Louis, Missouri
George Hjelte, Redmond, Washington
Gerald E. Freeman, St. Timothy, Maryland

live ordinance on outstanding ACECs, wilderness, recreational and archeological lands in the area. Nevadans rightly have come to call DoD attempts to circumvent such laws as the 1958 Engle Act, the Clean Water Act, FLPMA and NEPA as the "*Afghanistanization*" of the American West. Expansion of these withdrawals invariably has led to more and more *no-fly zones* and harassment of people on the ground, errant ordinance and groundwater pollution. This will in turn cause more unjustified demands for additional expansion of Military Operations Areas (MOAs). Z-3

Both the Navy, Army and the USAF have chronically abused the "*national security*" rationale for these unwarranted seizures of environmentally sensitive BLM Public Lands in the Great Basin. It must be pointed out that in 1995 U.S. Magistrate Mikel Williams in Idaho ruled that the DoD can no longer abuse "national security" to circumvent (particularly in a case involving the Owyhee Canyonlands) the "taking" of our wilderness candidate areas, ACECs, wildlife habitat, native fisheries, archeological sites, recreation areas as well as circumventing the 1958 Engle Act, such environmental protection laws as the Clean Water Act, NEPA, ESA, the Antiquities Act and FLPMA. The time has come for the Navy to realize it has sufficient lands to do its assigned missions. These new land demands are military *pork barrel* in a heightened U.S. deficit-reduction era which calls for downsizing of government agencies. Z-4

More land seizures simply cannot be justified. Nevada is not Iraq and Kuwait. We cannot allow our cherished and important wetlands, wildlands and open spaces to be degraded because the DoD needs new "*sandboxes*" (a word used by the USAF in Michael Skinner's book "*Air Combat for 80's*") for more unwarranted bombing, errant spreading of live ordinance, combat overpressures, noise, pollution, strafing and electronic experimentation. Therefore, this organization deems the *no action alternative* as the only acceptable and environmentally responsible course of action in this proceeding.

Yours very sincerely,

Charles S. Watson

Charles S. Watson,
Co-Founder & Director
P.O. Box 1245
Carson City, Nevada 89702-1245

telephone: (702) 883-1169

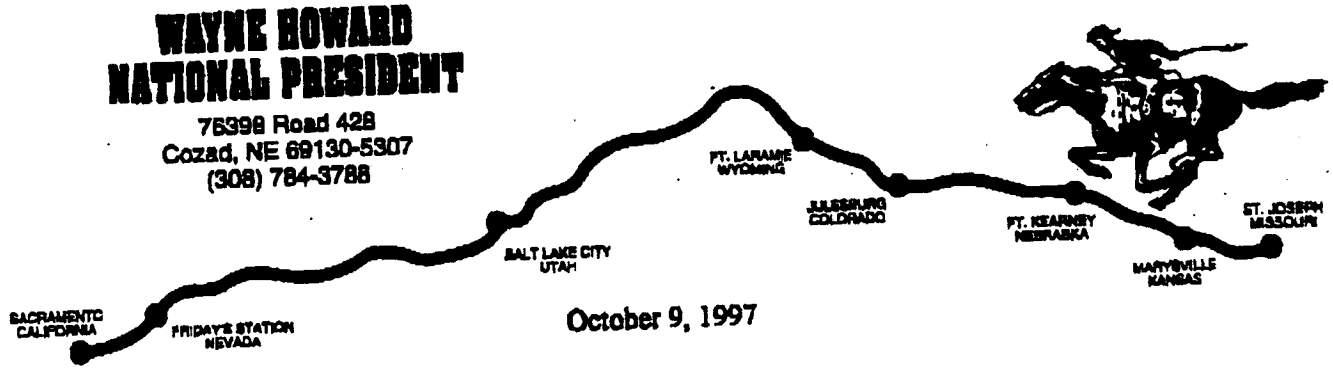
Letter Z
Charles S. Watson, Jr., Nevada Outdoor Recreation Association

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter Z. Letter Z has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter Z comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
Z-1	20p
Z-2	13h, 20a
Z-3	22c, 29a
Z-4	28a

Letter AA

NATIONAL PONY EXPRESS ASSOCIATION, INC.
(non-profit) (tax exempt)
WAYNE HOWARD
NATIONAL PRESIDENT
76398 Road 428
Cozad, NE 69130-5307
(308) 784-3788



October 9, 1997

Mr. Samuel L. Dennis
U. S. Navy, Engineering Field Activity, West
Planning-Regional Specialist Support Team, Code 7031
900 Commodore Drive
San Bruno, California 94066-5006

Dear Sir:

The National Pony Express Association is a nonprofit, all volunteer organization founded in 1978, devoted to preserving the history associated with the original pony express riders and the preservation of the Pony Express Trail, which has been designated by Congress as a National Historic Trail. The National Pony Express Association has approximately 800 members, from all walks of life, and from all areas of the United States, as well as several foreign countries. I have been active in this organization for nearly twenty years, and am now serving my third term as National President. As an individual and as President of the NPEA, I am concerned about the proposed expansion of the Fallon Naval Air Station and its effect on the Pony Express National Historic Trail.

Each year the NPEA conducts a reride between Sacramento, CA, and Saint Joseph, MO, relaying mail along the entire route on horseback, and following the route of the original trail as closely as possible. There are also many other history-minded individuals who traverse this trail. I have been accompanying the rider on our annual reride along the trail in Nevada when low-flying military aircraft were in the area and know from personal experience how detrimental this is to the experience and attitude of the re-enactment. The proposed expansion of the Naval Air Station at Fallon will apparently make many miles of the trail which we now follow each year off-limits to our organization and others who would follow this trail. There is also concern about live munitions which may be along this route. It is anticipated that use of the Pony Express National Historic Trail will increase in the future as trail marking is completed and maps are more readily available.

AA-1

The National Pony Express Association works closely with the National Parks Service, the Bureau of Land Management, and other federal and state agencies to plan our rerides. This helps to insure safe passage, compliance with pertinent rules and regulations, and overall goodwill for all concerned. AA-2

As the Environmental Impact Statement regarding this proposed expansion and the current situation along the Pony Express National Historic Trail in Nevada near the Fallon Naval Air Station are reviewed, I hope that consideration will be given to insuring continued access and safe passage for our members and other members of the public as well as adequate marking along this important historic trail. AA-3

Thank you for your consideration of this matter

Yours truly,

Wayne Howard

Wayne Howard
President, NPEA

c: Jere Krakow, Superintendent, NPS LDOT, Salt Lake City, UT
Dale Ryan, Nevada Division, Vice-President NPEA
Pat Hearty, Trails Chairman, NPEA

Letter AA
Wayne Howard, National Pony Express Association, Inc.

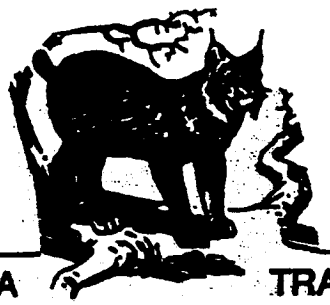
Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter AA. Letter AA has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter AA comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
AA-1	20n, 20o
AA-2	20n
AA-3	20n

Letter BB

President
Joel Blakeslee
7455 Star Hill
Sparks, Nevada 89436
Phone: 673-0900

Sec.-Treas.
Judi Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239



NEVADA TRAPPERS ASSOCIATION

Vice-President
Gene Gerdes
2775 Lone Tree Rd.
Fallon, Nevada 89406
Phone: 423-8288

Fur Manager
Jim Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239

September 17, 1997

Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066 - 0720

Attn: Mr. Sam Dennis:

Following are our comments regarding Draft Environmental Impact Statement (DEIS) for the Withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada, June 1997.

The DEIS fails to mention the hunting and trapping of furbearing mammals. This is a low density high value activity that takes place on lands proposed for withdrawal. BB-1

There are no legal descriptions for the lands in the proposed withdrawals. It is difficult to accurately ascertain what lands are included in the DEIS. BB-2

We note the distinction of the proposed withdrawan lands into two categories, A and B. Category A lands totally restrict public use while Category B lands will be "generally" open to the public. The word "generally" is a very loose term which could conceivably result in Category B lands being off limits to the public. BB-3

We feel the 25 year proposed withdrawal is much too long. The withdrawal of the Navy B - 20 range and the Nellis Air Force Range both received Congressional approval for a 15 year period. BB-4

Included in the DEIS is the indication that NATO allies will be using the Navy's facilities here. I'm sure that members of the organization I represent will not take kindly to being locked out of their public lands while a foriegn military power is training here. We can remember that not too far back our country was somewhat cozy with both Iran and Iraq. BB-5

President
Joel Blalesley
7455 Star Hill
Sparks, Nevada 89436
Phone: 673-0900

Sec.-Treas.
Judi Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239

NEVADA TRAPPERS ASSOCIATION

Vice-President
Gene Gerdes
2775 Lone Tree Rd.
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Fur Manager
Jim Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239

Our previous comments regarding the Master Land Withdrawal for Naval Air Station Fallon remain valid. Our present comments will focus mainly on the Navy's preferred alternative which is Alternative II.

Category B lands east of the Dixie Valley Road, the northward corridor lands connecting to Navy owned lands in Dixie Valley and the lands west of the road running from Highway 50 to the Mountain Wells Canyon Road may look good on a map for the Navy but they could cause problems for the public trying to access adjacent public lands. Further there does not appear to be any sound military reason for including these lands in the withdrawal. BB-6

Recently the Bureau of Land Management reopened the road to the public east of Range B - 19. This road follows a gas pipeline. The DEIS does not indicate if this road will remain open if surrounding lands are withdrawn. BB-7

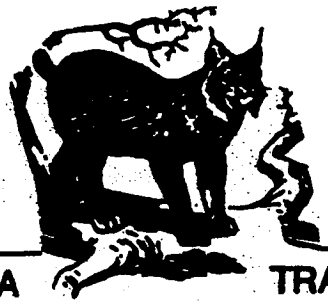
Maps indicate that much of the Slate Range will classified as Category A land, closed to the public. A map showing the "footprint" developed by Hazard Methodology also includes this same area. It is interesting to note that maps of ordnance sweeps of this area indicate that no ordnance was found. This seems to contradict the accuracy of the "footprint". The Slate Range has high wildlife value containing mule deer, bighorn sheep, chukar and several furbearing species. BB-8

We heard glowing reports of the accuracy of our weapons during the Gulf War. It needs to be pointed out that this accuracy was developed on existing ranges. BB-9

It should also be mentioned that I personally do not know of any injury or harm to civilians in the last 20 years caused by military activities on lands surrounding training ranges. BB-10

President
Joel Blakeslee
7455 Star Hill
Sparks, Nevada 89436
Phone: 673-0900

Sec.-Treas.
Judi Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239



NEVADA TRAPPERS ASSOCIATION

Vice-President
Gene Gerdes
2775 Lone Tree Rd.
Fallon, Nevada 89406
Phone: 423-8288

Fur Manager
Jim Curran
4170 St. Clair Road
Fallon, Nevada 89406
Phone: 867-2239

After receiving considerable public criticism regarding the use of B - 16 Range it is most amazing that the Navy proposes to withdraw land around the range and use it for additional military exercises. This proposal will without question add additional noise, air and ground traffic, and possible closure of land to the public. This area receives considerable public use. Also we note that the "footprint" developed by RAICUZ Study, 1995, falls entirely within the present range. BB-11

Finally, we see that no mitigation measures are offered for the proposed withdrawn lands. BB-12

Sincerly,

Gene L. Gerdes
Vice-President

Letter BB
Gene L. Gerdes, Nevada Trappers Association

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter BB. Letter BB has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter BB comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
BB-1	20m
BB-2	25h
BB-3	5f
BB-4	1c
BB-5	29b
BB-6	20a
BB-7	20b
BB-8	22d
BB-9	29a
BB-10	29c
BB-11	7b
BB-12	6c

Letter CC

Richard E. Franta, president
Nevada United Four Wheelers Association
P. O. Box 46521
Las Vegas, NV 89121

October 9, 1997

Commanding Officer
Naval Facilities Engineering Command
Attn: Sam Dennis
900 Commodore Drive
San Bruno, CA 94006-0720

Dear Sir:

With the current military down-sizing, increased technology, "more accurate" weapons, "smart bombs", etc. I find it difficult to understand why the Army (Ft. Irwin expansion), Navy (Fallon expansion) and Air Force (Nellis Air Space expansion and land swap) continually want more land. Another question that needs answering to the public, is why there can't be inter-service cooperation and sharing, rather than continual expansion. CC-1

Having said these things, questions that really need answering are the roads in the area that the expansion would affect. West and south of Fallon, we have concerns about Lone Tree road, another road to Camp Gregory mine, and a road to Red Mtn. And a mostly north-south road from Lone Tree road to Sheckler reservoir. In another area south of Fallon, it would impact a road along Diamond Field and Jack Wash and a road to Cinnabar and Birmetal mines. East of Fallon it would affect Eleven Mile was road, Black Knob spring and Dixie Valley road and Dixie Valley. On the southern expansion of that area it would affect Bluff mine, both Gold Coin mines, Bell Canyon road, and a road from just east of State 839 at Lucky Boy Canyon SE to Little Bell Flat well and also a road from Little Bell flat easterly and north to Bell Flat. CC-2

There are more roads (many) running from Dixie Valley road, westerly into several canyons to the 1954 earthquake fault. For anyone interested in any aspects of geology and quakes, it would be devasting to have any of those roads shut. People of Nevada should have the ability to visit that fault area to visualize how massively our state is subjected to earthquakes from time to time CC-3

All roads listed are RS2477 roads, so legally, even if the Navy wins the expansion, provisions should be made for continued use of these roads. The reasons primarily that military reservations are already so extensive is that when they were established, civilian 4x4's were practically non-existent, and just prior to, during and shortly after WWII, there were massive amounts of patriotism available throughout the country, and nearly everyone believed anything that was told to them by the government. CC-4

I also am still a patriot. I spent twenty years in the U. S. Marine Corps, supposedly defending our freedoms in both Korea and Viet-Nam. In reality, I know that we were enforcing treaties that our country had signed with other nations. Sort of the same thing. But after defending our freedoms, I really have had a time with the constant abuse of laws and freedoms by that same government in land and road closures nearly by whim, and at other times just bowing to pressures exerted by conservancy groups.

The Nevada United Four Wheelers Association is a statewide organization, representing OHV clubs in northern Nevada, eastern Nevada and southern Nevada. We are ten clubs strong at this time and growing.

Sincerely,

R. E. Franta

R. E. Franta

Letter CC
Richard E. Franta, Nevada United Four Wheelers Association

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter CC. Letter CC has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter CC comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
CC-1	3b, 29d
CC-2	20a
CC-3	20a
CC-4	20a

Letter DD

The Toiyabe Chapter of the Sierra Club

Nevada and Eastern California
PO Box 8096, Reno, NV 89507

One Earth, One Chance.

Sept. 29, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Dr.
San Bruno, CA 94066-5006

ATTN: Sam Dennis, EPB #1851

RE: draft EIS Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada

Dear Mr. Dennis,

This letter is to supplement comments made by the Sierra Club and myself at the Sept. 16, 1997 public hearing in Reno, NV on the draft EIS.

We appreciate the Navy holding a hearing in Reno on the draft EIS. Much of the recreational use of W. Nevada public lands is made by the 80% urban residents of Nevada, including the Reno metropolitan area.

Unfortunately, we found the dEIS to be deficient both substantively and procedurally. This is a common problem when environmental documents are prepared by the advocates for a particular public land use, instead of the federal land management agency.

1. **The Navy did not establish the purpose of and need for action:** The dEIS states (p.1-11) that the purposes of the proposed action are to provide the necessary land area so the Navy can "change and improve realistic operational and strategic combat training at NAS Fallon; and to provide safety buffer zones around the training ranges, including Navy control of lands containing off-range ordinance." DD-1

A. In our view, the practical purpose of the Navy proposed action is to establish a new Navy ground troup training base through administrative action (public land withdrawal), rather than through specific Congressional authorization for a new ground troup training base. This is an improper use of the public land use planning process and the NEPA process.

B. The dEIS did not establish that any needed "realistic" ground training could not be accomplished on lands already withdrawn by the NAS, Fallon or on the other 4,000,000 acres withdrawn for military use in Nevada. Procedurally, the alternatives considered did not examine whether other Navy areas or DD-2

cooperative agreements. Procedurally, the dEIS is in error for not having an alternative without a withdrawal, but with a cooperative agreement to accomplish its needs. DD-2

D. The dEIS also failed to consider alternatives which could have sought to resolve these conflicts between the military mission and multiple use mandates for public lands through the establishment of a legally mandated NAS Citizen's Advisory Board or through a request to the BLM's Resource Advisory Councils for assistance. DD-3

3. **The dEIS failed to consider an alternative to turn over Navy land acquired in Dixie Valley, which are surrounded by public lands, to the BLM:** The Navy has no authority to "own" or manage any lands in Dixie Valley.

A. The Navy acquired private lands in Dixie Valley to mitigate the impacts of sonic booms and disruption of the life and livelihoods of the farmers living in Dixie Valley. The lands were not acquired for a ground troup training base. DD-4

B. Inholdings within public lands which are acquired by the Navy must be transferred to the federal agency controlling the surrounding lands unless there is specific authorizing legislation to acquire and manage the land as a ground troup training base. Such is not the case for the federal appropriation to acquire the private Dixie Valley lands. The opposite is also true: if BLM had acquired lands within Navy owned or controlled lands, it would have had to transfer the lands to the Navy. Therefore, it is questionable whether the Navy should maintain control of the acquired lands in Dixie Valley, which undermines the entire dEIS.

In conclusion, the dEIS has not reliably established a need or purpose for the proposed action. The range of alternatives in the dEIS is deficient. The proposed action is not feasible. The legal ownership of the acquired lands in Dixie Valley on which the large withdrawal is based is questionable. The dEIS is deficient in analyzing environmental impacts of the alternatives.

We recommend that the Navy abandon the proposed action and work with the BLM to provide for authorization of military activities which are compatible with multiple uses on public lands which cannot be accomodated on either existing Navy lands or on other public lands withdrawn for military uses and which do not pose a threat to public health and safety. Or, if this cannot be accomplished, the Navy could seek Congressional support for federal legislation to set up a new ground troup training base on public lands in Western and Central Nevada.

Thank you for considering our supplemental comments.

Sincerely,

Rose Stricklland, Chair
Public Lands Committee

cc: Nevada delegation

Letter DD
Rose Strickland, Sierra Club, Toiyabe Chapter

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter DD. Letter DD has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter DD comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
DD-1	1d
DD-2	1e, 1f
DD-3	1f, 4a
DD-4	1g

Letter EE

People for the West!
Northeast Nevada Chapter
P.O. Box 5155 Elko, Nevada 89802

August 16, 1997

Naval Force Engineering Command
Engineer Field Activities West
900 Commodore Drive
San Bruno, CA 94066-0720

Regarding: Extension of the comment period for the Draft Environmental Impact Statement (EIS) for the Withdrawal of Public Land for Range Safety and Training Purposes at Naval Air Station, Fallon, Nevada

Dear Mr. Sam Dennis:

The questions raised in the Draft EIS, associated with this Military Operations Area document, are extensive and require additional time for the thorough inclusion of comments and inquiries of citizens and local governments on the proposed impacts on rural Nevada zones. .

There is no doubt that the defense of our nation is a primary concern to all of us. However, when there are publics that stand to be directly impacted in potentially negative ways by the expanding presence and requirements of government planning, then their concerns must have ample time to be heard. Quality planning on the front-end of projects leads to sustained decisions. EE-1

We support a 90 day extension of the comment period which allows for the proper hearing of all viewpoints. Citizens are not devoting each day to keeping abreast of the vast number of government documents implicating actions and policies they must live with. Time is needed to digest these documents and involve ourselves in intelligent dialogue. Dialogue is what our democrat process is based upon.

We thank you for the opportunity to comment and call upon you to implement our request.

Sincerely,
Lita Colland, President
Northeast Nevada Chapter

Letter EE
Leta Collard, People for the West, Northeast Nevada Chapter

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter EE. Letter EE has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter EE comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
EE-1	2c

Letter FF

Sierra Pacific
POWER COMPANY

6100 Neil Road, P.O. Box 10100 • Reno, Nevada 89520-0024 • 702.689.4011 • Web Site: www.sierrapacific.com

October 9, 1997

CERTIFIED MAIL Z705072453
RETURN RECEIPT REQUESTED

Commanding Officer, Engineering Field Activity West
Naval Facilities Engineering Command
Attn.: Mr. Sam Dennis
Environmental Planning Branch, Code 1851
900 Commodore Drive
San Bruno CA 94066-5006

Re: Proposed Land Withdrawal for Naval Air Station (NAS) Fallon

Dear Mr. Dennis:

I'm writing this letter on behalf of Sierra Pacific Power Company and the Western Utility Group, and on behalf of both entities, I would like to thank you for allowing us to comment on the draft EIS for the proposed withdrawal for NAS Fallon. For your information, the Western Utility Group is a consortium of investor-owned utilities in the 11 western states.

With this letter I wish to address the issue of the existing utility corridor that traverses the proposed withdrawal area east to west, north of Hwy. 50 in the Bravo 17 area. Utility corridors were established on public lands through the FLPMA planning process in cooperation with the various federal land resources management agencies. This particular corridor was established in cooperation with the Bureau of Land Management's Carson, Battle Mountain and Ely Districts. A brief review of the corridors within the State of Nevada would show that there is only one east-west corridor designated through central Nevada. In the Bravo 17 area, I would refer you to the Lahontan Resource Management Plan. This corridor is not for the sole use of Sierra Pacific Power Company, but for all utilities. Other utilities may include telephone, natural gas pipeline or other electric energy companies. Limiting the height of any structures within the corridor to 50 feet in effect renders the corridor useless for electric transmission. The two existing transmission lines in the Bravo 17 area are both 230 kV. The top of the structures for those lines varies between 50 and 70 feet. If a utility was desirous of constructing a higher voltage line, say in the 345 kV to 500 kV range, tower heights would range between 80 to 100 feet in height. The loss of this corridor due to the height restrictions could affect the

FF-1

future transmission and delivery of economical energy to western Nevada and within the Western Power Grid. As such it is extremely important to maintain the integrity of this corridor.

FF-1

Neither Sierra Pacific nor the Western Utility Group wishes to impend the Navy in creating a first class training facility, however, the plan for the corridor as presented in the draft EIS is not acceptable. I'd be very willing to meet with your planners and the BLM to discuss alternatives for preserving the corridor either in its present location or a mutually agreeable alternate location. Please call me at (702) 689-4432 to arrange a meeting or you have any questions.

Sincerely,

Robert J. Edwards
Manager, Right-of-Way/Real Property

RJE/bk

cc: Mr. Charles Pope
Bureau of Land Management
5665 Morgan Mill Road
Carson City NV 89701

Carl Barnett
Western Utility Group
PacifiCorp
Property Management 1030
920 SW Sixth Avenue
Portland OR 97204

Letter FF
Robert J. Edwards, Sierra Pacific Power Company

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter FF. Letter FF has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter FF comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment	Response Location
FF-1	24a

Letter GG

PAIUTE PIPELINE COMPANY

October 10, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

attn: Mr. Sam Dennis, Environmental Planning Branch, Code 1851

RE: DEIS: Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada

Dear Mr. Dennis:

Paiute Pipeline, a wholly owned subsidiary of Southwest Gas Corporation, operates several high pressure natural gas transmission mains in Northern Nevada. One of these mains, an 8" high pressure pipeline, currently passes through both Category "A" and Category "B" land to the east of the existing B-19 bombing range. The pipeline conflicts with the withdrawal in Section 35 T. 16 N., R. 20 E., Section 1 T. 15 N., R. 30 E., and in Sections 6, 7 and 8, T. 15 N., R. 31 E. Approximately 3 miles of pipeline in Churchill County is effected in all Alternatives proposed in the DEIS. Please refer to the enclosed map for the exact location.

The pipeline in concern was installed in 1964 and is thin wall steel pipe. Due to the nature of this pipeline and the relatively shallow depth in some locations, the use of any ordinance on or near this pipe could be detrimental. In addition, any sudden ground movements or land slides caused by ordinance testing would also effect the pipeline. The maintenance road along the pipeline right of way crosses over the pipeline in some locations. If large military vehicles were to use this road, additional cover across this pipeline would be required to protect it. GG-1

Another concern would be the access into the proposed restricted area. Paiute's personnel are required to perform an annual land patrol of the pipeline. Additional patrols are sometimes required during the normal operation and maintenance of the pipeline. Paiute would require access to the restricted area for such operational and maintenance activities with proper notification to FNAS. This notification may be required outside of normal business hours. GG-2

If requested, Paiute would provide alternatives to prevent this conflict with the land withdrawal. One alternative, the relocation of the existing pipeline, would require extensive consideration, design and construction and would be the financial responsibility of the Department of the Navy. GG-3

If you have any questions concerning this matter or would like to discuss this further, please feel free to direct your correspondence to me at the above address or call me at (702) 887-2741.

Sincerely,

Paul C. Beck

Paul C. Beck, E.I.T.
Transmission Engineer
Paiute Pipeline

enclosure

pcb:PCB

c. A. Trevino
M. Bartholomew

Letter GG
Paul C. Beck, Paiute Pipeline Company

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter GG. Letter GG has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter GG comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
GG-1	24b
GG-2	24b
GG-3	24b

Letter HH
1

DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS

WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES
NAVAL AIR STATION FALLON, NEVADA
June 1997
U.S. Department of the Navy

The following comments are in regards to the Draft Environmental Impact Statement (DEIS) document titled "Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station, Fallon, Nevada," June 1997.

I appreciate this opportunity to comment on Fallon Naval Air Station's (NAS Fallon) proposal to withdraw certain public lands in central Nevada, for military training uses. I trust that the Navy will seriously take my comments into consideration.

After W.W.II many military facilities in the western United States were deactivated. The Cold War brought about a reopening and expansion of many of these facilities. Now that the Cold War is winding down the military is continuing its request for the expansion of training ranges in the West that began well before the end of the Cold War. I believe that further expansions are no longer justified. Though the military is vital to the defense of this nation, it is essential that the people of this country keep in mind that it is an institution whose expansive desires should be checked. HH-1

The federal guidelines for performing an Environmental Impact Study, under the National Environmental Policy Act (NEPA), are spelled out in the section of the U.S Code of Federal Regulations that covers the Presidents' Council on Environmental Quality. The Council's regulations are found in Title 40, Part 1502. Section 1502.15 explains the requirement that the EIS should describe the affected environment. HH-2

Under all the Navy's public land withdrawal proposal alternatives, except for the "No Action Alternative," the DEIS indicates that the 2,765 acre Shoal site would be withdrawn for integrated air and ground training activities. The center of the Shoal site is located approximately 27.7 miles southeast of Fallon, Nevada and approximately six miles west-southwest of the Navy's existing Bravo 17 Training Range. It includes the area called Gote Flat in the northern part of the Sand Springs Mountain Range. Presently, the U.S. Department of Interior's Bureau of Land Management (BLM) records indicate that the Shoal site is land which is under the administration of the U.S. Department of Energy's Nevada Operations Office (DOE/NV) in North Las Vegas, Nevada. DOE/NV records indicate that the Navy's Fallon Naval Air Station has been interested in obtaining control of the Shoal site since the late 1960s. (2) HH-3

Chapter three of the NAS Fallon DEIS deals with the existing environment and section 3.8 deals with the existing land use. Section 3.8.1.4, dealing with the proposed land withdrawal of the Shoal site, consist of two short paragraphs at the top of HH-4

page 3-32. The last sentence in this section briefly mentions that an "...early underground nuclear test explosion..." was conducted at the site. No date or other information is provided, in the nearly three-pound DEIS, that further describes this significant event and its existing or potential future environmental impacts.

The explosion of a nuclear weapon type device is functionally equivalent to the explosion of a small nuclear reactor and both leave substantial quantities of radioactive contaminates, one of which will remain hazardous for tens of thousands of years. These are similar to the materials which may end up encased in multiple engineered barriers, deep in the bowels of Yucca Mountain which has not yet been approved as a suitable place to dispose of high-level nuclear wastes.

During the last 16 years that NAS Fallon has prepared and distributed EIS documentation on its land withdrawal plans, the Navy has rarely mentioned the existence of a nuclear explosion cavity beneath the surface of the Shoal site. Similarly, they never bothered to mention that significant quantities of nuclear waste lie buried there. The existence of this waste will require that the site be monitored for tens of thousands of years. I believe that the omission of such information, in the DEIS, was no accident.

HH-4

The Shoal event involved the detonation of a nuclear explosive device, at a depth of 1,205 feet below the surface of Gote Flat on October 26, 1963. It was conducted by the Atomic Energy Commission (AEC) for the Department of Defense's Advanced Research Project Agency's VELA UNIFORM program. The fission explosion produced an energy yield of 12.5 kilotons which was about 80% of the energy released by the bomb that was dropped on Hiroshima, Japan. At that time, the personnel at NAS Fallon must have been aware of the test since the AEC's public relations people put on quite a show in the Fallon community. On Sunday, 13 February 1994, the Reno Gazette-Journal did a large spread that described the test site and the location of the radioactive debris that lies buried there. On August 1996, the DOE/NV issued a fifteen pound EIS on the Nevada Test Site (NTS) which devoted at least ten pages to describing some of the environmental impacts of the Shoal test. (1) During the last couple of years the DOE/NV's Environmental Management Division has expended over a million dollars in an effort to better understand the fate of the radioactive contamination at the site. During the fall of 1996, four groundwater monitoring wells were drilled, round the clock, right next to the access road that Navy personnel drive on their almost daily rounds to service radar equipment on a nearby hill. NAS Fallon had to be aware that this site was the focus of a major environmental research effort associated with the contamination left by the Shoal nuclear test. Despite all this recent activity, the Navy's public presentations on the 16th and 17th of September, never mentioned any ongoing environmental research at the site or even the existence of buried nuclear waste at that location.

The Cooperating Agency, in the production of the NAS Fallon EIS, was the BLM. The Carson City District BLM office administers the

HH

lands around the Shoal site. For several years this office has been aware of the fact that the site is, effectively, host to an unlicensed and uncharacterized nuclear waste dump. This office has explained to me that they have no interest in returning the site to the public domain, due to the existence of the test contamination. Apparently, they feel it represents a potential liability which they can not afford to take on. I suggest that the BLM should play a more active role in the production of the NAS Fallon EIS so that its knowledge and concerns, of the potential environmental liabilities of the Shoal site, are reflected in the Final EIS. The BLM should also raise the issue that it may be improper to transfer the administration of this particular piece of property until the DOE has completed its environmental program at the site. HH-5

On page 4-128 and 4-129 of the NTS EIS is a table which lists the types and radioactive quantities of radionuclides which were expected to be left by approximately 38% of the NTS underground nuclear explosions as of 1 January 1994. The total quantity of radioactivity, left from all 800+ NTS underground tests is estimated to be approximately 300,000,000 Curies. (1)

Based upon my rough estimates, the Shoal test may have left a bit more than a half kilogram of fission products including cesium-137 and strontium-90. One DOE/NV technical report suggest that up to 3,000,000 Curies of tritium may have been produced by the explosion. (2) There is also a strong possibility that something like two kilograms of unfissioned plutonium-239 may be left in the rock debris that exist at the bottom of the blast cavity. Since it is totally impractical, from an economic and safety standpoint, to attempt a cleanup of this mess, it is essential that knowledge of the site be retained so as to discourage entry into the subsurface contaminated areas. HH-6

I do not believe that the deposited nuclear waste materials present any risk to ongoing operations on the surface of the site. I do believe that it is exceedingly important to preserve the memory of what happened here and that appears to be a position the Navy has no interest in. I have proposed that such sites be listed in the U.S. Department of the Interiors' National Register of Historic Places. Such an action would utilize a federal agency that has strong interests in preserving a broad range of U.S. historical events. Some other agencies, including the Navy and the DOE, have a well known tendency to be a bit more selective when it comes to recording and otherwise preserving their history. HH-7

The DEIS briefly mentioned that the Navy works with the DOE in regards to their joint activities at the Shoal site. If this is so I would expect to see some references to DOE documents in the reference section. Instead, I found numerous references to other federal agency documents but not a single reference to a DOE document. I found this to be odd since the DOE has a collection of dozens of reports that deal with the Shoal site. The Navy should consider incorporating the references, listed at the end of my comments, into their Final EIS document. HH-8

Section 3.7 of Chapter three describes the cultural resources HH-9

associated with the various proposed land withdrawals. Some of the cultural resources mentioned here are listed in Appendix G. Archeological Sites and Surveys. Table G-2, on pages G-4 through G-6, lists Cultural Resources Surveys Conducted at NAS Fallon. The last entry, on the bottom, list the GZ Canyon Guzzler No. 1. This is located in the canyon that serves as the entrance to the Shoal underground test site. GZ is an acronym for Ground Zero which refers to the surface point above the detonation point. The term Guzzler refers to special watering troughs which were emplaced to aid in the support of certain wildlife species in the area. No other cultural resources were listed for the Shoal test area. Clearly, places such as nuclear explosion sites are not considered, by the Navy, worth remembering. I believe that nuclear test sites deserve to be marked, recorded and preserved as cultural resources. They are not going to simply fade away as would a wooden shack which is left to rot. To my mind, a watering trough is not nearly as significant as a historic nuclear explosion and the legacy of radioactive waste that it bequeaths future generations. HH-9

One of the Navy's stated justifications for the withdrawal of additional lands is based upon the uncertainty of locating and disposing of all off-range ordinance, including expended ordinance fragments. The safety risk, associated with such lost materials, appears to be almost nil. This is a problem that resulted, for the most part, from past Navy training operations. Though recent training practices have reduced the likelihood of additions to the existing problem, these practices are unable to eliminate the possibly of ordinance fragments leaving the boundaries of the existing training ranges. The Navy and the BLM seem to have come to an agreement suggesting that withdrawal of public lands, surrounding some of the training ranges, is the best way to deal with the problem. This would provide the Navy with expanded use and administrative control of the marginal properties. Apparently, this aids the BLM which is presently responsible for maintaining safe public access to the surrounding properties. This move makes sense for the BLM, an agency that can't afford to deal with the liabilities associated with another agency's mistakes. The result is that these public lands are being lost to the control of more powerful federal agencies such as the Department of Defense and the Department of Energy. HH-10

I believe the wrong message is being sent to federal agencies who spoiled the public commons in the name of national security. The message that these spoiling agencies are getting is that the price of the spoilage is a gift which allows them to retain long-term control and use of lands that ware formerly open public property. This practice is increasingly justified on the basis that such public restrictions and controls are essential to protect the public from harm. More members of the public should start asking if they are giving up precious open spaces which will be utilized in ways which will preclude their return to the public domain in the future. The public should realize that the cost of cleanup comes out of their pockets, and the federal government can't completely clean up many sites because the public's pocket is not limitless. HH-1

In addition, the Final EIS should contain much more data concerning the biological effects of fiber-glass chaff upon desert wildlife and potential human receptors. This is likely to require studies that could potentially delay the issuance of the final document. I believe such studies are worth the risk. The fact that hundred of square miles of our western deserts are being littered with this unnatural contaminant justifies much more extensive studies. Alternatives to the glass fibers which bio-degrade need to be given much more serious consideration. HH-11

The Presidents' Council on Environmental Quality regulations states at 40 CFR 1502.2(g) that "Environmental impact statements shall serve as the means of assessing the environmental impact of proposed actions, rather than justifying decisions already made." Another section states that the EIS is to "[r]igorously explore and objectively evaluate all reasonable alternatives..." (40 CFR 1502.14[a]). And a third section states that the EIS should "[i]nclude the alternative of no action" (40 CFR1502.14[d]). Page 2-8 of the NAS Fallon DEIS states "[t]he No Action Alternative does not meet the mission evaluation criteria; therefore it is not a reasonable alternative for purposes of this action." In reviewing several DOE EIS's, and this Navy DEIS in particular, I have noticed that the No Action Alternative is always treated in the same manner and with nearly identical statements. It seems as if it has become a standard, accepted practice to treat the No Action Alternative as if it were completely unreasonable and offhandedly dismiss it in a brief paragraph or two. To me, this represents the justification of decisions which have already been made. It is clear to me that this and other EIS's that I have reviewed have become little more than sales tools used to justify decisions that the lead agency wishes to finalize. The fact that there is documented evidence that NAS Fallon has, for three decades, desired the withdrawal of the Shoal site for its own use suggests to me that we are dealing with decisions that well precede the initiation of the NAS Fallon Master Land Withdrawal proposal, sixteen years ago. (2) HH-12

For forty years the Cold War provided the justification for a massive expansion of this nations' military-industrial-academic complex. Now that many of the past justifications no longer garner the popular support they once did, military bases in densely populated and highly visible areas of the country have been closed. One result has been the transfer of training operations to politically-weak regions of the western deserts. This has provided many bases, including NAS Fallon, with new justifications for the further expansion of their already expansive training ranges. The time has come for the common citizens of this nation to legally regain access to many of the public lands that began to be reserved for military uses a half-century ago. Popular support for this position has been increasing since the fall of the Berlin Wall. HH-13

A reasonable start should involve efforts to halt the new acquisition of public lands by the military. They already have garnered ample land resources which could be better utilized if there was more sharing and less inter-service rivalry. I therefore call on NAS Fallon to adopt the No Action Alternative as HH-14

the preferred alternative and I urge the Secretary of the Navy to choose the No Action Alternative for the EIS Record of Decision (ROD). HH-14

07 October 1997

Sincerely,

Vernon J. Brechin

Vernon J. Brechin

PO Box 7052
Menlo Park, CA 94026-7052 USA

References

(1) DOE, "Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada," Volume 1, 2 and 3, DOE/EIS-0243, Nevada Operations Office, Las Vegas, Nevada, August 1996.

(2) Gardner, M.C., and W.E. Nork, "Evaluation of the Project Shoal Site, Fallon, Nevada, for Disposition, Including Identification of Restrictions," NVO-1229-105, Part I, Teledyne Isotopes, Palo Alto, California.

(3) Mudra, P.J., "Estimates Made by LASL of the Residual Radioactivity from the Shoal Event as of October 27, 1970 (Seven Years After Detonation) (Deleted)," TWX to R P Richter, DMA, Wash D.C., U.S. Atomic Energy Commission, August 4, 1970.

cc:

Honorable Richard Bryan, Senator,U.S. Senate

Honorable Harry Reid, Senator, U.S. Senate

Paul Liebendorfer, Fed. Facilities, Env. Prot. Div., Conservation and Natural Resources Dept. State of Nevada

Julie Butler, Coordinator, State Clearinghouse DOA/SPOC State of Nevada

Frankie Sue Del Papa, Attorny General, State of Nevada

Ray Clark, Assoc. Dir., NEPA Oversight, Council on Environmental Quality U.S. Office of the President

David Farrel, Chief, Federal Activities Office Region 9, U.S. EPA

Letter HH
Vernon J. Brechin

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter HH. Letter HH has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter HH comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
HH-1	29a
HH-2	8a
HH-3	8a
HH-4	8a
HH-5	8e
HH-6	8a
HH-7	15b
HH-8	8a
HH-9	15b
HH-10	1b
HH-11	22c, 23a, 23d
HH-12	29e
HH-13	29f
HH-14	3b

Letter II

Abigail C. Johnson
617 Terrace Street
Carson City, Nevada 89703

October 10, 1997

Commanding Officer
Engineer Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006
Attn: Mr. Sam Dennis, Environmental Planning Branch, Code 1851

Dear Mr Dennis

I have the following comments regarding the Draft Environmental Impact Statement (DEIS) for the Withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station Fallon, Nevada.

1. The scoping for this EIS did not include the proposal to do ground training in Dixie Valley. This should have been stated from the beginning, and the DEIS is deficient because the Navy does not present alternatives to the training. II-1

2. While the Navy has met the letter of the law in terms of comment period for this document, I was distressed to discover at the Nevada Association of Counties meeting in Elko at the end of September that two county commissions, White Pine and Mineral, had not received the DEIS. Mineral County was not even aware of the proposal at all. The Navy did an inadequate job of outreach to local governments in rural Nevada. The Navy's unwillingness to extend the comment deadline in the face of this inadequate outreach is disturbing, and does not portend well for the future of county Navy relations. II-2

3. The Navy should adopt a policy of only using lands it already controls and lands that are already contaminated: No new contamination. II-3

4. The Navy should work cooperatively with other branches of the military in Nevada who also control land and airspace to share existing resources rather than acquiring more. In times of war, the public expects the military branches to cooperate. Making this a peacetime practice is essential to being prepared for war. II-4

5. The Navy is piecemealing the take over of central Nevada. The threat emitters are the beginning. The proposed MOS for Diamond, Duckwater and Smokey are evidence of the gradual takeover and control by the military in central Nevada. This will ultimately lead to the slow strangulation of the small towns and way of life of the communities of central Nevada, such as Austin, Eureka, and Ely. The DEIS is inadequate because it does not address the cumulative impacts of this control over time on the economies and well being of these communities. II-5

6. The Navy should not be allowed to put any equipment or threat emitters under the Diamond, Duckwater, and Smokey MOAs. II-6

7. The environmental justice discussion is inadequate. It does not address the impacts of the ground training in Dixie Valley on the Stillwater area native Americans. This area is a traditional recreation area for them, accessing the area through back roads. This loss of recreation should be compensated. The impacts of changing the B-16 flight patterns on the Walker River tribe are not adequately discussed, and the Navy should have held a hearing in Schurz to get input from the tribe. Finally, environmental justice means not putting disproportional impacts on a population. This proposal unfairly targets rural communities and individuals. This should be acknowledged and addressed in the DEIS. II-7

8. The DEIS states that if any of the 200 ground training events per year conflict with the public 's use of the area, the ground training will be relocated. I do not believe that the Navy will be willing to reschedule training and defer to members of the public. II-8

9. Many of the confusions and concerns raised by the scoping and presentation of this DEIS could be addressed through a local committee made up of all the interests of the area, not just the ones the Navy wants represented. II-9

10. The Navy should do a programmatic EIS which thoroughly studies the cumulative impacts of the activities likely to occur in the near and far future as a result of military activity in Nevada. II-10

11. The DEIS states that recreation loss cannot be compensated. This is not the case, and is not a responsible position for the Navy to take. II-11

Thank you for considering my point of view.

Sincerely,

Abigail C. Johnson

Letter II
Abigail C. Johnson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter II. Letter II has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter II comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
II-1	1e, 9b
II-2	2b
II-3	1b
II-4	3b
II-5	2e
II-6	10e
II-7	16a, 16e, 16l
II-8	5I
II-9	4a
II-10	11b
II-11	20q

Letter JJ

Comments on Draft Environmental Impact Statement (DEIS)

PERSONAL STATEMENT

Loss of use of existing roadways concerns me whether it is roadways lost to existing installations or the land proposed for withdrawal.

The Navy's inclusion of roads located at the edges of Category A lands, but beyond the safety foot prints and of roads at the edges of Category B lands concerns me

In addition to the inclusion of roadways, the potential of the Navy having exclusive control of public land proposed for withdrawal concerns me.

With exception of the land north of B-16 and along the edges of the various alternatives, I accept the Navy's statements concerning the need to close land for public safety or training.

INTRODUCTION

The DEIS does not use standard maps showing roads and/or terrain. There are no legal descriptions of the lands included. To determine what was going on each withdrawal was plotted on standard maps as accurately as possible. Almost at the beginning of my search to see if the roads I use would be closed, I noticed an on going pattern of the closure of one to two mile stretches of roads barely within the borders of the withdrawal areas. JJ-1

That constant repetition of inclusion of one to two miles of roadways seemed strange, so I looked at the public safety issues for each road. Documentation supporting a public safety need, for closure, was weak or non-existant for many roads at the edges of withdrawal areas. Further, it appeared that borders were established precisely in order to include those roads and prevent the public from accessing large tracks of land adjacent to the bombing ranges. JJ-2

Are those are large tracks of land adjacent to the ranges some the BLM wants to keep people off? Is that why the BLM supports these withdrawals as identified? Does the Navy want to keep its borders safe from US citizens? It looks like one, the other, or both. I support the Navy closing public land for public safety. I support the Navy closing closing public land for training. But if the Navy wants public land to protect its backside from US citizens, we should all heartedly, and heatedly, object. JJ-3

The following are discussions of my concerns:

WHAT ROADS ARE INCLUDED IN THE WITHDRAWAL
WHY THE NAVY SHOULD NOT HAVE CONTROL OF ACCESS ROADS
RECREATION
ROADS DESERVE MORE ATTENTION THAN WAS GIVEN IN THE DEIS
PROBLEMS WITH EVALUATING B-16 DOCUMENTATION

Post-it® Fax Note 7671	Date	# of pages ▸
To Sherm Sallenger	From Rose Thomas	
Co./Dept. WRW San Bruno	Co.	
Phone # Environmental	Phone #	
Fax # 650 244 2553	Fax #	

WHAT ROADS ARE INCLUDED IN THE NAVY WITHDRAWALS

INTRODUCTION

Category A withdrawals are where ordnance was found. The Navy wants these areas closed for public safety. In some areas in Category A documents show that no ordnance was found and none is predicted to find its way in the future. JJ-4

Category B withdrawals are in land the Navy wants for training purposes. The DEIS says that Navy management of Category B would be consistent with BLM regulations and would continue current management purposes. It also says, "the withdrawal ... is designed to ... increase control and management... " (Page ES-1, para 1). If the Navy manages Category B lands, "will generally remain open to public use" (page ES-4, para 3) and "land uses would be restricted if they affect operations or safety." (2.3.2.2 para 3) JJ-5

In addition to identifying Category A (closed access) and Category B (controlled access), the DEIS lists results of 3 studies: An "ordnance sweep" identified areas with existing ordnance. The HAZARD study identified areas of potential future ordnance contamination, including areas which might be hit by ricochet. The RAICUZ study is the older study of noise and possible contamination. JJ-6

Additionally there are three alternative plans. The comments below are based on Alternative II. "the preferred plan." If Alternative I or III is chosen the withdrawal area and losses to the public will be greater. JJ-7

B-17, SOUTH OF HIGHWAY 50

INTRODUCTION. Southwest of B-17 Bell Canyon Road, the Bell Flat Road, and the Slate Mountain Road Y off of State Highway 839 (the Scheelite Road). Bell Canyon Road goes into Category A areas. Ordnance was found along this road and it is in the HAZARD footprint. This road should be closed, based on the documentation.

The Bell Flat Road runs for 2 miles no farther than ½ mile inside the boundary of Category A. This road turns east toward Slate Mountain and goes to Bell Flat on the other side of Slate Mountain. The area along the Sheelite Road was swept for ordnance (Figure 3-13). No ordnance was found where this road Y's off the Sheelite Road (Figure 1-5). The HAZARD study does not identify this area as an area of potential ordnance contamination either (Figure 1-3 and Appendix D, Addendum Page 3). This road is at the outermost edge of the RAICUZ study "zone of minimum concern., which in other areas are not included in withdrawals," (Figure 1-6). Mitigation of this road closure: Give up this small section of land, which presents no danger to the public and/or run the fence east of the road. JJ-8

The Slate Mountain Road begins outside of Category A, but about a mile of it crosses into Category A, no more than ½ mile from the boundary. Walking around the boundary is also 2 miles. The road bears east across the valley and goes to Slate Mountain. The road was included in the sweep and no ordnance was found. (Figure 3-13 and 1-5). This road is outside both the HAZARD footprint and the RAICUZ study (Figure 1-3, Appendix D Addendum Page 3, and Figure 1-6). Mitigation of this closure: Give up this small section of land which presents no danger to the public and/or run the fence north of the road.

Slate Mine (a mine, not a road), is shown on the Nevada Map Atlas, Nevada Department of Transportation, as being 1 1/4 miles south of the HAZARD footprint (Figure 1-3 and Appendix D Addendum Page 3) and 1/4 mile outside Category A. However, The Nevada Atlas and Gazetteer, DeLorme, shows this mine to be within Category A--right on the border. The General Location of _ Mining Claims (Figure H-1) indicates there is a claim in the area--probably the Slate Mine. Whichever location is correct for the mine, it is not within the foot prints of either the HAZARD nor the RAICUZ studies. No ordnance was found in this area. However, Category A was extended a mile south, presumably to include this mine. A comment was made in the public hearing about this mine. Mitigation of this closure: Give up the additional 1 mile south and 3 miles east/west, which by your documents presents no danger to the public.

JJ-8

SUMMARY OF EFFECTS. Eight square miles are included in Category A, that need not be. The roads access approximately 20 more square miles. An alternate route is available into these areas. It is slightly more difficult to travel and find a way through, but only 9 miles farther. The Bell Flat Road accesses a geode field. The Slate Mountain Road and Slate Mountain offer some of the only metamorphic rocks found in the area. Both are roads are often used to access these areas favored by rock hounds.

Not one piece of documentation indicates or even suggests that there is a public safety factor requiring the two roads or Slate Mine be included in Category A. Remove them.

B-19, EAST OF HIGHWAY 95 S

INTRODUCTION. Category A at this range is an area in which considerable amounts of ordnance was found. However, the discrepancy between where ordnance was reported to have been found and what was actually searched raises the question of whether or not there is a danger to the public (Figure 1-5 and 3-13). In addition to "finding" ordnance in areas that weren't swept, two other things suggest that this road does not need to be closed to the public. First, the measured effectiveness of the sweeps was extremely high; second, since it is a pole line Right of Way, the road will be in continuous use.

The Diamond Field Jack Wash Road (the pole line road) runs approximately 2 miles, ½ mile inside the border of the north east corner of Category A. Here, the ordnance sweep did not even take place on some of the area identified as having ordnance (Figure 3-13 and Figure 1-5). The HAZARD footprint completely clears the section of the Diamond Jack Wash Road that is included in Category A (Figure 1-3 and Appendix D, Addendum page 4). The RAICUZ study shows it in an area of minimum concern (Figure 1-6). Use will continue; the road is a Right of Way Corridor for a power line (Figure 3-5 and page 3-35, para 1). Mitigation of this road closure: Give up this small section of land, which present no danger to the public and/or fence both sides of the road. The latter option was used on B-19 already.

JJ-9

SUMMARY OF EFFECTS. Category B land adjoins Category A. The terrain through A to B is relatively easy. However, if the road is closed the alternate route, which is about the same distance, is extremely rugged. Closure of Diamond Field Jack Wash Road eliminates this easier access to 3 miles of roads in Category B, making it relatively impossible for most people to access. This is an outstanding mineral area.

B-16 NORTH, SOUTH OF SCHECKLER RESERVOIR AREA

INTRODUCTION. Information about the withdrawal lands north of B-16 is difficult to evaluate, because (1) the withdrawal maps shows SCHECKLER Reservoir in the wrong place, (2) the maps show it the wrong size and shape for normal conditions, (3) the size of the ordnance (inert) contaminated area does

JJ-10

not match the text, (4) the map shows the withdrawal area as 5,760 or 7040 acres depending on which map interpretation is used; the text says 6,160 acres, (5) the text does not clarify why these lands were included by the BLM in the closures for "public safety," (6) the withdrawal maps do not show which of the BUREC acres are TCID acres, (7) no right of way is shown across the TCID dam, (8) the text has conflicts concerning changing BUREC/TCID land uses. These are detailed at the end of this document.

Assuming the lake is as shown on the withdrawal map, the withdrawal area cuts the last little bit of the SCHECKLER Reservoir Dam Road. Would it be closed, because it is not a legal public access? Although the subject matter is expansion, the DRIS says, "TCID roads ... are privately maintained and not considered by the county as legal access for the public," (3.8.5 para 4). Since TCID put the dam in, it must be their road and it needs to be maintained. However, no right of way is shown for it (Figure 3-5). If the Navy does withdraw the end of the roadway, will the Navy maintain it? In addition to accessing the lake, this road over the dam is the kick off point for three roads to Red Mountain and the Nipple, as well as the steep, but only reasonably close remaining road into the Dead Camel Mountains.

Assuming the lake is 1 mile farther north than the withdrawal map shows, the primary access to Red Mountain and the Nipple is no more than 1/4 or ½ mile inside the boundary of Category B depending on whether the correct acreage is 5,760 in 7,040 (two posibilities due to map error). There is no way to calculate for the 6,160 acres listed in the text, since boundaries are not predictable. In any case a one to two mile segment of road is included in withdrawal. This roadway is located in the north western corner of the withdrawal lands and should it become closed, a deep ravine prevents using this, the most used, access to Red Mountain and the Nipple. JJ-10

Mitigation of potential closure: Give up this small section of land which presents no danger to the public.

This new withdrawal has a pan handle that will cut off several roads. By taking one square mile of land where access roads converged, easy access to more than 30 square miles of land were cut off from public use by the 1953 withdrawal. No live ordnance was used in this area. Mitigation of the 1953 wrong. Return the pan handle to the BLM, so that roads will be administered for both Navy and public good.

SUMMARY OF EFFECTS. Closes off low relief mountains. Alternate routes, including those used to get around the 1953 pan handle withdrawal, are much steeper or longer. This is an outstanding area for hiking, horseback riding or off road vehicle use. In addition the subdued relief, the area presents some moderately steeper areas for a bit more challenge. The views of the valley and Fallon from the peaks are among the best of any range. Geology and Mineral Deposits of Churchill County Nevada *Bulletin 83* by the Nevada Bureau of Mines and Geology, 1974, says, "Red Mountain [in the Dead Camel Mountains]... is a favored area for collecting wonderstone." This wonderful, nearby area, is almost a forgotten, because of the 1953 closure of the valley roads that lead into it. *NOTE*: Alternative III takes all of SCHECKLER

E-16 SOUTH, WEST OF HIGHWAY 95S

INTRODUCTION. The roads included in this withdrawal are Category B. They are supposed to remain open to the public.

The Pony Express Route/Simpson Road was fenced and gated in the 1953 withdrawal. The road is located on the southeastern most point of the range in an 1/8 of a square mile--80 acres. With the new withdrawals, 2 miles of the road will come under Navy control. No live ordnance is in this area. JJ-11
Mitigation of this closure: Take all of the Pony Express Road out of Navy control.

The Sam Springs Wash Road, which Y's off of the Pony Express Route, falls within the new outer most corner of the withdrawal area. A mile of this road is within Category B. In this case a walk around fencing if it is constructed will be two miles. Mitigation of this closure. Taking the Pony Express Road out of Navy control will remove this road as well.

SUMMARY OF EFFECTS. Closes off moderate relief mountains containing many trails excellent for horseback riding or off road vehicles. The DEIS says that the Pony Express Road will always be open for the annual June trail ride. Will it be closed to others? Will casual users be required to get passes? If Category B roads are eventually closed, a variety of roads will be lost for public use. These roads go to Hooten Wells and the east side of Lake Lahonton. JJ-11

DIXIE VALLEY, NORTH OF HIGHWAY 50

INTRODUCTION. The roads included in this withdrawal are Category B. They are supposed to remain open to the public. The Navy plans to put Electronic Warfare devices (EW), a computerized system called TACTS, and visual cueing devices along the roads in this valley. These devices take up minimal space and will be fenced. Access to fenced areas will be closed. The DEIS states that, "Military presence could cause discontinued use of the lands for recreation even though recreation itself would not be closed."

The DEIS states up to five EW sites of five or fewer acres and up to 50 TACTS sites of one acre or less will be constructed (page ES-4, para 4). These are to be located in areas that have existing development, including utility corridors (e.g. pole line roads), existing road and trails (4.2.4.1, para 6 and 4.2.6.1 para 2), where "....road conditions are adequate to handle" development of the sites (4.2.14.1, para 3). The sites would be fenced (4.2.13.1 para 2). These sites will be constructed in locations to be determined (page ES-4, para 4).

In spite of not knowing locations, the DEIS is clear about what will not be disrupted, "All EW, TACTS ..... will be located away from sensitive resources and will undergo National Historic Preservation Act Section 106 and federal Endangered Species Act Section 7 consultations.." (Page ES-4, para 6) "EW or TACT sites.... would be located to avoid existing mining and grazing activities" (4.2.9.1 para 5) "The Navy has no plans for EW,TACTS... development in the Wilderness Study Area," (2.3.2.2 para 16 and Figure 3-1). JJ-12

Under the heading Recreation and Public Access, "Access would be restricted on... EW, TACTS sites" (4.2.12.1, para 3) Then again under the heading Transportation in the DEIS, "Public access across the developed EW, TACTS, and visual cueing device sites generally would not be permitted (4.2.14.1 para 3).

Nothing in the DEIS says that EW, TACTS, sites will not be placed on existing roads or trails

The La Plata Canyon Road is buried in the Dixie Valley withdrawal. It is likely that the public will avoid using the road due to Navy developments along it. Mitigation of the appearance: Make the road and signs more user friendly and keep EW and TACTS off road.

The Eleven Mile Canyon Road is, except for the withdrawal pan handle, is the northern most boundary of Alternative II (Alternative II, Figure 2-8). Presumably the road is within the withdrawal. If for some reason that road becomes closed to public use, it will make getting to some areas of the Eastern Stillwaters impossible. Mitigation: Don't include the road.

There are a about 15 roads to the east in the pan handle area. The amount of EW and TACTS sites

exceeds the number of roads. The quality of EW and TACTS sites exceeds that number. If for some reason they were placed on each road, all the roads could be cut off. Mitigation of the potential closure. Keep EW and TACTS off all roads and trails.

SUMMARY OF EFFECTS. One EW site is shown centered over the Dixie Valley Wash trail. Three more are shown farther north along (or maybe on) a roadway (Figure 3.4). If the fenced sites cross road ways or trails, the public will be stopped dead in its tracks. The public could be prevented from using Eleven Mile Canyon Road and certainly from accessing parts of the Louderback and Clan Alpine Mountains from the Dixie Valley Road. These are is a good for off road vehicle, horseback riding, hunting and gold prospecting. Both are of great historical interest because of the early mining history. JJ-12

MORE COMMENTS ABOUT THE B-16, 1953 WITHDRAWAL

INTRODUCTION. In 1953, B-16 was transferred to the Navy. For a minimum of 50 years prior to the transfer the people of Fallon traveled the dirt roads to and through the Dead Camel Mountains. A local tells about going with his family on horseback to Hooten Wells to enjoy rodeos that were held there or to see the polo ponies that were being raised in the Dead Camel Mountains back in the 40's. He traveled the same roads later to collect firewood or hunt the back side of Lahonton. Later still he and his wife hunted leaf fossils in the Dead Camel Mountains. Acquisition of B-16 included a panhandle at the north west corner that cut off easy dirt road access to this popular areas. Twice after B-16 came under Navy control this man attempted to show his children the places he went in his youth, but was stopped while crossing the B-16. He quit going there. JJ-13

The B-16 Pan Handle. I have been told that the public is now allowed to pass through the gate, but along side that gate is a large do not trespass sign. The gate has been locked in the past and may well be locked again in the future, preventing public access. Mitigation of the closure. Return the access to the BLM

SUMMARY. The Dead Camel mountains have been forgotten because of the 1953 road closures. If this section of land were returned to the BLM many more recreationist would be able to access this area. This is especially important as Fallon grows and becomes more "citified." It is a great starter area for interesting people in the outdoors.

WHY THE NAVY SHOULD NOT HAVE CONTROL OF ACCESS ROADS

The public is supposed to have access to Category B land and roads. A close look at the DEIS shows a disregard for public comments concerning access. Considering the consequences of the proposed road closures (which are unnecessary for public safety) and the past history of Navy policy changes with change of command, it is likely that public access of Category B lands and roads will eventually be closed.

The DEIS says the Navy would managed withdrawn lands jointly with BLM, BUREC, and DOE. The DEIS says that Navy management of Category B would be consistent with BLM regulations and would continue current management practices. If the Navy manages Category B lands, the DEIS says they, "will generally remain open to public use" (Page ES-4, para 3). There is no statement of what land uses would be restricted or what restrictions might apply. Does using a right of way for recreation affect safety? It could be construed as such. The areas won't be delineated until the resource management plan is drawn up (2.3.2.2 para 3), therefore the public is not able at this time to address what it might see as problems. Finally the DEIS says, 'The BLM Carson City District is considering the potential for the Navy to manage Category B lands." (2.3.22, para).

JJ-14

The BLM or BUREC should control accesses to "their" adjacent land. The BLM and the BUREC, not the Navy, should specify use and arbitrate road users disputes. That will prevent the placement the non user-friendly signs the Navy posts at its gates.

As was pointed out by one of the speakers, the Navy managed Horse Creek in Dixie Valley out of existence. When the Navy acquired Horse Creek, a long time favorite fishing spot of locals, it said the area would remain open for everyone. Then a permit was required. In a few more years, after decades of use without harm to the area, Horse Creek was shot up. Finally it was gated and the reservoir was drained. I assume the public is still welcome to get a permit and go to see the hole in the ground.

Well with all due respect, the best thing about the BLM management practices from recreationists' point of view is they pretty well leave us alone and tend to issues which are more critical than what we are doing on public land. It just won't be the same with the military management, and as the DEIS points out, "Military presence could discourage use of lands for recreation even though recreation itself would not be restricted."

WHAT THE DEIS SAYS ABOUT RECREATION IN CHURCHILL COUNTY

INTRODUCTION: Even with the influx of population, Fallon has remained primarily a community of people who like and use the out of doors. The DEIS in a very general way indicates that recreation opportunities in Fallon can be accessed from paved roads and that most recreational opportunities take place away from the community. It says other recreational places will take up the slack for areas and dirt roads it wants to close. Well, it is just not so.

The DEIS allows that there will be an affect on "primitive" recreation due to either to the closing of Category A lands or the presence of Navy activities on Category B lands.

The DEIS says, "The cumulative effects of overflights, developments, and operations have impacted the primitive and wilderness recreation opportunities in small and localized areas for a portion of recreationists" (5.8.3.3)

Recreational Resources. The DEIS states that "recreational opportunities are accessed primarily from area roads, including Highway 50 and Dixie Valley Road."

JJ-15

The map titled "Important Recreational Resources in the Study Area" also shows two game refuges--the Fallon and Stillwater National Wildlife Refuges (bird watching), and Hidden Cave (archeological site), Grimes Point (petroglyphs), four Pony Express Station ruins, and the Pony Express Trail. According to the DEIS approximately 15,000 people a year visit Grimes Point; 30,000 go to Sand Mountain, and a quarter of a million go to Lake Lahonton. These recreation areas are used by the local people, but the majority of visitors are from outside the county, since the county population is only 21,000.

Other outdoor recreation in the county, the majority of what Fallonites do is listed in the DEIS "Common recreational activities in the study area include hunting, camping, hiking, horseback riding, fishing [lake and stream], and off-road vehicle use," (3.12) In another section it adds rockhounding, photography, cultural resource sightseeing (5.4.3.3 para 1 and 2). (3.12 para 2 and 5.4.3.3 para 1-2)..

Activities not listed in the DEIS include, year round four-wheeling and motocross, motorcycle, 4 wheelers on dirt roads, visiting mining and ghost towns. In the winter there are snow sports, trapping, lion hunting. The rest of the year there is boating and swimming in the nearby reservoirs and lakes, bird watching, flora, fossil and arrowhead collecting, even hang gliding. People also go out on the dirt roads to look for rocks and boulders for landscaping, wood cutting for fire places, wonderstone for lapidary work, Christmas tree cutting, insect collecting and dead animal counting for school science projects, and collecting pine nuts.

Some people go out to kill time and get away from it all--to let the world go by for a day--no telephones, no TV, no traffic noises, no people. The drive around, get out of their vehicles and look around. The have a picnic lunch under a pine tree. These are the recreations of the local people.

Recreation Users. Discussing SCHECKLER Reservoir and Dixie Valley, the DEIS says there is, "No specific information on the number of individuals using the proposed withdrawal areas," (4.2.5.1 para 3). Later it says that few people use areas proposed for withdrawal "number... not very high" (4.2.12.1 para 5).

JJ-16

The number may not be very high, but the percentage of locals who visit the near-by areas is high. It is virtually impossible to drive around SCHECKLER without seeing at four to six groups using the lake on a summer weekend--and there is a constant turn over. In the course of a day a great many people, teenagers,

families, buddies, and elderly couples, are out there. If you count those on dirt roads in the area, there's another three to five vehicles spring through fall--and again, it is an all day turn over of users. These roads also access the Dead Camel mountains. Water in a desert area, good dirt roads, the terrain, and the proximity to town, make SCHECKLER a favored spot--and there is no other place similar to it. The number of users probably reach 7,000 or more a year.

One of Fallon's best points is that no one needs to go 60 plus miles for outdoor recreation. It is a short distance beyond the paved roads of the city to undeveloped, unrestricted, primitive places. The easy access to recreation is a large part of what attracts newcomers. It is only the low population that makes it hard to match the number of people who pass through and avail themselves of a rest stop at Grimes Point. JJ-16

The Navy says we can go elsewhere and find the same recreational opportunities. That may appear to be the case to a city-type, but the locals will tell you it is just not like going to a different movie theater. Public interest has built a wealth of information about sites that appeal to specialized interests. People share information and pass it from friend to friend, local to military, and generation to generation. You just don't go to a different valley or mountain to find the same. You may need to search for years to find something similar. Changing will do as what happen in the Dead Camel Mountains--kill off public use.

Withdrawal Effects--just of B-16. Closing of roads through B-16 cut off easy (not steep) and nearby dirt road accesses to the Dead Camel Mountains. 4-wheeler go "over the top" of the steep north eastern slope. Others don't go there. The Dead Camel Mountain Range is one of the "other parts of Churchill County," and far closer to the town than areas mentioned in the DEIS. It contains mineral and fossil sites. Additionally, the subdue relief of the range and roadways are excellent for recreational vehicles and horseback riding. Nevertheless only a small percentage of Fallonites travel to this area compared to the great percentage prior to B-16. Except for the ranchers and long time residents, people have forgotten what is there and particularly the roadways, because of Navy closed roads. The Dead Camel Mountains are a perfect local retreat. The excellent condition of the roads is testimony to the tenacity of "a portion of recreationists" (5.8.3.3). JJ-17

The point is that if a nearby area is "forgotten" by the community, because of the changes in routing, "other parts of Churchill County" will be also accessed less and less until they are forgotten, because of Navy closed roads.

ROADS DESERVE MORE ATTENTION THAN WAS GIVEN IN THE DEIS

INTRODUCTION: Dirt roads are barely mentioned in the DEIS. These roads are used by few people compared to Lake Lahonton or Sand Mountain, but they are important to a large percentage of the residents of this county. Several of public scoping comments concerned public access. The Navy's answer was "roads are unmitagable."

This answer is non-responsive. Additionally neither dirt roads, nor the mountainous topography of this area are shown on the withdrawal maps There was no study of cut off areas to the public. Without this DEIS is incomplete as well as non-responsive.

The DEIS names Churchill County Highways: US routes 50E/W and 95N/S and state routes 361 to Gabbs; 839 (the Scheelite Road) to Hawthorne; 121 to Dixie Valley. (3.14 para 1). It did not point out that county roads extend 5 miles north, 8 miles south, and 15 miles east and 15 miles west of Fallon. There are no other paved roads in the county. This situation is unusual and should have been addressed.

The remaining 87 ½ per cent of Churchill County: 4,293 of 4,913 square miles in Churchill County can only be accessed by dirt roads. Dirt roads and trails Y off each other to create a vast transportation network and are used by miners, ranchers, recreationists, hobbyist, and home improvers.

The DEIS characterizes dirt roads: The DEIS refers to dirt roads as "local roads historically used to access mining areas" (Executive Summary, Transportation, page ES-15), "easements," "utility corridors," "rights of way," "mining roads," "historical mining roads," and "trails." Except for pole line roads, where we see the poles, and really rugged trails, few locals know which roads are which type. If a road exists, it is used. These DEIS terms for dirt roads suggest a limited use by the public and limited usefulness to the public that is not reflective of the situation.

JJ-18

The DEIS minimizes dirt roads: When the discussion changes from what exists to discussions of road closures, the DEIS becomes even more general with. "No major roads [presumably highways] would be closed, and only minor roads would be affected," (5.8.9) In Churchill County there is no such thing as a "minor" road. Every road leads to an area of particular significance or value.

The DEIS on alternate routes: The DEIS says, that "alternative routes may be identified." (Table 2-6, Transportation/Mitigation, page 2-48). Finding alternates on dirt roads is not like on paved roads. Generally there is a way around a closed road in the valleys. However, a road closed along the edge of a mountain may completely cut off all the up-land area, and there will be no alternate route, except on foot or horse. Sometimes one canyon, other times many square miles, become inaccessible to the rest of us.

SUMMARY. Dirt roads are slower and less comfortable. Alternate routes may be 2 or 3 times farther. They may be steeper, more dangerous and/or not passible with 2 wheel drive, because of terrain or soils. In the best of conditions we live with the possibility of being unable to find or get to desired locations on dirt roads. There are no street signs and sometimes maps are wrong. There are rock slides, washouts, and fallen trees. Sometimes we wait a year or two, for more experienced drivers, to wear down steep slopes or forage a new by-pass at washed out roads. After a wet winter there is an annual spring wait, to hear the report of the dirt road conditions in the mountains. Nevertheless dirt is our equivalent of the paved back roads in other more populated areas.

PROBLEMS WITH EVALUATING B-16 DOCUMENTATION

(1) The withdrawal maps shows SCHECKLER Reservoir in the wrong place. The withdrawal map (Figure 1-5 and all others) shows SCHECKLER Reservoir 1 mile south of where it is shown on both the Nevada Map Atlas, published by the Nevada Department of Transportation and The Nevada Atlas and Gazetteer, published by DeLorme. The Churchill County Phone Book Map also shows the reservoir to be one mile farther north. All three maps show it's southern most tip almost in line with Union Lane not with Berney Road. JJ-19

(2) The withdrawal maps show SCHECKLER Reservoir the wrong size and shape for normal conditions. The USGS State of Nevada Map, 1984 is the only map that depicts SCHECKLER Reservoir in the shape shown on withdrawal maps. That map, and other USGS maps depicting similar shapes, show one or more bodies of water to the southwest, that are not shown on the withdrawal map. Depending on the actual withdrawal distance from existing boundarys (2 or 3 miles), Category B boundaries would include this unshown section of water. The reservoir dam road--the area that is most fished--would be included.. JJ-20

The withdrawal map shows SCHECKLER Reservoir to be about 3 square miles. The three maps listed above show it covering 6 square miles, and similar to a butterfly shape. The SCHECKLER Reservoir Quadrangle Topographic, USGS, 1985 shows the Lake at this size and in this shape; the water is labeled "Normal Pool." The DEIS text underplays the normal size and use of the reservoir.

(3) Text and maps do not match--size and shape of ordnance contaminated (inert) area In discussing the land closed because of contamination: the DEIS discusses 1,920 acres (3 square miles) belonging to the BLM--that is the shaded area withing the striped area (Figure 1-5). That shaded area is 2 not 3 square miles on the rest of the maps. Either way the northern most boundary of that shaded area would still be one or two miles from the reservoir. JJ-21

However, one of the figures says that 12,180 BUREC acres and 24,646 BLM acres were contaminated. That is 19 not 3 square miles as discussed in the text. Additionally if the number is 12,1800 acres, the BLM shading should be twice the BUREC's (Figure 1-5 Text below map scale). Instead only 5,760 BUREC acres are shown as contaminated (Figure 1-5). No figures match.

(4) The map shows the withdrawal area incorrectly. The withdrawal foot print, from the base boundary to the new northern boundary, shows a distance of 2 or 3 miles depending on what is correct in number (3) paragraph 1 above. If it is 2 miles, the offsets give the appearance of a maximum total of 5,440 acres (Figure 1-5). If it is 3 miles, the offsets give the appearance of 7,520 acres. The text states that 6,120 acres will be withdrawn (Table 2-5). The first way over a square mile that is not depicted. The second will add more than 2 square miles to the withdrawal if "error" is begged. JJ-22

(5) The text does not clarify why these lands were included in the closures for "public safety". *The DEIS states and Figure 1-5 indicates that all off-range ordnance at B-16 is inert, which poses virtually no danger. The extremely low level of danger is further evidenced by years of public use without incident. Nevertheless the Navy included this off-range land--1,920 acres--when it requested the BLM "close" the 24,464 acres in 1990. The BLM responded in 1991.*

This 1,920 acres of inert contamination was included by the BLM in its response requesting the Navy to fence or post all 24,464 acres. The BUREC was also contacted about closing 9 square miles that included SCHECKLER Reservoir. The BUREC declined. Now the Navy and the BLM are in agreement that "closed properties", which includes the 1,920 acres contaminated with inert ordnance, should be JJ-23

withdrawn and placed under Navy control and management. There is simply no public safety reason for the withdrawal. JJ-23

(6) The withdrawal maps do not show which of the BUREC acres are TCID acres. This is significant, because the Navy's interest in legal access raises two questions. The first, what roads are considered to be TCID roads? Second, what will the Navy do with "non-legal" Category B roads north of B-16. JJ-24

(7) The text has conflicts concerning changing BUREC land uses. *There is no explanation for the cooler response to the Navy by the BUREC, it can only be assumed that someone in that office knew what inert meant, while the BLM did not.* JJ-25

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Letter JJ
Rose Thomas

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter JJ. Letter JJ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter JJ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
JJ-1	20e, 25a, 25h
JJ-2	20e
JJ-3	20e
JJ-4	22d
JJ-5	26eeeeeeeee
JJ-6	26eeeeeeeee
JJ-7	26eeeeeeeee
JJ-8	18g, 20f
JJ-9	20g
JJ-10	6d, 20h, 25f, 25g
JJ-11	20i
JJ-12	20j
JJ-13	6d
JJ-14	5f
JJ-15	20k
JJ-16	20k
JJ-17	20a
JJ-18	20l
JJ-19	25f
JJ-20	25f
JJ-21	22e
JJ-22	22f, 25c
JJ-23	22f
JJ-24	25g
JJ-25	22f

Letter KK

720 Brookfield Drive
Reno, Nevada 89503
October 8, 1997

Commanding Officer, Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

Dear Sir: Attn: Sam Dennis, Environmental Planning Branch

You have received the written comments submitted on behalf of the Toiyabe Chapter of the Sierra Club dated Sept. 29, 1997, and signed by Rose Strickland, Public Lands Chair, on the Draft EIS entitled "Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station, Fallon, Nevada" formerly named the "Master Land Withdrawal." I support these comments entirely, but also wish to raise some points that were not covered in these comments or in my testimony at the public hearing on Sept. 16, 1997.

First I am disturbed by your statement that the "no action" alternative would "result in incomplete training of combat pilots, thereby increasing the potential for loss of lives in actual combat situations," and therefore is only analyzed "to provide a baseline of current conditions as required by CEQ regulations." (ES 7,8) Nothing in this document proves that adequate training for the pilots at the Naval Air Station cannot be provided if the land continues to be administered by the BLM. KK-1

The BLM can continue to designate the public land previously identified as containing off-range ordnance (Category A lands) closed to public use until these lands are no longer seen as a threat to public safety. In no way should this interfere with Naval Air Station operations. KK-2

Category B lands, particularly those identified in Dixie Valley under Alternative II, the preferred alternative, should certainly remain public lands and be administered by the BLM. These are important multiple use lands and contain many resources such as wildlife, geothermal areas, and minerals. In addition they are used by recreationists for many activities and are the gateway to three WSA's--Job's Peak, Stillwater, and the Clan Alpines. While Alternative II does not actually allow the Navy to acquire lands within a WSA, the boundaries of the proposal come so close to the boundaries of the Job's Peak WSA that access could be threatened. The Naval Air Station operations and pilot training could still occur without this massive loss of public lands. KK-3

I further believe that the Navy should turn over the lands they acquired several years ago in northern Dixie Valley when they bought out threatened ranches to the BLM and conduct any necessary ground operations under a MOU. In this way, these lands will KK-4

continue to be public when the Navy has no more use for them. KK-4

One glaring omission which is obvious in the planning process as outlined in the DEIS is the failure to consult with the Native Americans about the effects on cultural resources and about the effects of the Navy takeover on their current status. An extensive consultation should have been conducted before any land takeover was proposed by the Navy. KK-5

In light of the obvious deficiencies in the DEIS and the frightening precedent of allowing the Navy to establish a extremely large ground training base through administrative public land withdrawal rather than Congressional action, I ask that the "no action" alternative be selected and that the BLM to provide for military activities which are compatible with multiple use on public lands. KK-6

Please inform me of further developments in this important proposal and send me a copy of the Final EIS when it is released.

Sincerely,

Marjorie Sill

Marjorie Sill

cc Senator Richard Bryan
Senator Harry Reid
Representative Jim Gibbons

Letter KK
Marjorie Sill

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter KK. Letter KK has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter KK comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
KK-1	1h
KK-2	1h
KK-3	1h
KK-4	6c
KK-5	16i
KK-6	1d, 5d

Letter LL

Christine Smith
P.O. Box 283
Eureka, NV 89316

ATTN: Mr. Sam Dennis Code 7031
Engineering Field Activity West
Naval Facilities Engineering Command
Environmental Planning Branch
900 Commodore Drive
San Bruno, CA 94066-5006

September 23, 1997

Acting as an individual, with no affiliation or outside assistance, I have sacrificed many hours of my time to wade through this cumbersome document. Please accept the following comments on the D.E.I.S. – Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station, Nevada.

- Fig 1-4, p 1-21
  Map identifies Townships but not Ranges. LL-1

- Sec. 2.2, p 2-2, second full paragraph
  The text states that some of the EW and visual cueing devices will be located in Fairview Valley area. Most of your maps do not label the Fairview Valley, and it took me a very long time to find a map that references this area (Fig 1-1, p 1-4). Please include a label for the Fairview Valley on all of your maps or refer the reader to the appropriate map whenever the Fairview Valley is mentioned in the text. LL-2

- Sec. 2.2, p 2-2 and Sec. 2.3.1, p 2-15
  The text states that "Any military use that would become necessary outside of the proposed withdrawal footprint would continue to be coordinated with the BLM or other appropriate agency." The statement implies that this has occurred in the past. What kinds of military uses might become necessary outside of the proposed withdrawal footprint? Give an example. LL-3

- Table 3-3, p 3-20
  Table 3-3 lists "normally acceptable noise levels". Are these federal, state, or local standards? I believe that the U.S. Environmental Protection Agency recognizes L_{dn} <55 dBA as a goal for outdoor residential areas to protect public health and welfare with an adequate margin of safety (EPA 550/9-74-004). Is the Navy exempt from EPA guidelines? Please state somewhere in Sec. 3.5 whose noise level standards you are using. LL-4

09/23/97

- Same text reference as above
  These decibel levels for "normally acceptable noise levels" are meaningless because readers have no basis for comparison in their everyday lives. For example, how "loud" are 30, 40, 50, 60,70 and 80 decibels and what daily activities create a given decibel level? Please include as a table (in the text or as an appendix) a relative scale of various noise sources and effects on people. For example, 70 dBA is similar to a vacuum cleaner at 10 feet, or a gas lawn mower at 100 feet, resulting in "possible complaints" as a public reaction. LL-5

- Sec 3.5.3, p 3-20
  How much further does noise travel during temperature inversions, which are common in the winter months? What effect would temperature inversions have on your modeled noise level contours? LL-6

- Fig 3-4, p 3-33
  It appears that you are able to set up EW and TIS sites prior to land withdrawal. Have you installed or are you planning to install any military-related electronic equipment on land below the "reasonably foreseeable airspace designations", namely the Smokey Valley, Diamond, and/or Duckwater MOAs? LL-7

- Fig 3-12, p 3-60
  Please add a few townships and ranges to reference this map. LL

- Sec 4.1.3 p.4-4 and Sec. 4.2.1.1, p 4-5
  On page 4-4, the EIS states that the general finding from the Airforce study "is that chaff is not harmful to humans, livestock, fish and wildlife, or plants." On the next page, 4-5, (third full paragraph) it states that "While detailed data on the effects of chaff ON LAND are lacking...". These two statements appear to contradict one another. Please clarify. LL-9

- TABLE 4-1, p 4-15
  Please include in this table the federal ambient air quality standards for comparison. LL-10

- Sec 4.2.2.1 through 4.2.2.3, p 4-7
  I disagree with the statement "The loss of access to water righted developments...cannot be mitigated". Proposed mitigation for water rights holders on category A lands is too vague. The Navy should assess the potential adverse fiscal impact to water rights holders and include a plan for compensation and/or other mitigation in the Final Draft.
  -The state of Nevada owns the water, and water rights are granted by the state. The text needs to be clarified, since a reader who doesn't know this LL-11

might assume that the Navy or the BLM has the authority to take away water rights.
-Has the Navy worked with the state water master on this issue? If so, please include a discussion of this in the text.
-In addition, please include a list of all water rights holders on lands proposed for withdrawal (similar to appendix H for mining claims). LL-11

- Sec. 4.2.8.2, p 4-24
  The economic impacts to mining and grazing are not unmitigable. Claimholders who are prohibited access to their claims on Category A land should be compensated for the loss of these claims. By the same token, ranchers with allotments on category A withdrawn land should either be given equivalent grazing allotments or compensated for the loss of AUMs and the subsequent devaluation of their ranches. In addition, the owner of the oil and gas lease that exists in the panhandle under Alternative II should be compensated if restrictions are imposed on operating the lease. -Please include a list of all grazing allotment holders on lands proposed for withdrawal (similar to appendix H for mining claims). LL-12

- Secs. 4.2.9.1 through 4.2.10.3, pp 4-27 through 4-30
  I am strongly opposed to the concept that adverse impacts to mining and grazing are unmitigable. The Navy's proposed mitigation is too vague. The Navy should assess the potential adverse fiscal impact to affected miners and ranchers and include compensation as part of mitigation. A plan for compensating affected miners and ranchers should be included in the Final E.I.S. LL-13

- Sec. 4.2.13, pp 4-34 through 4-36
  There is no discussion in this section addressing the potential health and safety impacts resulting in the expansion of withdrawn lands north of the B-17 range. I am concerned about the proximity of the present B-17 range and the proposed withdrawal of additional land adjacent to Highway 50. It is difficult to believe that proposed Category A withdrawn lands abut Highway 50 and yet there is no increased danger to travelers. It is also difficult to believe in the coincidence that the HAZARD study, using statistical probability, just happens to delineate the B-17 northern footprint boundary along highway 50. LL-14
  - The statement on page 1-18 that "the statistical probability of people or structures being struck by objects is infinitesimal" does not assure me, since later in the same paragraph it states that "this generated analysis does not account for proximity to training ranges", including B-17. LL-15

- Sec. 4.3, p 4-38
  Same as comment for Secs. 4.2.9.1 through 4.2.10.3, pp 4-27 through 4-30. LL-16

09/23/97

SMITH

- Fig 5-1, p 5-3
  Please include a few Townships and Ranges for reference. LL-17

- Fig 5-2, p 5-4
  Map does not adequately show locations of communities in lands below military airspace, especially Austin. LL-18

- Fig 5-3, p 5-5
  Map does not show locations of communities on land below the proposed and reasonably foreseeable future military airspace, including the towns of Austin and Eureka. The map also does not show the location of supersonic corridors. I recall that the Special Nevada Report identified at least one proposed supersonic corridor within the Diamond MOA. LL-19

- Fig 5-4, p 5-32
  Map identifies Townships but not Ranges. LL-20

- Sec. 5.7.2.2, p 5-36
  What exactly are "strike aircraft rendezvous" and "stand – off jammer" operations and what to they entail? What part of the Diamond MOA would be used for supersonic activity? What would be the impacts on civilian flight navigation if an ATCAA were established over this airspace? LL-21

- Sec. 5.7.2.4, p 5-36
  What is a "rendezvous area" and what activities does it entail? What is a "jammer axis"? What would be the impacts on civilian flight navigation if an ATCAA were established over this airspace? LL-22

- Sec. 5.7.2.4, p 5-36
  It appears that the "reasonably foreseeable future" Smokey MOA is most crucial to your future training plans, with a 200-foot AGL to provide a "tactical low-level ingress to B-17 and B-19 target areas." What would be the impacts on the area below this MOA? What would be the impacts on civilian flight navigation if an ATCAA were established over this airspace? LL-23

- Sec. 5.7.2.2 through 5.7.2.4, p 5-36
  The Navy MUST expand the scope of the present D.E.I.S. by taking the Duckwater, Diamond, and Smokey MOAs out of the "reasonably foreseeable future" category and including them within the scope of the proposed action. The Navy appears to be trying to "piecemeal" its overall plan. Particularly with respect to the Smokey MOA (200 – foot AGL, ingress to B-17 and B-19 target areas) it seems obvious that the Navy plans to expand its airspace for training exercises. LL-24

- 5.7.3, pp 5-37 through 5-39
  This entire section needs to be expanded and included within the proposed action. LL-25

- Appendix D, Addendum, pp 3,4, and 5
  Figures are of poor quality. The symbol for dirt roads is confusing and practically illegible. I can't identify the obscure symbols in the center of the figures. LL-26
  - The figure on page 3 includes a north-south dirt road west of the footprint. Please identify this road. Is this the scheelite mine road? If so, doesn't it continue father south? Is the road going to be moved or closed? LL-27

- Appendix D, Addendum, ?p. 6?
  Page number not listed. No legend. Figure is meaningless to reader. The scale used for this map is inconsistent with the previous three maps: the three previous maps use a bar scale and this one uses a numerical ratio. LL-28

- Appendix D, Executive Summary, Fig 2, p 4
  Please include a scale for distance. LL-29

- Appendix D, Executive Summary, Figs 3-6, pp 5-8
  Are these the figures the same as the ones referred to in the text (same section, p 10, second full paragraph) as figures 7 - 10? If so, please fix this error. LL-30
  -The same text further states that "these plots do not include legends because HAZARD does not produce one". Why can't you add legends to the figures on your own? Please either add your own legends and scales for each figure or eliminate the figures altogether. LL-31
  - The same text further mentions Figs. 11 and 12 showing current and proposed withdrawal boundaries. Where are these figures? LL-32

- Appendix D, Executive Summary, Fig 3, p 5
  Overall poor quality figure. Difficult to read. LL-33

- Appendix D, Exec. Summary, Fig 4, p 6
  Overall poor quality figure. Difficult to read. Legend is incomplete (i.e. alt. Limits for R4804 – surf to ____? Since I am particularly interested in the B-17 Range and its proximal location to Highway 50, I'd REALLY like to know what the squiggles and lines and fan patterns represent on the map, and I want to be able to relate this map to the location of Highway 50. LL-34

- Appendix D, Exec. Summary, Fig 5, p 7
  Overall poor quality figure. Difficult to read. LL-35

- Appendix D, Exec. Summary, Fig 6, p 8
  Overall poor quality figure. No explanation of dashed/dotted lines in legend. LL-36

- Appendix E, Fig 2-1, p 2-2
  Where is Austin located on the map? Are there other communities not included? LL-37

- General Comment
  According to NEPA, Environmental Impact Statements should be written in language that can be understood by someone with a 10th grade education. I have a master's degree in science and had a difficult time with the document. LL-38
  - This document is 1 ¼ inches thick and contains vast quantities of technical writing and data. How can the average citizen possibly find the time or have the level of education and expertise necessary to read this document in order to make valid, intelligent, appropriate comments?

Thank you,

Christine Smith

Christine Smith

Letter LL
Christine Smith

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter LL. Letter LL has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter LL comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
LL-1	25a
LL-2	25a
LL-3	5j
LL-4	14c
LL-5	14c
LL-6	14c
LL-7	10d
LL-8	25a
LL-9	23d, 25d
LL-10	14e
LL-11	6a, 13i
LL-12	6a
LL-13	6a
LL-14	21e
LL-15	6a, 21a
LL-16	6a
LL-17	25a
LL-18	25a
LL-19	25d
LL-20	25a
LL-21	11d
LL-22	11d
LL-23	12e
LL-24	2e
LL-25	12e
LL-26	25e
LL-27	25e
LL-28	25e
LL-29	25e
LL-30	25e
LL-31	25e
LL-32	25e

Letter LL
Christine Smith

Comment Designation	Response Location
LL-33	25e
LL-34	25e
LL-35	25e
LL-36	25e
LL-37	25a
LL-38	2f

Letter MM

Melissa Smith
14001 Cadet Rd.
Fallon, NV. 89406

MR Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA. 94066-0720

Dear Mr. Dennis,

Please review my comments concerning the D.E.I.S. Withdrawal of Public Lands For Range Safety and Training Purposes Naval Air Station, Fallon, Nevada. Thank you.

Melissa Smith

I have some concerns in regard to the NAS - Fallons Master land withdrawal, and am currently opposed to the proposed land withdrawal for the following reasons.

The BLM Communications Sites Final Amendment has been shelved by the Navy in the DEIS. There is a strong conflict between the Navy's evaluation criteria (DEIS chapter 2 page 3) and the BLMs' stewardship of our public lands. Our public lands already have 69 electronic warfare and communications sites with over 200 miles of adjoining power lines. "This is the most extensive and intensive military military electronic warfare facility use of civilian land anywhere in the nation" (U.S. D.O.I., BLM 1610 NV-030). The BLM and the public has suffered from the Navys' off range ordnance, chaff, chaff caps, and pocket flare litter. I have personally found a missile launcher miles from any Navy land. The Navy now wishes to acquire the Sheckler Reservoir for overflights and ground troop exercises. MM-1

The Sheckler Reservoir and B-6 bombing range are both about 5 miles from Fallon. For many years residents in the area and the State of Nevada have requested the bombing range be closed or relocated but the Navy will not comply, and now wish to move ground troops closer to citizens homes and ranches and take control of the reservoir which plays a vital role in the lives of local farmers, ranchers and wildlife. MM-2

Sheckler Reservoir, which is mainly used for irrigation, has been a benefit to wildlife, specifically migratory waterfowl. A change in management may leave the reservoir dry or polluted, making the reservoir useless or even hazardous for the farmers and waterfowl which use it. MM-3

Many new homesites are being developed and planned to the North of Sheckler and B-16 (i.e. Helen's way). MM-4

Also, as B-16 is on higher ground than Fallon and was flooded in January of this year, a ground water study of this area should be conducted by the Navy to check for contamination of heavy metals. MM-5

To the east of Sheckler reservoir is the Carson Lake, and to the North is the Stillwater National Wildlife Refuge. These areas have been designated as part of the Western Hemispheric Shorebird Reserve Network. The Sheckler reservoir is not included in this network, however, the birds don't know this and stop there anyway. MM-6

I have found the DEIS chapter 3 "Existing Environment" incomplete and very generalized. For example, there is no mention of the Loggerhead Shricke. This bird is very people shy yet can be seen around all areas which the Navy would like to MM-7

withdraw. These birds use these areas during the mating season and the use of ground troops would be incompatible with this. The use of ground troops would not be compatible with any of our birds, wildlife, insects or humans. MM-7

There is absolutely no mention of beetles, butterflies, bees, moths, toads, squirrels, spiders or chipmunks at all in the DEIS. These along with the common ants help make up the environment. I have yet to find any chaff studies on the previously mentioned wildlife. MM-8

The Scheelite Mine Road, to the west of B-17, is a migratory route for Tarantulas. There is no mention of this fact in the DEIS. The expansion of B-17, use of ground troops, and chaff, could be detrimental to this species. MM-9

I have read 4 of the 8 chaff references located in the back of the DEIS. How could anyone, anywhere, compare central Nevada with Chesapeake Bay!! The cattle utilize the range for six months out of the year. The "Electronic Warfare Digest Vol.17 No 4, April 1994" quotes a Canadian cattle study. The Canadians' experimented on the calves for only 14 days, I feel that the study should last for the same six months that the cattle are on the range. I appreciate all the studys' done on Oysters, but this information is irrelevant to Nevada. MM-10

The bottleneck the Navy would like to create in Dixie Valley, would be a high concentration chaff area. In this area there are no oysters, sheepshead minnows, or blue crabs as stated in the chaff studies the Navy chose to utilize. There are however Mustangs, ground squirrels, beetles, spiders and birds which have not been included on any chaff studies I have found. The Electronic Warfare Digest Study does state that chaff kills baby oysters, perhaps the chaff will also kill newborn softskin wildlife and insects. MM-11

This same report also states that there is apparently no effect on plant life, yet according to Chemical Research Development & Engineering Center, "CRDEC-CR-126, Environmental and Health Effects Review for Obsurant Fibers/Filaments, Jan 1992". "Plants grown on the M-field soil, sandy, loam-low-organic matter (1.4%) showed a significant reduction in height...(pg 26). MM-12

This study went on to say (4.3.4) <u>Terrestrial vertebrates.</u> "No data available on the effects of fiber exposure in wildlife or domestic livestock. Laboratory animals have been used as surrogates in human health effects research and these results used to characterize the general mammalian response to fibers. However, mammalian data cannot be applied to avian species because of fundamental differences in their respiratory systems, weight specific minute ventilation, and breathing zones. MM-13

Preening, grit, searching, and dusting behaviors of birds also put them at greater risk for oral uptake of obscurants. Avian response to materials are important because birds are often more sensitive to airborn pollutants than mammals, have higher public visibility, and are used by regulatory agencies as bioindicators of ecosystem health". MM-13

This is the only mention of Avian health in all the chaff reports I've read. There is nothing in the DEIS on avian health. Avian health and insect health are very important players in the ecosystem.

Chapter 4 in the DEIS "Environmental Consequences" is very disturbing. The navy expects to habituate the wildlife to the overflights (accustom by frequent exposure or repetition). Wildlife, much like humans do not want to be habituated. On pages 4-8 "The authors note that the data gaps still exist in the overall effects of noise on wildlife." Page 4-9 "Helicopter flyovers demonstrated that both auditory and visual stimuli caused pronghorns to bolt and seek escape". There was no habituation documented. Page 4-11 states Hawks not previously exposed to disturbances showed stronger avoidance behavior. Additional studies reported similar findings. MM-14

I have seen the effect of flyovers first hand, cattle kick and scatter, dogs bark and run, and birds panic and fly away. I have viewed a video by Mr. Vick Williams proving low level flights over Sheckler Reservoir do severely impact birds.

I must add at this time, anyone with common sense can see that there would be great environmental consequences for animal, wildlife and humans if this land withdrawal is approved. MM-15

As a citizen of Churchill county I strongly oppose the Navys' Alternatives 1,2 & 3. Since the Navy has not thoroughly studied an adequate range of alternatives for presentation. The no action alternative would be the best choice. I also stand behind the State of Nevadas' position on the closure of Bravo 16. MM-16

Letter MM
Melissa Smith

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter MM. Letter MM has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter MM comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
MM-1	10g
MM-2	7a
MM-3	13f
MM-4	7b
MM-5	21d
MM-6	13f
MM-7	13a
MM-8	13g
MM-9	13g
MM-10	23e
MM-11	23e
MM-12	23e
MM-13	23e
MM-14	23f
MM-15	23f
MM-16	1a, 7a, 28a

Letter NN

Carpenter

October 10, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore drive
San Bruno, CA 94066-5006
Attn.: Mr. Sam Dennis - Environmental Planning Branch, Code 1851

Dear Mr. Dennis,

I am sending this in response to the DEIS pending with the BLM, Carson City Office (see attached documents). I am writing this for both myself and my husband, Tom Carpenter.

We are long time Nevadans, and have been traveling throughout this state for over 60 years, combined. We work and play throughout this state, and because of this we want to speak to some of the issues being raised by this DEIS. The biggest issue for us is that you (Navy) have not provided a master plan, allowing we Nevadans to review fully the intent of the Navy with respect to Nevada and its (Navy's) land use proposals. This makes it impossible to fully address the complaxities and full impact of this current proposal. We, as tax paying citizens, want and expect the full benefit of reviewing FULLY how our tax dollars are being spent. This proposal falls seriously short of this . . . NN-1

Purpose of the Proposed Action

- **Provide the necessary land area so the Navy can facilitate and improve realistic operational and strategic combat training at NAS Fallon**
  - this equates to more land grabs by the armed forces, and we are not in favor of this. What lands you have currently , and previously, acquired here in Nevada have NOT been respected - you have gone outside of the current boundaries, especially with respect to stray ordinances, for which NO effort appears to have been made to clean these up, from this side of the fence looking in. Why would I , as a Nevadan who uses this state from boundary to boundary, approve of more land to be taken out of land use ... .? What guarantees will be made that 'stray' migration of ordinances will NOT occur on the lands for which you are asking? Our view point is that until the Navy cleans up the current 'mishaps' (all other land-use industries are charged with 'reclaiming'). additional lands should not be removed from public use for Navy related exercises NN-2
- **Provide public safety buffer zones around the existing training at NAS Fallon**
  - Again, additional land 'grabs' by the Navy canNOT be supported, for the reasons outlined in the above comments. We all realize that NAS Fallon is growing, but there NN-3

Carpenter

are existing homes in the areas outlined for expansion (public safety zones) NN-3

Need for the Proposed Action

- **Need for realistic operational and strategic combat training brought about by real life combat situations and changes in military technology and training operations.**
  - Until the Navy provides a master plan with respect to Navy activities here in Nevada, we as Nevada citizens, canNOT support this. There is no way to fully address this current land grab by the Navy. What are the Navy's full objectives with respect to Nevada? Until you are all forthright with this information, a clear understanding and focussed comments are impossible. We are NOT in favor of continued 'piece-meal' land grabs here, ore anywhere in the U.S. NN-4
- **Need for safety buffers from expanding populated areas in the Fallon region over the past 50 years, particularly towards B-16.**
  - We suspect this has been a recognized issue for years, although it is probably more acutely obvious and problematic now that the base consolidations throughout the U.S. has IMMEDIATELY expanded the population in this community, as well as on the base. Shouldn't this issue have been addressed prior to NAS Fallon getting the population increase to the base with consolidations and related transfers of populations, as well as the Top Gun group getting transferred here, as well? NN-5
- **Need for flexibility in developing tactical combat training systems and electronic warfare threat scenarios.**
  - All industries need flexibility with the hopes of addressing rapid technological changes as they occur, to able to best adjust tactics, methodologies, etc. Our concern is that the land grabs associated with the Navy's training areas are a permanent consequence, which affects all of us who like to utilize all of Nevada at any time. We are not sympathetic to the Navy's 'flexibility' issues because of this. NN-6
  - Additionally, your technologies are changing so rapidly that there exists the appearance that there is NOT enough time to test, check what the effects are to others living in the area where these new technologies are being utilized PRIOR to using them. Until this can be sufficiently address, we suggest that any changes have to be submitted for public scrutiny, concern must be addressed and answered. The Navy's actions have a CAUSE & EFFECT for which public safety and health concerns must be addressed and answered with sufficient testing. Just ask the Austin-Big Smoky Valley residents and visitors. NN-7
- **Need to support integrated air and ground training, close air support, and combat search and rescue training.**
- **Land withdrawal is designed for efficient use of lands for military training purposes while minimizing conflicts with other public land users.**
  - We appreciate that the Navy is attempting to mesh all land use issues to maximize everyone's needs, concerns. Our discomforts remain with respect to: current boundaries have NOT been fully respected in the past (stray ordinances issues); and without a NN-8

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Carpenter

master plan it is hard, impossible to fully address the issues and implications at hand. We do NOT support additional land grabs by the Navy until: 1) clean-up of stray ordinances is implemented and completed; and 2) a master plan is drafted for public review and comments. NN-8

Other Issues

- 10,000 square miles of air space (MOA) that is proposed for withdrawals of some sort.
  - We are NOT in support of this as it is difficult enough to fly around this state as these current boundaries are defined.
  - The Navy and its representative pilots are historically callous and uncaring to the current population bases within, under their current air space boundaries. Ask the Austin - Middlegate residents and visitors. Until better discipline and control of low-flying thrill seekers can be employed, the Navy should not be granted additional air space
  - I am a frequent visitor to theses areas, as well as elsewhere in the state, and have been 'buzzed' by low-flying, joy-seeking pilots who blatantly disregard the health and safety of those on the ground. The current commander (Ronnie ??) at Fallon once excused these actions because 'pilots tend to be of a different personality base'. That was, and remains, the lamest excuse - those 'kids' are in control of multi-million dollar aircraft, and they ought to have better control and respect for these expensive machines, as well as the folks on the ground paying their taxes to support this activity. We realize they are training to protect us with respect to potential war threats, but does part of that training include 'buzzing' those of us on the ground?? We think not . . . This commander's response was a poor example, illustration of leadership. If he canNOT control his pilots better than this, he ought to be replaced with one who can. NN-9
  - Comments were raised as to employing better disciplining tactics with respect to these errant pilots. We believe there are technologies available for tracking individual and/or group activities (GPS and computer tracking technologies) to better scrutinize activities (these are MULTI-MILLION dollar aircrafts), that would make the pilots more accountable for their actions. If NOT then ground the whole lot of them until better discipline and control can be exercised by all. You don't just give a young kid the controls of a multi-million dollar piece of equipment if you don't think he/she can handle it responsibly.

Carpenter

We believe strongly that the Navy needs to draft a master plan for all to review, so that better decisions can be made with respect to land and airspace withdrawals. These partial requests, ones that have the appearances of being piece-mealed together have collectively greater impacts than the individual, and consequently should be scrutinized as a collective impact - not as individual impacts. NN-10

Sincerely,

Ann Carpenter

Ann S. Carpenter

Tom Carpenter

Tom Carpenter

5445 Goldenrod Drive Reno, NV 89511 702-849-9707 Ph...; 702-849-3513 Fax

Letter NN
Ann S. and Tom C. Carpenter

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter NN. Letter NN has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter A comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
NN-1	5g
NN-2	22b, 22c
NN-3	1I
NN-4	2e
NN-5	29g
NN-6	21f
NN-7	21f
NN-8	22b
NN-9	28b, 29h
NN-10	5g

Letter 00

September 20, 1997

David R. Wood
4269 Muirwood Circle
Reno, Nevada 89509

Commanding Officer, Engineering Field Activity West
Attn.: Mr. Sam Dennis, Code 1851
900 Commodore Drive
San Bruno, Ca. 94066-5006

Re: Navy proposal to take more public land in Nevada

Dear Mr. Dennis:

The Navy's proposals to take more land in Nevada saddens me and also does not appear to make a lot of sense. First, I am a life long Nevadan, as was my father and my grandfather, and I have a great respect and love for this state. It concerns me when outsiders come in and destroy the land and limit or restrict access and use to Nevadans, such as myself, and all other people. The Navy's proposal does this! 00-1

I am personally familiar with two of the three areas where the Navy wants to expand. The northern proposed expansion, south of Sheckler reservoir, appears to be in an area that is at least partially a wetland area. As you may or may not know, Sheckler reservoir drains to the south underneath a dike road to the immediate south of the reservoir. This drainage goes for some distance south into the desert area (toward the existing bombing range) forming a marshy type area (somewhat seasonal) which is used by many different types of bird life. 00-2

Further, this proposed expansion appears would also likely cut off what little access presently exists into the Dead Camel Mountains from the southern end of the reservoir. As a matter of fact, there are only one or two roads going southerly into the Dead Camel Mountains from Sheckler reservoir and it certainly appears that the Navy's proposed expansion would eliminate such access. The Navy has, in a previous expansion in this area, already limited some access to the public lands by closing a previously utilized public access roads. Further restriction is not right and surely not good for the general public. 00-3

The other proposed Navy expansion area that I am personally familiar with is the Dixie Valley area and I am appalled that the Navy wants to destroy more property here. Wasn't it enough that the Navy purchased the historic site of Frenchman's Station, on Highway 50, and tore down every single structure so that now only memories exist. Frenchman's Station was not fancy. But it was an interesting place to stop and it certainly did have at least a minor historical significance that dates back to the early 1900's. Now its gone thanks to the Navy! 00-4

Regardless, further expansion into Dixie Valley will result in a beautiful area of Nevada being taken away from its citizens. For the uninitiated, the area looks like barren desert. Nothing could be further from the truth. Dixie Valley sits between the Stillwater Mountains to the West and the Clan Alpine Mountains to the East. If a person wants to access the eastern side of the Stillwater range, they have to go through the Dixie Valley area. There are a lot of beautiful areas on the eastern side of this mountain range; canyons and valleys with streams and springs; interesting wildlife. I have hunted in this area and, despite the navy's "promises" to the contrary, the navy's use of this area, both on the ground and in the air, will most certainly destroy hunting and will ultimately result in restrictions or prohibitions on access. 00-5

There are also other historically significant sites in this area the most prominent of which is Wonder on the western side of the Clan Alpine Mountains. To get to Wonder, a person must go through Dixie Valley. I am not very familiar with the Clan Alpine Mountains but have been told by many that these mountains also have many unique qualities that make public access and availability appropriate. 00-6

It is reported that part of the Navy's reasoning to withdraw some of the public lands is to protect the citizenry from the errant munitions which are purportedly in various public access (buffer) areas. If you enlarge the bombing ranges, don't you likely have the same problem but maybe on a larger scale? All of a sudden stray bombs begin appearing in areas OUTSIDE of the newly enlarged areas. Why not resolve this problem in the obvious manner? CLEAN UP THE CONTAMINATED AREAS! Government statements that a clean up can not be accomplished is an insult to <u>everyone's</u> intelligence. Appropriate technology most certainly exists and, if you spent the money to create the problem, you certainly should now spend the money to fix the problem. 00-7

I don't believe very may people would like to see the Navy leave Fallon. There is a positive economic impact to Fallon and, to a significantly lesser extent to the State of Nevada. It is also very prestigious to have some of the high profile flight training programs at Fallon NAS. However, the need (defensive) for expanded military training has been curtailed in recent years as a result of a changing world. The military is down sizing and military installations are closing. It makes no sense for the Navy to appropriate more land (and airspace) in Nevada. 00-8

00-9

A comment, or suggestion, that I am sure has been brought up before, is that the Navy should consider sharing the Nellis Air Force Bombing and Gunnery Range with the Air Force. Joint usage should strongly be considered in lieu of destroying more Nevada land. Further, since the Navy and the Air Force are **both** part of the United States Government (at least I hope so), appropriate and reasonable joint usage arrangements could certainly be developed.

I calculated (as the crow flies) the distance from Fallon NAS to the northern area of the Nellis Bombing Range to be approximately 145 miles. This seems to be a relatively short distance. Interestingly, this same northern area of the Nellis Bombing Range is approximately 170 miles from Nellis Air Force Base. It is closer to Fallon NAS than to Nellis AFB!

Be reasonable and conscientious to a changing world. Use existing resources appropriately.

Please don't take anymore land from the citizens of Nevada!

Sincerely

David R. Wood

cc: Senator Richard Bryan
Senator Harry Reid
Congressman Jim Gibbons
Congressman John Ensign
Governor Bob Miller

Letter OO
David R. Wood

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter OO. Letter OO has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter OO comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
OO-1	28a
OO-2	7b
OO-3	20a
OO-4	29i
OO-5	29i
OO-6	20a
OO-7	22b, 22c
OO-8	29d
OO-9	3b

Navy Public Hearing On DEIS
Withdrawal of Public Lands
Fallon Convention Center
100 Campus Way
Fallon, Nevada 89406

Wed. Sept. 17, 1997

Letter PP

Our concern is the withdrawal of more land around Bravo-16.

We have always felt Bravo-16 should be closed, as recommended by the FAA in 1984, and more recently by Gov. Miller, Sen. Bryan and Sen. Reid. It is technically an "In Town" bombing range, and was originally meant for propellor type planes, not fast low flying jets. There have been 7 crashes on Bravo-16, resulting in at least 2 deaths.

We live 6 miles North and 1 mile East of Bravo-16. When we bought our property in 1974, we were not advised by anyone that there was a bombing range in the area. For many years the low flying jets screamed by and over us from early morning till often late at night. In the 1980's the Navy brought in a Company from back East to set up noise monitors on our property to record the decibel level of the jets. It was business as usual up to the day the noise monitor was set up, the jets did not fly up by us at all during the time the monitor was here, and the day after it was removed, it was back to business as usual. So to anyone looking at that report, there was no noise problem here. The same with the EIS issued about 1984. It showed about 6 noise complaints called to the Base from our address, when in fact we had called in hundreds of times over the years. Even now the number of noise complaint calls reported to the Press is lower than the actual number, and the number of people in this area was reported lower. According to a State Survey done over a year ago, there were 2400 people living in this area, and there could be even more now. PP-1

People who bought property and built homes closer to Bravo-16 after we bought our property had been advised by the Navy that Bravo-16 was going to be abandoned in the near future, but this never happened.

The end of June we were part of a group attending a demonstration of low flying jets, jets breaking the sound barrier (sonic booms), etc. The noise monitor set up to record the decibel level showed the low flying jets were as loud as some of the sonic booms, and this is what we lived with for many years.

Since Capt. Ronnie has been the Base Commander, things have been

considerably better. He has worked hard to try to come up with a solution to the problem that will be beneficial to both the Navy and the residents affected by Bravo-16, for which we commend him. He has proposed a change in the flight pattern so the jets will approach the bombing range from the South where there are no residences, instead of from the North, which is heavily populated, and now is seeking FAA approval to make the change. On July 26th, jets made test runs using the proposed new flight pattern, and we could barely hear them from our place. We do not know how it affected those living closer to Bravo-16. PP-1

On Feb. 12th we went to the Senate Hearing on closing or relocating Bravo-16, and then to the subsequent Hearing where the Senate voted to let the Navy try the new route it has proposed. However, Sen. Rhoads said if the FAA does not approve the new flight pattern, or if it is not beneficial to the residents in the area, they will look again at closing or relocating Bravo-16.

Sincerely,

Alice Schneider

Alice Schneider
1843 Cherry Lane
Fallon, Nevada 89406
(702) 867-2434

WED. FEB 12, 199

STATE SENATE JOINT RESOLUTION HEARING

RELOCATION OR ABANDONMENT OF BRAVO-16 attachment to Letter PP

CAPITOL COMPLEX

CARSON CITY, NEVADA

1. WE FEEL BRAVO-16 SHOULD BE CLOSED OR RELOCATED. B-16 IS TECHNICALLY AN "IN TOWN" BOMBING RANGE, & SHOULDN'T BE HERE.
2. OBSOLETE - WAS FOR PROPELLOR TYPE PLANES, NOT FAST LOW FLYING JETS
3. THERE HAVE BEEN 7 CRASHES ON B-16, RESULTING IN AT LEAST 3 DEATHS COULD JUST AS EASILY HAVE CRASHED INTO OUR HOMES
4. IF AREA MOA, COUNTY COMMISSIONERS SHOULDN'T HAVE OK'D FOR HOUSING.
5. WE BOUGHT OUR 5 ACRES IN 1974 WHEN BELL-SMITH TRACT OPENED, & W WERENT ADVISED BY REALTOR, COUNTY COMMISSIONERS OR ANYONE ABOUT B-1
6. WHAT WE WERE SUBJECTED TO FOR MANY YEARS WITH JETS FLYING B & OVER US 50-100 FT OFF THE GROUND FROM EARLY MORNING TILL OFTEN LAT AT NIGHT WAS UNBEARABLE & INEXCUSABLE.
1. FAA SAID TO CLOSE B-16 IN 1984 - NAVY SAID THEY COULDN'T BECAUSE B-16 WAS USED TO SIMULATE NUCLEAR STRIKES. THAT EQUIPMENT & OPERATION WERE MOVED TO B-20 WHEN THAT OPENED SEVERAL YEARS AGO.
8. LAHONTAN VALLEY NEWS ARTICLE OF 2/8/97 SAID SO MUCH ADDED TO RANGE NOW BUT ACTUALLY IT WAS DOWNSIZED WHEN NUCLEAR EQUIPMENT & OPERATION MOVED TO B-20.
9. GOV. MILLER, SEN. BRYAN & SEN. REID SAID TO CLOSE OR RELOCATE B-16
10. GOVERNORS REPORT SHOWS 2400 PEOPLE LIVING IN AFFECTED AREA. NOW NAV WANTS TO WITHDRAW MORE LAND AROUND B-16. WHEN WE CALLED BASE JAN. 31 TO REPORT JETS FLYING UP BY US INSTEAD OF BY B-16, WE WERE TOLD THIS IS RESTRICTED AREA 4803 & THEY HAVE RIGHT TO BE HERE. IF MORE LAND WITHDRAWN OVER US, THEY CAN SAY THEY CAN FLY OVER US ANYTIME, & WE COULD BE BACK TO WHERE WE WERE BEFORE.
11. NAVY RAN THE PEOPLE OUT OF THEIR HOMES IN DIXIE VALLEY, SO LET THE MOVE B-16 OUT THERE. THEY'VE SPENT MILLIONS IMPROVING THE BASE, S LET THEM SPEND A LITTLE MORE TO RELOCATE B-16.

Respectfully,

Alice Schneider (ALICE SCHNEIDER

1843 CHERRY LANE
FALLON NEVADA 89406 (702) 867-2434

Letters To The Editor:

Feb. 26, 1996

I am writing in defense of Mr. Bonetti's concern about the recent jet crashes and public safety, in his letter of Feb. 16th. The responses to his letter, including an Editorial on Feb. 16th, suggest that the jets do not fly in residential areas, none has crashed within 37 miles of Fallon, and the only things disturbed by the "aircraft plowing into the earth" were a few Chukars and some sagebrush.

We live 6 miles north and 1 mile east of Bravo-16, and many times the jets have barely cleared our house or trees as they've screamed over us on their approach to B-16. Not only have we been concerned about the safety of the people here, but for many years were subjected to unbearable noise from early morning till often late at night. According to a State survey, 2400 people live in this area, which is considerably more than just Chukar and sagebrush. And B-16 is just 9 miles SW of NAS Fallon, which is considerably closer than 37 miles. There have been 7 crashes on B-16, one due to a mid-air collision between a jet and private plane, which killed both pilots. And there have been numerous accidents right on the Base during take-offs and landings.

Gov. Miller, Sen. Bryan and Sen. Reid have all said to close or relocate B-16, but instead the Navy is trying to expand B-16 and withdraw another 53 square miles around it. There are thousands of square miles of unoccupied land in Nevada that the Navy could use. We feel the Navy is being irresponsible by ignoring the welfare of the people here, and by not complying with the request of our State leaders, as well as the FAA.

For the record, in addition to the 14 crashes at NAS Fallon and adjacent ranges from May 1951 to July 1952 that Mr. Washer mentioned in his letter Feb. 22nd, per a report in 1977, there were 25 accidents at NAS Fallon between 1965 and 1976, resulting in 5 fatalities. And per a report in 1982, there were 27 accidents on training ranges between 1970 and 1981, resulting in at least 3 fatalities. In the Special Nevada Report issued in 1991, it stated that from 1964 to 1988, which includes the above from 1965 to 1981, 75 aircraft mishaps occured in conjunction with NAS Fallon activities, on the Base, training ranges, and public or private land. These reports go only to 1988, and there have been accidents since then, too.

Finally, my husband and I are extremely sorry about the loss of the pilots who recently died, and our hearts go out to their families. We sincerely hope there won't be any more crashes anywhere in the future.

Sincerely.

Alice Schneider (ALICE SCHNEIDER)

843 CHERRY LANE
FALLON, NEVADA
847-2434

The US Constitution

5th Amendment Dec. 15,1791

" No person===be deprived of life, liberty or property without due process of law, nor shall private property be taken for public use, without just compensation. "

14th Amendment July 9, 1868

Section I

"No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the US ; nor shall any state deprive any person of life, liberty or property, without due process of law, nor deny to any person within it's jurusdiction the equal protection of the law."

Letter PP
Alice Schneider

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter PP. Letter PP has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter PP comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
PP-1	7a

Letter QQ

3/8/97
Fallon, Nev.

My name is Victa Williams, and I live at 3876 Boyer Rd. Fallon, Nevada.

Approximately 20 yrs ago, when Capt Toft was Commanding Officer of NAS Fallon, a meeting was held between the Navy, Churchill Co. Commissioners and other governmental agencies. The Navy wanted to withdraw additional lands for their various bombing ranges. The Navy said, at that time, if the withdrawals were granted they would do no more improvements on Bravo 16 and would abandon it, Bravo 16, in the near future.

Bravo 16 is still here. I bought property and built a home on land adjacent to Bravo 16 believing the Navy would keep their word. I was wrong, instead of downsizing B-16 the navy has upgraded its facilities, and now wants to withdraw more land around Bravo 16. I with many others in this community have a definite problem with the Navy's credibility. QQ-1

Over the years I have watched aircraft flying below required altitudes, many times below 200 ft A.G.L. my home and the homes of approx 3,000 residents in this area have been "buzzed" and we have been subjugated to the "sound of freedom" for much too long. I have video taped a lot of these "pilot miscalculations" and have tapes of aircraft flying through flocks of Pelicans, geese, and ducks, which the aircraft have frightened up from Sheckler reservoir, I also have videos of aircraft buzzing my house and my neighbors houses.

The Navy has changed its ingress and egress for aircraft using the Bravo 16 range, and this has been of some help, however, if an aircraft has problems it can now crash into a populated area instead of in the desert.

OCT. -09. 97(THU) 13:08 NAVY EFA WEST ENVIRON PLNG TEL:4152443206 P.035

The Navy says that Bravo-16 is necessary for the training of its "rookie" pilots, & think "rookie" pilots should be trained away from populated areas similar to those surrounding B-16. QQ-1

Another factor, which should be taken into consideration, is the problem of growth in the Fallon area. Fallon can't grow to the North because of bombing ranges and lack of potable water. Fallon can't grow to the South because of bombing ranges and lack of potable water. Fallon can't grow to the East because of NAS Fallon and lack of potable water. The only direction Fallon can grow is to the West but Bravo-16 negates growth in that direction even though there is good water. QQ-2

I, like most people in Churchill County, am not opposed to the Navy, and in fact I am very proud to have worked at the Naval Strike Warfare Center, and am pleased that the Navy has chosen NAS Fallon for some of their most technological programs; TOP GUN, TOP DOME etc, however, I think it is time for the Navy to remove their bombing range from my neighbors, and my, front and back door. QQ-3

Thank You

Vi Williams

Received: 10/ 9/97; 12:12PM; OCT. -09. 97(THU) 13:09 NAVY EFA WEST ENVIRON PLNG TEL:4152443206 P. 036
4152443206 => CORDLE; #36

Letter QQ
Victor Williams

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter QQ. Letter QQ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter QQ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
QQ-1	7a
QQ-2	7a
QQ-3	7a

Letter RR

Draft Environmental Impact Statement for the
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- ✓ Individual (no affiliation)
- ___ Private Organization
- ___ Federal, State, or Local Government
- ___ Citizen's Group
- ___ Elected Representative
- ___ Regulatory Agency

Name: Dan Walsworth
Organization (if applicable):
Street Address (optional): 957 Ronald Way
City/State/Zip (optional): Fallon NV 89406
Phone # (optional): 702/423-0543

Did you receive a copy of the DEIS? ☒ Yes ☐ No
Do you wish to speak this evening? ☐ Yes ☐ No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments:
It appears that several of the expansion areas (B-16, B-19, B-17) have been designed to strategically cut off public vehicular access to significant amounts of public land. If denying access to these public lands is not the intent of the withdrawal then Access Corridors should be provided to ensure that vehicular access to these public lands is ensured. If denying access to public land (in addition to areas indicated on the withdrawal maps) then the Navy needs to make clear their intent to reduce/eliminate that public access. Existing "Alternative routes" are extremely circuitous, and unreasonable burden to the public attempting to access & use open public land. Corridors and/or new roads skirting open public areas are essential.

RR-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

Letter RR
Dan Walsworth

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter RR. Letter RR has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter RR comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
RR-1	20a

Letter SS

Oct. 9, 1997

Commanding Officer
Naval Facilities Engineering Command, Attn: Sam Dennis
900 Commodore Drive
San Bruno, CA 94066-0720

RE: Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon

To be included in the DEIS comments.

What you boys need is a plan, a *comprehensive* plan for all military activity on the land and in the air. This plan needs to encompass all states.

Across the nation the military is shredding states, destroying public lands, endangering human and wildlife, and generally making lives of many civilians miserable. SS-1

This is done all in the name of "defense." Gentlemen, I ask you directly, defense from whom. Who are you defending us from? Who are our "peer competitors?"

Specifically the DEIS neglects to mention:

- Wildlife issues, i.e. eagle habitat and rare fish species including the chub SS-2
- Impact on the Walker Indian Reservation SS-3
- An analysis of alternatives SS-4

It appears that the military thinks BLM land is theirs. Wrong! There is other land available. Use it!

Thank you,
E. C. Mueller

E. C. Mueller
P.O. Box 216
Crestone, CO 81131

Letter SS
E. C. Mueller

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter SS. Letter SS has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter SS comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
SS-1	3a
SS-2	13a
SS-3	16a
SS-4	1a

Letter TT

August 11, 1997

Commanding Officer
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-0720
Attn: Sam Dennis

Re: Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon

Dear Mr. Dennis:

My wife and I enjoy many outdoor activities including being rockhounds. One of our favorite areas to rockhound in is called the "Fairview area." This area is found south and east of the junctions of Highways 50 and 839 (southeast of Fallon approx. 35 miles). It's my understanding that this is one of the many areas the Navy wants to withdraw.

It seems these days that everyone is tying up, or withdrawing lands, or whatever, and leaving us the general public with few places to go. TT-1

Can there not be a compromise made? How about opening areas during specific times of the year for rockhounding, hunting, whatever? Or - guided hunts where Navy personnel are present to ensure we the general public don't walk over the wrong hill? Or something - not just taking another huge area (for all the best reasons) and saying too bad!

Look forward to hearing from you.

Sincerely yours,

JOHN PETERSON
390 Tucker Road
Reno, Nevada 89511

Phone: (702) 849-1522

Copies to:

President Bill Clinton
The White House
1600 Pennsylvania Avenue
Washington, D.C.

U.S. Senator Richard H. Bryan
364 Russell Senate Office Bldg.
Washington, D.C. 20510-2804

U.S. Senator Harry Reid
324 Hart Senate Office Bldg.
Washington, D.C. 20510

U.S. Congressman Jim Gibbons
1116 Longworth H.O.B.
Washington, D.C. 20515

Governor Robert J. Miller
State Capitol Building
Capitol Complex
Carson City, Nevada 89710

Secretary of State Dean Heller
State Capitol Building
Carson City, Nevada 89710

Senator Ernest E. Adler
412 North Division St.
Carson City, Nevada 89703

Assemblyman Mark Amodei
805 W. Sunset Way
Carson City, Nevada 89703

Letter TT
John Peterson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter TT. Letter TT has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter TT comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
TT-1	20c

Letter UU

Draft Environmental Impact Statement for the
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 16, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below: see my comments distributed to officials at 11 a.m. meeting

- ____ Individual (no affiliation)
- ____ Private Organization
- ____ Federal, State, or Local Government
- ____ Citizen's Group
- ____ Elected Representative
- ____ Regulatory Agency — Prospector

Name: R L Huntsman 9-16-1997
Organization (if applicable): ____
Street Address (optional): 12955 Thistle Court (Lemmon Valley)
City/State/Zip (optional): Reno 89506-9456
Phone # (optional): 702-972-0939

Did you receive a copy of the DEIS? [✓] Yes [ ] No
Do you wish to speak this evening? [ ] Yes [ ] No I would if I were there

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: Commendation for conducting meetings. Lets hope all claims will be returned or compensation paid for them. I'm a prospector & BLM gave me claims just to take them away 3 yrs later after the area was depleted — I was tricked into staking on ground of interest to the military

UU-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive. San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

attachment to Letter UU

Introduction

GREETINGS FROM
DUGAN L. HUNTSMAN
12255 THISTLE COURT
(LEMMON VALLEY)
RENO
NEVADA 89506-9456
U.S.A.
PHONE (AREA 702) 972-0939
DATE: 9-16-1997

(1) This is to respectfully inquire about the status of my Gold & Silver claims tied up by the Navy Air Force just as the ore was exposed & ready to mine

(2) Compensation; In depending upon the moral high standard and fairness of the Navy Air Force to pay me a fair price for the offensed of making the discovery and to pay me a fair price for the rare rich discovery that required 8 years prospecting & 3 years of development work

(3) Designation of ground as being mineralize I was glad to note that you have recognized the mineral potential of the area of my claims.

One reason to define the area as good for mining is that I spent 3 years & several thousand dollars of my own money on assays that led to high values, good enough to consider a mining operation

(4) In your recent appraisal & tabulation of mining claims I noticed that you did not list my claims Why?

Name of Claims: "3rd Brunje 1-10" or "DH 1-32"

Respectfully D L Huntsman

ineering Field Activity West
Naval Facilities Engineering Command
Attention of Sam Dennis
Environmental Planning Bran
900 Commodore Drive
San Bruno
California 94066-5006
Attention of Sam Dennis

GREETINGS
FROM
EUGAN L. HUNSAKER
12235 Thistle Court
(Lemmon Valley)
Reno, Nevada 89503-9435
(702) 972-0959
ALL 9-16-1997

At this time, I would like to report that the Air Force has had my gold & silver claims tieing up for a very long time for lack of decision on the status of the the ground on which are my claims

I have been told that the Navy Air Force has no need for the ground and/or can't make any use for the ground (it is certainly very rugged, remote and inaccessible)

The ore has been lying idle, denying Nevada hundreds of new high paying jobs and many millions of dollars of new wealth

In my staking & recording I have not been accused of violating a law, regulation or of having made a mistake (I have the regulations)

No mention has been made for compensating me (and the Mining Company Lessee) for my losses and on the value of the ore deposit. Eight years of prospecting & 3 years of development work was

very expensive. The ore deposit is an asset at my expense & work — others have been compensated

As with other Claimants, the taking away of my claims resulted in miserable financial hardship &, in my case, it has meant that retirement for my wife and I has been ruined. The most precious years of our lives have been taken away

As I understand it, the ground given to you by B.L.M. (without first being appraised) is now your land and as such, I should think that you would in fairness & in keeping with the very high moral standard of the Air Force, pay me fair compensation for the rich gold & silver asset

As to the legality & authenticity of my claims, all you have to do, to verify it, is to review, for yourself — by yourself, the regulations for staking and recording at the time of my staking and then check that I and the Lessee adhered to those regulations U.S.G.S. maps, such as section of map enclosed, showed as you can note, that the ground was available for staking

I'm surprised that with the thousands of words about "public safety", that the United States Navy Air Force did not bother to change maps to reflect the change in your land acquisitions, nor were there any signs and nor were there any fence

Any person approaching from the East would not

and could not declare that they were in the vicinity of land used by the military

Of the thousands of times that you have used "E d S" or "E d S" the time for it was before your acquiring of land

In other words, at the time of my staking and for several years afterwards, there was no way to know (without being omniscient) that the ground I staked could be observed as other than "open" ground to me and a host of Mining Companies and Prospectors who were on the ground staking & re staking mining the ground (in the area of my claims) over a period of about 80 years right up to the time I took my turn. I discovered rich gold & silver that others, including BLM, passed up and I am being treated for more than a criminal for doing it!

Also, about maps, BLM's own map department explained to me with U.S.G.S. topographic maps (2 of which I have — one annotated) — that the ground, I was interested in, was indeed open

As you know, the first step in staking is to confer with the, in this case, Churchill County Mining Recorder's office. All their records & knowledge confirmed that

the ground I was interested in, was available for staking. I checked with them almost every month for 3 years

In other words why did BLM accept my documents and fees and GIVE me claims as legitimate claims just to TAKE them away 3 years later after the ore was exposed, after the Lessee and I paid up to $1000 in fees, after we paid about $25000 in development work and after I paid $2000 for assessment requirements? I lost 8 years of prospecting and all the money I had and I have never been able to recover the money I lost or to replace it

---

The reason that I'm emphasizing that the claims are my claims is that, if need be, you will appreciate very little cooperation from BLM. They made several mistakes in the way they mishandled their land status records, in the way they played the sadistic game of give & take with my claims, in the way they violated regulations withdrawing the grounds and in the way they violated the regulation that says "abandoned" claims can be returned to the original Claimant.* They have been too guilty to admit their mistakes

* I have a copy of all regulations & all documents

now that the land is Navy Air Force land I (and everyone else) can expect a higher standard of operating procedures — more attention to morality, more attention to justice, more respect & concern for others, more attention to Christian Principles and more courage — courage not to take the easy way out at the expense of others

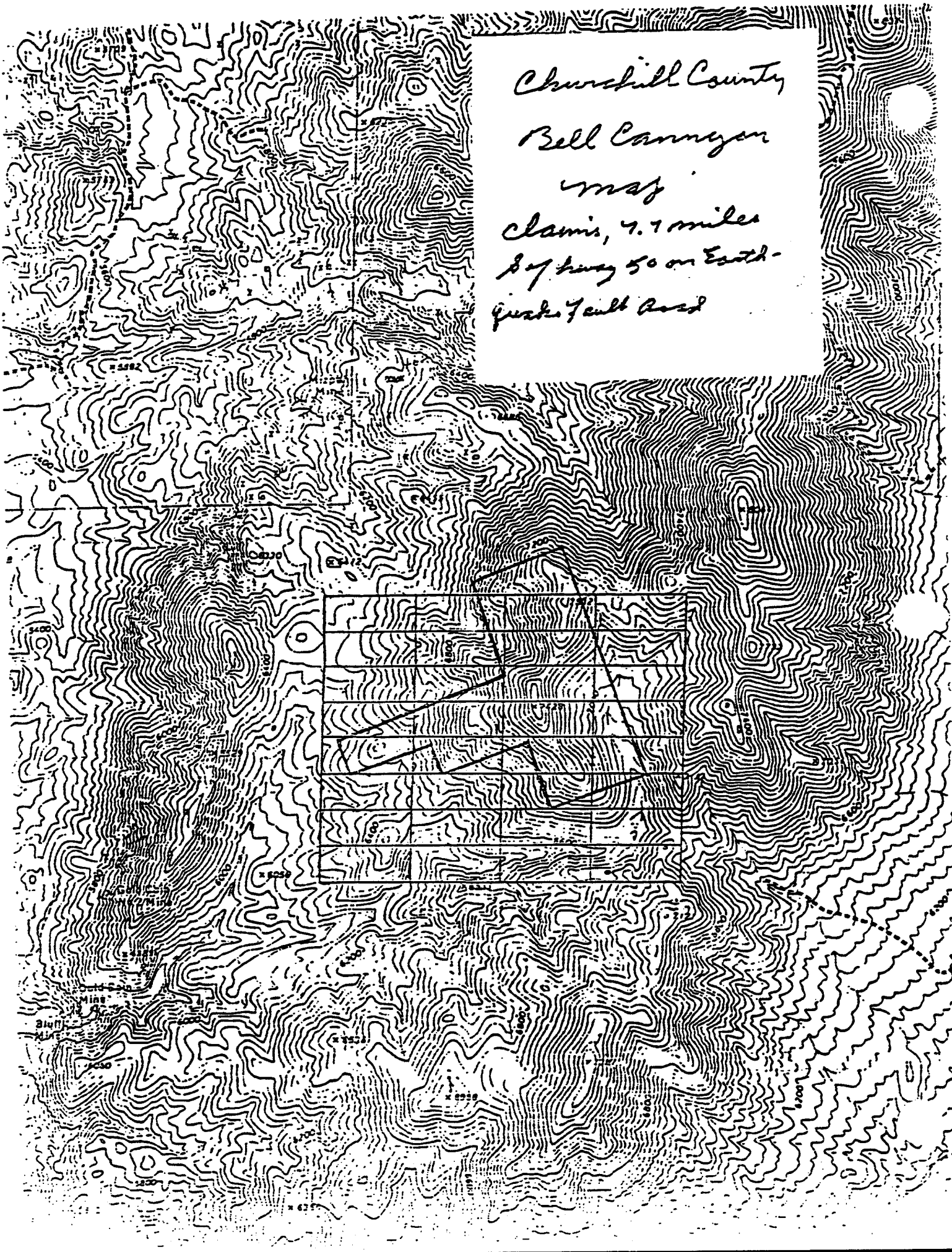
I'm writing this at your invitation for comments

I want to add my appreciation for allowing us "out-siders", general public, to learn of your land policy

Sincerely & Respectfully

D. L. Huntsman, Prospector, tax payer of 67 years, Veteran of W.W. II, creator of new jobs & new wealth & former Engineer in two branches of the military

9-16-1997


Churchill County
Bell Canyon
map
Claims, 4.1 miles
S of hwy 50 on Earth-
quake Fault Road
Gold Coin
Mine
Gold Coin
Mine
Bluff
Mine

PART III

Because BLM has taken my gold and silver claims away from me, my losses have been:

1. Loss of gold and silver claims. . . . . $----.--*
2. Loss of fees. 324.00
3. Loss of three years of work. . . . . Lessee 666.00 6,240.00
4. Loss of pre-mining royalty payments. 17,000.00
5. Loss of assessment payments. 2,060.00

*The Mining Company Lessee of my claims was prepared to spend $1,000,000 to delineate the ore body and other prerequisites for mining.

Gold fire assayed 1.0* oz., which as you know, is far above average (about 20 times the mineable average). The sample for gold assay was taken by Placer Dome. Silver fire assayed 42 oz. which is also far above average. The sample for silver assay was taken by Newmont. This is rich ore. Millions of dollars will be required for mining startup. Millions of dollars will go for wages and millions of dollars will go to Nevada and the federal government in the form of taxes.

1.0495

Also, the Lessee & I spent about $25,000 in development work. Now BLM has the gold & silver and the convenience of my 5 years of prospecting (without a racket)

*1.0495

DUSTIN L. HUTTEMAN
12285 THISTLE COURT
RENO NV 89506-9456

Letter UU
Dugan L. Huntsman

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter UU. Letter UU has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter UU comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
UU-1	6a

Letter VV

JOHN E. MARVEL
ATTORNEY AT LAW

285 10th Street
Elko, NV 89801

P.O. Box 2646
Elko, NV 89803

Paralegal
RAYMOND E. CONNELLY

Telephone (702) 738-9881
Fax Number (702) 738-0187

October 10, 1997

To Amy:
From Sam Dennis

CERTIFIED RETURN-RECEIPT

Commanding Officer, Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066

Attention: Mr. Samuel L. Dennis, Environmental Planning Bran

Re: *Draft Environmental Impact Statement*
Withdrawal of Public Land for Range Safety & Training Purposes [illegible]

Dear Mr. Dennis:

In reference to the above described Draft Environmental Impact Statement (DEIS) issued to interested parties on July 11, 1997, the letter is to inform you that this office represents Joseph C. Marvel and Patrice B. Marvel. Mr. and Mrs. Marvel recently acquired from Mr. Don Coops all right, title and interest in and to all rights, privileges, preferences, permits and licenses to graze livestock upon the federal domain administered by the Bureau of Land Management in the Bass Flat Allotment, together with all water rights appurtenant thereto, cooperative agreements and range improvements used in connection with said grazing permit.

Therefore, as a result of my client's recent acquisition we have been asked to provide written comments regarding the proposed withdrawal of Public Lands and the effect said planned withdrawal alternatives will have on our client's cattle operation in the Bass Flat grazing allotment. As such, on behalf of Mr. and Mrs. Marvel, please note the following comments.

1. First and foremost, the DEIS appears to neglect one of the most significant factors which absolutely must be considered by the Department of the Navy in considering such actions. That factor being the potential substantial and devastating economic impact to Mr. and Mrs. Marvel as well as the other affected permittees, in the event that Congress should eventually decide to accept either alternatives I, II or III. All three of these alternatives have the potential to effectively reduce my client's authorized grazing preference within the Bass Flat Allotment.

VV-1

2. Based upon the implementation of the maximum withdrawal area under alternatives I, II, III, my client would loose 468 AUMs of grazing preference, or 29.5 percent out of a total of 1,587 AUMs within the Bass Flat Allotment. Based upon a present cost basis of $94.52 per AUM, this loss in grazing preference would translate to approximately $44,235.00.

3. Although the DEIS states that the Navy will explore means of compensating holder of affected grazing permits, pursuant to the Taylor Grazing Act and subject to Congressional authorization and appropriation, there is obviously no guarantee to the affected permittees. See *Executive Summary ES-14, Livestock Grazing.*

4. Moreover, the DEIS appears to be internally contradictory and often times difficult to fully comprehend and understand. Specifically the document suggests that only a maximum of 1,130 animal unit months (AUMs) could be affected, or 1.4 percent of the 80,000 AUMs in the Lahontan Resource Management Area. See *Executive Summary ES-14, Livestock Grazing.* However, approximately 5,386 AUMs would actually be affected within the maximum withdrawal area, or 13.6 percent out of a total grazing preference of 39,527 within the maximum withdrawal area. See *Table 3-10, Grazing Allotments Data for Allotments Partially within Maximum Withdrawal Area, 3-57, Existing Environment.* VV-

5. At a minimum under alternatives I, II and III, my client's allotment will have approximately 6,240 acres located east and north of area known as Bravo-19 declared as Category A lands (restricted use) in which livestock grazing would be completely eliminated and existing BLM preference grazing within this land area would be revoked after the land is officially withdrawn.

6. Furthermore, and again under alternatives I, II and III, my client's allotment will have a minimum of 5,120 acres and a maximum of 5,760 acres declared as Category B lands (regulated development). For the most part the document states that these lands would be required to provide a safety buffer and integrated air and ground training areas. Although it is our understanding that applications for continued use of BLM grazing permits for grazing on Category B lands would require Navy review and approval which approval would only be granted if the development was compatible with Navy training operations, these training operations are not well defined.

7. However, notwithstanding the preceding, we are advised and believe that most if not all of the Category B lands within the Bass Flat Allotment are already fenced and as such cattle grazing would be excluded from the fenced sites therefore effectively converting my client's Category B lands into Category A lands.

8. The scoping document fails to adequately address the financial and economic impact which would occur as a result of the loss of water resources within the Category A lands. Apparently access to the four existing developments would be closed except to BLM personnel. Specifically my clients would suffer the loss and use of one (1) water storage tank and trough within VV-2.

the Category A lands which is critical to the viability of their operation. Moreover, my clients would effectively suffer the loss of an additional water storage well and spring development within the Category B lands due to the fenced exclosure area. See *Grazing Allotments and Water Developments, 3-56, Figure 3-10.* VV-2

9. Additionally, we believe that the scoping document fails to sufficiently address an impact analysis on the presence of or the implementation of ground training approximately 200 ground troops annually within the Category B lands. Clearly this action will have an effect on the movement of cattle and their grazing patterns. VV-3

10. Please be further advised that the method of distribution utilized by the Department of the Navy failed to include many of the individual permittees which stand to be affected by the actions outlined. VV-4

In summary and conclusion, we believe that the scoping document as presented does a rather poor job of analyzing the cumulative and long term effects as well as the past, present and reasonably future impact the withdrawal of the federally administered public lands will have on the livelihoods of the individual permittees and the resulting financial and economic impact by the loss of preference grazing and multiple use, together with the taking and confiscation of water rights.

As a result of the aforementioned items, we respectively request that the Department of the Navy elect to accept the No Action Alternative proposed within the DEIS, in which the Navy would not withdraw any federally administered public lands around the Fallon Range Training Complex.

Should you have any questions whatsoever concerning the foregoing, please do not hesitate to give me a call.

Sincerely,

John E Marvel

JOHN E. MARVEL

JEM/rc
cc: Mr. and Mrs. Joseph C. Marvel
Mr. John O. Singlaub, BLM District Management, Carson City District Office

Letter VV
John E. Marvel

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter VV. Letter VV has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter VV comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
VV-1	26fffffffff
VV-2	26gggggggg
VV-3	19b
VV-4	2a

Letter WW

IRA H. KENT
1545 GETTO CIRCLE
FALLON, NEVADA 89406

September 23, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

Attention: Mr. Sam Dennis
Environmental Planning Branch
Code 1851

We have a grazing permit from the Bureau of Land Management, north of Bravo 17 in the Stillwater Range of Mountains that is in the proposed land withdrawal.

We believe the withdrawal should be held to the old electronic warfare range as there has been sufficient land already withdrawn by the Nellis Airforce withdrawal for integrated air and ground training. WW-1

If the Preferred Alternative is used we would like to see a one-half mile buffer area around all springs and water troughs within the withdrawal. This is requested because helicopter landing within this area would scare all wildlife and cattle away from the water. Ground training around water holes and water troughs would have the same affect in keeping cattle and wildlife away from water. In past years, we have experienced these problems. WW-2

Yours truly,

Ira H. Kent

Ira H. Kent

Bruce K. Kent

Bruce K. Kent

IHK: cr

Letter WW
Ira H. and Bruce K. Kent

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter WW. Letter WW has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter WW comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
WW-1	1e
WW-2	19a

Letter XX

Waymen & Judy Rosenlund
HC 61 Box 6169
Austin, Nevada 89310

October 1, 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94006-5006

Attention: Mr. Sam Dennis
Environmental Planning Branch
Code 1851

We have a grazing permit administered by the Bureau of Land Management, north of Highway 50 within the E.W. Range. It is Frenchman Flat and its in the proposed land withdrawal. Frenchman Flat is half of our livestock operation.

We believe the withdrawal should be held to the old electronic warfare range as there has been sufficient land already withdrawn by the Nellis Airforce withdrawal for integrated air and ground training. | XX-1

If the Preferred Alteration is used, we would like to see a one-half mile buffer area around all springs and water troughs within the withdrawal. | XX-2

We want to be reassured that if the navy disrupts our ranching operation in any way, you will furnish us with winter range comparable with Frenchman Flat and the same distance from our headquarters or the Navy will buy our entire ranch. | XX-3

Your truly,

Waymen Rosenlund

Judy Rosenlund

Letter XX
Waymen and Judy Rosenlund

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter XX. Letter XX has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter XX comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
XX-1	1e
XX-2	19a
XX-3	26hhhhhhhhh

Letter YY

Draft Environmental Impact Statement for the
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- ✓ Individual (no affiliation)
- ___ Private Organization
- ___ Federal, State, or Local Government
- ___ Citizen's Group
- ___ Elected Representative
- ___ Regulatory Agency

Name: Jo Geyer
Organization (if applicable): ALPINE CORNERS Ranch
Street Address (optional): 53621 Austin Hwy.
City/State/Zip (optional): FALLON, NV. 89406
Phone # (optional): None Available -

Did you receive a copy of the DEIS? [X] Yes [ ] No
Do you wish to speak this evening? [ ] Yes [X] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: I have no complaints about the noise, Navy etc.. I do hope that the Navy policy to pay for reasonable damages will continue, and will not involve a lot of "red tape" Thank You

YY-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

Letter YY
Jo Geyer, Alpine Corners Ranch

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter YY. Letter YY has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter YY comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
YY-1	26iiiiiiiii

Letter ZZ

Dear Sirs:

I see no problem with the Navy using this area. I like to see the planes. ZZ-1

thanks

Letter ZZ
Lewis J. Munger

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter ZZ. Letter ZZ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter ZZ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
ZZ-1	27a

Letter AAA

Draft Environmental Impact Statement for the
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [X] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: Mike Protani
Organization (if applicable):
Street Address (optional): P.O. Box 241
City/State/Zip (optional): Eureka, NV 89316
Phone # (optional): 237-5594

Did you receive a copy of the DEIS? [X] Yes [ ] No
Do you wish to speak this evening? [ ] Yes [X] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: I have been a resident of central Nevada for 10 years. I have witnessed many over flights, sonic Booms, and other Navy operations. The military withdrawal should proceed as outlined in the preferred alternative. The Navy is a good neighbor and I enjoy observing the latest equipment and tactics. I hope that the Navy will increase its presence in central Nevada.

AAA-1

Michael J. Protani

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851)

Letter AAA
Mike Protani

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter AAA. Letter AAA has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter AAA comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
AAA-1	27a

Letter BBB

NAVY LEAGUE of the UNITED STATES

(FOUNDED 1902)

The Civilian Arm of the Navy

RENO COUNCIL

Dear Sir: 10/5/97

On September 16, 1997 I attended a Public Hearing in Reno Nevada on the withdrawal of some 127,365 acres of public land for training associated with Fallon Naval Air Station. The Navy did an excellent job of presenting the facts and the need for the additional land to facilitate realistic combat tactical ground training, increase safety to the public for continued population growth west of the City of Fallon, provide long-term management for off-range ordnance, and afford flexibility in developing air combat training and electronic warfare threat scenarios.

BBB-1

Though the Navy is asking for control of some 127,356 acres in reality only some 40,280 acres would be denied public access and usage. These 40,280 acres are a danger to the public because of expended ordnance that has taken place over the past 55 years.

As President of the Reno Council of the Navy League I highly support the Navy in this effort to provide optimal training to our young men and women who will go in harms way to protect our way of life. This has been an issue for some twelve years and it is high time the Navy gets the land it requires.

Dr. W. Craig Bell Capt. USN Ret.

Letter BBB
Dr. Craig Bell, Navy League of the United States

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter BBB. Letter BBB has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter BBB comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
BBB-1	27a

Letter CCC

21 September, 1997
1292 Rambling Wind Dr.
Fallon, Nevada 89406

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

Attention: Mr. Sam Denis, Environmental Planning Branch, Code 1851

Dear Mr. Denis,

I would like to take this opportunity to express my thoughts and concerns relative to the Navy's proposal for the withdrawal of public lands for range safety and training purposes at NAS Fallon, Nevada. First, I would like to say that I fully support the U.S. Military and this proposal.

Next, I would like to comment on the remarks made by a number of the speakers at the public meeting held in Fallon, Nevada on September 17,1997 on this subject. A meeting that I attended and also made a few remarks. It appeared to me that most of the opposition was by a few special interest groups or individuals who expressed there concerns over relatively minor inconveniences or sacrifices that they may personally experience if this proposal is approved. Then there were others who have an axe to grind with anything the government or Navy wants to do. It didn't appear that any considered the overall benefits to our country. CCC-1

Finally, I would like to state my position on this proposal. I believe we all need to look at it with a much broader view. We are asking our young men and women of the Navy to defend the United States for us and if necessary sacrifice their lives. The least we can do is provide these people with the best possible training available even if it results in some small sacrifices or inconveniences to relatively few of the civilian population. These young people are being trained here in Fallon in modern air warfare tactics using high speed, high technology aircraft. Good training is an absolute necessity. As a result more space is required. Further, it would not surprise me if even more space will be required in the future when the

next generation of aircraft is placed into service.

In summary my position relative to this proposal is as follows:

1. I fully support the military and this proposal

2. We need to provide our young navy personnel with the best possible training facilities available. Especially those using high technology equipment. CCC-1

3. That the opposition to this proposal, at least that those verbally expressed at the 17 September meeting in Fallon Nevada, was from a few special interest groups or individuals who might experience a few minor inconveniences as a result of this proposal rather than considering the much larger benefits to the country.

Sincerely yours,

William E. Stephens

William E. (Bill) Stephens
Concerned U.S. Citizen and Fallon Residence

Letter CCC
William E. Stephens

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter CCC. Letter CCC has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter CCC comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
CCC-1	27a

Letter DDD

September 19, 1997

Engineering Field Activity West
Naval Facilities Engineering Command
Environmental Planning Branch
900 Commodore Drive
San Bruno, CA 94066-5006
Attn: Mr. Sam Dennis Code 7031

Mr. Dennis:

Please include this statement of my support with the Navy's Environmental Impact Statement for the proposed Withdrawal of Public Lands for Range Safety and Training at Naval Air Station Fallon, Nevada. After reviewing the proposed action and attending a public hearing on this matter, I have concluded that the objections of a few people, based largely on misconceptions and mistrust, should not stand in the way of a reasonable request to support Navy training and public safety.

As a resident of Churchill County and an avid outdoorsman, I frequently visit the open areas around Fallon and Dixie Valley. While training activities are occasionally disruptive, I usually get entertainment and comfort from watching these talented people honing their amazing skills. These men and women, the best aviators in the world, are training to survive while defending our country against threats that seem to change weekly. Given the importance of their jobs and the risks they must take, the impact of this withdrawal to residents like myself seems insignificant. Indeed, I would have to question the priorities of a country that would spend huge amounts of its taxpayers' money to arm itself with aircraft carriers, aircraft and weapons, support ships, maintenance personnel and infrastructure, etc. but yet deny training to the people on the "pointy end" because somebody's cows would have to move, or a horse trail might be closed.

DDD-1

What some have characterized as a "land grab" looks to me like a measured, rational request. I hope the hysteria of a few will not be allowed to constrain the excellence of some of our country's most valuable people.

Sincerely,

Randy Goggin

Letter DDD
Randy Goggin

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter DDD. Letter DDD has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter DDD comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
DDD-1	27a

Letter EEE

Wilbur E. Stephens
Patricia A. Stephens
1350 Manchester Circle
Fallon, Nevada 89406

September 30, 1997

Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

Attn: Mr. Sam Dennis (Code 1851)

I am writing in response to your land withdrawal request for the Navy at the Fallon Naval Air Station, Fallon, Nevada.

My wife and I have attended most of the information meetings presented by the staff at FNAS.

Our position in regard to the land withdrawal is as follows:

As a veteran of World War II we have experienced the effects of minimal military capabilities and believe this country should maintain a strong, well-trained military system. Casualties of poorly-trained personnel are several times greater than well-trained units.

The number one factor in regard to the land withdrawal should be the safety of the pilots and other related personnel and to provide sufficient facilities for their training. Modern high-speed jet aircraft require additional air space for their training maneuvers. EEE-1

The United States Congress and Defense Department have made the decision to enlarge and make the FNAS the primary training facility and in many cases the only facility for certain operational requirements. Millions of tax dollars have been spent on base facilities within the past few years and for the relocation of training units such as the Top Gun School. It is essential to provide adequate air space to supplement base facilities to meet training requirements.

Where possible, areas that are used for overflight only should be duel use areas. Public access should be made available to areas wherever possible. EEE-2

As a bird watcher in this area I have witnessed minimal impact from Naval Aircraft. A coyote, eagle, hawk, or falcon is far more disturbing to the flocks of ducks, geese, water birds at both Carson Lake and the Stillwater Wildlife Refuge than the flyover of naval aircraft.

My wife and I personally observed a pair of eagles perched on power poles directly in the flight path of aircraft along highway 50 in Dixie Valley. As a photographer, pointing a telescope camera lens from an acceptable distance is more disturbing to eagles and hawks than low flying aircraft.

We realize that the noise level occasionally disturbs those living under the flight path in Churchill County, but most farm animals and wildlife accept the fact that overflights of aircraft are harmless. The value of the FNAS training is so beneficial to our entire nation that it far exceeds any complaints. EEE-2

Population growth has forced the relocation of a number of important bases in the United States. It also seems the path of wisdom for us to define our long-range goals and move rapidly to nationally set aside enough land to reduce civilian pressure and establish sufficient oases for our defense needs for some time to come.

Thank you for the opportunity to express our comments.

Yours very truly,

William A. Stephens

Patricia A. Stephens

Letter EEE
Wilbur E. and Patricia A. Stephens

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter EEE. Letter EEE has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter EEE comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
EEE-1	27a
EEE-2	27a, 26jjjjjjjjj

Letter FFF

DONALD T. TEN EYCK
1924 Rio Tinto Drive
Sparks Nevada 89434
Phone/FAX 702-359-4976

9 October 1997

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

RE: Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes in the vicinity of NAS Fallon, Nevada

Att; Mr. Samuel L. Dennis, Environmental Planning Branch, Code 1851

Dear Mr. Dennis:

NAS Fallon in now one of the most important training facilities in the Department of Defense. It is therefore essential that our Navy and Marine Corps pilots have all of the space that they need to train and it is also important that the safety of the public is protected. The proposal under discussion accomplishes these objectives.

In the mid 1960's the United States Navy returned over 830,000 acres of land to the public because, at that time, it wasn't needed. For over 12 years the Navy has been trying to acquire over 190,000 acres because warfare is different, the aircraft are different and training is different. In addition, because of the base re alignment and closure act new commands have been transferred to NAS Fallon, for example Top Gun and Top Dome. Today the request for 127,365 acres is necessary. FFF-1

The Mayor of the city of Fallon and the Churchill County delegation support the current proposal and they represent the people most directly affected by this proposal.

I support this proposal because it is reasonable and it is about time that a decision that is essential to our national security be made in the affirmative.

I urge all in authority to vote to approve this proposal because the pilots and aircrews that fly in Navy and Marine Corps planes must receive the best training that our nation can provide.

On a personal note, I have three friends who were shot down in Vietnam. On Thursday 2 October 1997 I stood before the grave of one of the three, Captain Ralph W. Caspole,

USMC, Grave 3328 Section 35 Arlington National Cemetery. Warren was killed in action on 4 June 1966 at the age of 33. I thought of his wife and the family that he could of had and I lifted my head from Warren's grave and looked around at the hundreds of grave stones representing the young men and women who died in the service of their country. I was standing on sacred ground consecrated by the young men and women who gave their lives for our freedom. They cannot voice their opinion on the subject of our national defense but I will say to you, do not put another young man or women into a grave at the Arlington National Cemetery for lack of adequate training.

The other two men who were shot down in Vietnam did not die in Vietnam but both spent over 7 years at the Hanoi Hilton as prisoners of War. One of them, Captain Dick Stratton, USN (ret) was a high school classmate of mine and presently lives in Florida, The other, Captain Ray Alcorn, USN (ret) spoke at the public hearing in Reno on 16 September 1997. Ray was 26 years old when he was shot down and 34 years old when he was released. He stated, at the public hearing, that the training at NAS Fallon is extremely important and he speculated that if the kind of training that now takes place at NAS Fallon was available to him prior to the time that his air group left for Vietnam he probably would not have been shot down. FFF-1

In conclusion, it is now time to make a decision that will protect the lives of the young men and women who serve our country in the Navy and Marine Corps. I urge your support for Alternative 11 and the withdrawal of 127,365 acres of land for training purposes.

Very truly yours,

Donald T. Ten Eyck

Donald T. Ten Eyck

Letter FFF
Donald T. Ten Eyck

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter FFF. Letter FFF has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter FFF comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
FFF-1	27a

Letter GGG

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [V] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: Sally J. Cook
Organization (if applicable):
Street Address (optional): P.O. Box 143
City/State/Zip (optional): Austin NV 89310
Phone # (optional): (702) 964-1105

Did you receive a copy of the DEIS? [ ] Yes [V] No I HAVE ONE
Do you wish to speak this evening? [ ] Yes [ ] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: 10-1-97

DO THESE MEETINGS REALLY DO ANY GOOD? DOES ANYONE REALLY HEAR WHAT IS BEING SAID?

WHAT I HEAR IS THAT NO ONE WHO LIVES IN CENTRAL NEVADA WANTS THE NAVY TO WITHDRAW ANY MORE LAND, PERIOD, BECAUSE WE CHOOSE TO LIVE HERE BECAUSE OF ITS REMOTENESS AND NATURAL BEAUTY AND PEACE AND QUIET. ALL OF WHICH ARE BEING DISRUPTED. BUT SINCE THERE ARE SO FEW OF US, THEY'RE GOING TO TAKE IT ANYWAY, SO WHY BOTHER TO HOLD MEETINGS?

GGG-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

P.S. I HAVE RECEIVED DUPLICATE MAILINGS PREVIOUSLY, WHICH IS A WASTE OF RESOURCES.

Letter GGG
Sally J. Cook

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter GGG. Letter GGG has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter GGG comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
GGG-1	28a

Oct 5-97 Letter HHH
P.O. 34
Virginia City, Nv.
89440

Sam Dennis
Naval Facilities Engineering Command
900 Comadore Dr.
San Bruno, Ca. 94066-5006

Dear Mr. Dennis -

Can you please tell me why the Naval Air Base in Fallon, Nevada needs an additional 311 square miles of my state? HHH-1

I have lived here all my life (67 yr.) and a member of the Canvasback Gun Club located in the Stillwater Marsh just east of Fallon. You "fly boys" have not only used the Canvasback to fly over but also the Federal Wildlife area as well as the rest of the state. Since noise was not a problem for forty years why now? Unless the Navy just wants an excuse for a "land grab." HHH-2

As far as unditionaled bombs, etc. I know they are few HHH-3

and far between as I have walked & drive thru a great deal of the boming range- HHH-3

You - the Navy - should have to clean them up! There are no excuses for this - if you were a mining company you can bet it would have been taken care of years ago. HHH-4

Then with you 6,000 acres you want a Sheckler Reservoir - Are you planning a Officers Country Club? HH-5

I feel you are being greedy and have no real valid military reason for your land request. HHH-6

Virginia G. Carrington

Letter HHH
Virginia Carrington

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter HHH. Letter HHH has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter HHH comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
HHH-1	28a
HHH-2	28a
HHH-3	22a
HHH-4	22b
HHH-5	7b
HHH-6	28a

Letter III

Commanding Officer
Naval Facilities Engineering Command, Attn: Sam Dennis
900 Commodore Dr.
San Bruno, CA 94066-0720
September 25, 1997

Re: DEIS for Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station, Fallon, Nevada

Dear Commander and Staff,

I have read the draft environmental impact statement on the proposed Nevada land withdrawal and I thank you for the opportunity to comment on this report. For the sakes of those who are faced with tallying and sorting the many letters sure to have been generated regarding this issue, I wish to state directly that I oppose the project. III-1

Anyone reading further should know that I have no numbers to contradict any EIS numbers, nor have I any other contrary statistics. I have only questions and feelings, and after reading about the sparkling variety of living and historic presences in these hundreds of square miles the Navy wishes to appropriate, only a deeper and more vivid curiosity about the public lands in which it is my birth right to love and protect. III-2

I was amazed at the variety of birds, reptiles, mammals and fish and further amazed that the list includes names I know but have never seen, such as a Western snowy plover, striped whipsnake, fathead minnow and yes, the desert kit fox. There were many, many plants listed that I would like to continue growing there so I might be able to greet them myself one day--King's eyelash grass, cheesebush and alkali sacaton, for example.

Regarding the archaeological findings, I truly doubt that any but the most superficial land surveys were done. The "lithic scatter" reported is enough to encourage more careful and more comprehensive investigations. It is hard enough to think of the living creatures and their floral companions being blown up for the sake of munitions practice (although the military classification of the noble dog as "equipment" implies the inherent coldness towards any non-enemy/ non-human animal). But those "inert" places that only thrive upon discovery and III-3

interpretation must be protected and valued as well. Both the present and the past are in jeopardy of destruction from the same source. A less frequently noted loss during the recent Gulf war were many potential neolithic sites, blasted beyond the reconstructive reach of the most gifted archaeologist. III-3

I understand that the Navy needs to be especially cautious regarding the real peril of civilians and ordnance. I have lived my whole life within such peril. I was a child when we were assured by authorities that dropping atomic bombs in the Nevada desert would not harm us. I was raised and continue to live between two huge munitions dumps in Herlong and Hawthorne. Trains transporting bombs pass within a mile of my home. I see and/or hear military aircraft or transport frequently, whether it's the Reserves stationed in Reno or the Navy or Air Force flying, sometimes low enough to see the pilot, out anywhere in the Great Basin. My "safety", especially in light of the current spate of fatal military accidents, does not rely on and never did or will depend upon, my approval to grant one more square inch of public lands for any purposes within the military-industrial complex. No. No. No more. III-4

Sincerely,

Frances Spikes
887 Primrose St.
Reno, NV 89509

Letter III
Frances Spikes

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter III. Letter III has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter III comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
III-1	28a
III-2	26kkkkkkkkk
III-3	15a
III-4	28a

Letter JJJ

Cold Springs October 4, 1997

Stina E Patnoude,
52200 Austin Highway,
Fallon, NV 89406

Engineering Field Activity West,
Naval Facilities Engineering Command,
900 Commodore Drive,
San Bruno, Ca 94066-5006

Attention Mr. Sam Dennis,

I attended the meeting in Austin, NV last week and would like to add my comments regarding the withdrawal proposed in our area.

I do not have anything against the Navy's proposal IF the proposed withdrawal would be the end of it. BUT it seems to me with the added activities we are in for a pretty rough time as far as the supersonic flying is concerned. JJJ-1

When my husband and I bought Cold Springs Station in the Fall of 1979 there was very little disturbance to speak of. What damages we sustained (and there were a few) the Navy eventually paid for. Not without us having endured a lot of aggravation such as not being compensated for having to drive 62 miles to Fallon and get whatever supplies needed to fix "things" However, that is not what I would want or need to comment on.

My situation is quite different now. My husband, Preston Patnoude, passed away in 1991 and I now find myself not being able to sell the property that we had acquired BEFORE you even gave notice of that you would be flying supersonic above us. My property entails 60 acres adjacent to the Cold Spring Station and the Highway Maintenance Station. It was purchased in April 1980.

I sold Cold Springs Station in 1992. I have since had the 60 acres on the market since 1993 and have had several offers but they are always withdrawn when the prospected buyer finds out about the amount of noise that now comes with the territory. JJJ-2

For myself, I do not mind the sonic booms to terrible, but I need to sell my property and move to a smaller place that I can maintain myself. I fear the time when something major will start to break down and I would have to bring craftsman from Fallon to do the work that I can't do. I do not think I should have to deal with that part of being a property owner just because the Navy is saving money by closing Bases and that consequently puts a burden on the Fallon Station.

Therefore, in my situation, I would like to propose that the Navy buy my property to a fair market price. In addition to the 60 acres there are two separate dwellings on it.

So, Mr. Sam Dennis, I would love to hear from you or Captain Romney what my chances are to be heard. I really would want for you to get your wish of an easy withdrawal, but it should not be on the shoulders of the citizens who settled here in hope to live in a nice quiet valley for the rest of their lives. I can easily relocate but I can not afford to walk away from my property that I have paid for and worked at for 18 years. JJJ-2

Sincerely,

Stina E. Patnoude

Stina E. Patnoude
52200 Austin Highway,
Fallon, NV 89406

Letter JJJ
Stina E. Patnoude

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter JJJ. Letter JJJ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter JJJ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
JJJ-1	26lllllllll
JJJ-2	26mmmmmmmm

Letter KKK

October 1, 1997

TO: Mr. Sam Denni
Naval Facilit es Engineering Command
fax: 415-244- 206

FROM: Jay W. Santos
Box 871
Yerington, Ne ada 89447

RE: Fallon NAS DE S for land withdrawal

I attended the talk by aptain Scott Ronnie last night in Austin, Nevada, where he very t oroughly explained the need for expanded ground areas for moving target exercises and range buffer. I sympathize with the Nav 's need for additional land, although I believe that would be l st served if the entire Detachment was moved to Tonopah and d: l their exercises in the infamous area 51. Another alternative is :o contract out our foreign work to ware-R-us. However as neith r of these are likely to happen, below are my comments and sug ested remedies to mitigate the problems as I see them. KKK-1

1. You are proposing xpanding B-19 to the east under a category B designation I oppose that because it will withdraw the Holy Cross Mining istrict from exploration and development. Instead I suggest you egotiate a lease for a portion of the Walker Lake Indian Res rvation in Rawhide Wash. KKK-2

2. You propose to wi draw, under Category A, the east and southeast portions of -17. This covers the entire Fairview and Slate Mountain Mining istricts from exploration and development. A comment was made at ne meeting that "they" doubted if anything would be found there a it has been explored in the past. The history of mine develo ent is such that most areas receive multiple stages of exp oration as new geological concepts are conceived, quite often resulting in a mine - Rawhide, your neighbor, is a prime e ample. Your evaluation of the mining district portions of B 17 shows them having good mineral potential. I suggest hat the potential mineralized portion of 17 be designated as mu tiple use with the 50 foot height restriction. Aircraft could still approach over that area and signs along the west b rder and roads into the area could inform the public of that. KKK-3

3. The area north of Highway 50 proposed to be of multiple use under Navy rule poses any problems. The use of the land by the Navy poses no problem o the public, however, I don't see how you can mix BLM jurisdicti n with a Navy Withdrawal. You will allow claim staking on what ill become withdrawn land, and while I don't doubt that it co ld somehow be handled, I do believe that it would require very pecific legislation to allow and control it. I suggest, inste l, that a simple congressional bill be KKK-4

introduced that would m idate the BLM to issue you a perpetual permit to conduct your : oposed land operations under the DEIS proposed restrictions w: :h the requirements that the Navy be legally responsible for any problems it may cause and reimburse the BLM for any costs t st they may have due to the Navy's operation in the area. KKK-4

In summary, lands suspe ted as being mineralized should not be removed from explorati or development (part of our tax base) and the majority of you proposed Navy multiple use lands should be administered by the LM. KKK-5

Not connected with the EIS is a criticism I made to Captain Ronnie that the Navy ma e a public relations mistake by closing off the old town of Fai view, next to Highway 50, to tourists and the road though it to t e private land around the Nevada Hills and Dromedary Hump Mine . I suggested to him that the navy simply open up that unu ed corner of the recently withdrawn lands and move the existing s gns to the southwest side of the road. I would appreciate you se ding a copy of this to Captain Ronnie as a reminder. KKK-6

Thank you for consideri g the above.

Jay W. Austin

Letter KKK
Jay W. Santos

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter KKK. Letter KKK has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter KKK comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
KKK-1	3b
KKK-2	18f
KKK-3	18e
KKK-4	5c
KKK-5	5c, 18e
KKK-6	26nnnnnnnnn

Letter LLL

Clifford W.S. Talbot
2462 Hammond Dr.; Fallon, Nev., 89406
Ph: 702-423-6158 , Fax: 702-423-8710

8/4/97

Commanding Officer
Naval Facilities Engineering Command
Attention : Sam Dennis
900 Commodore Dr.,
San Bruno, Calif., 94066-0720

Navy proposed land/air withdrawal, Fallon area:

Sir,

I have been a resident of Fallon for over 25 years and am very much aware of the expansion efforts of the Fallon Naval Air Station.

Until my loss of my medical certificate, I was a private pilot for over 15 years, so am very much aware of the impact more restricted air space means for the independent people of Churchill Co. and Nevada.

While I realize that the Naval presence here has expanded, I am against any further withdrawal of either air space or land from the public domain. LLL-1
Between the Navy and the BLM, the government wants to prohibit the public use of our lands and I have been sick of it for the last 20 years and am not any more in favor of it now than I was then!!

There is plenty of air space south of here that can be utilized without taking public land and airspace to do so!!

Sincerely,

Clifford W.S. Talbot

Letter LLL
Clifford W. S. Talbot

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter LLL. Letter LLL has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter LLL comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
LLL-1	28a

Letter MMM

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [X] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: Russell & Freda Stevenson
Organization (If applicable):
Street Address (optional): 42500 Austin Hwy.
City/State/Zip (optional): Middlegate, NV 89406
Phone # (optional): 702 423-7134

Did you receive a copy of the DEIS? [X] Yes [ ] No
Do you wish to speak this evening? [X] Yes [ ] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments:
We were under the impression that the Navy would work with us to our mutual satisfaction. There has been no concessions. New airspace will be flown & devalued just as they have middlegate - what will happen to the people who own property under new airspace will they also lose their life savings as we have?

Over

MMM-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

WHAT GUARANTEE DO THE NEARBY PEOPLE HAVE THAT THE NAVY, IN THEIR TRAINING WILL NOT "SHIFT/EXPAND" THE AREA OF TESTING AIRCRAFT - DROPPING CHAFF + LASER WEAPONRY - WILL THIS NOT EVENTUALLY BE AS FAIRVIEW ONCE WAS. THE NAVY ASSURED US THEN THAT FAIRVIEW WOULD CONTINUE TO BE OPEN FOR RECREATION + HIKING - WE SEE NOW A LOCKED GATE + POSTED SIGNS FROM FAIRVIEW TO MIDDLEGATE - WHAT BESIDES THE NAVY'S ASSURANCE WILL KEEP THIS FROM HAPPENING TO THE LAND THEY ARE NOW THEIRS - WILL THEY GIVE US WRITTEN GUARANTEES - THEY HAVE NOT EVER - NOR WILL THEY NOW - IN THEIR TRAININGS CAN THEY GUARANTEE US THERE WILL BE NO ACCIDENTS! WILL WE NOT HAVE CRASHES - LIKE THE ONE THAT BURNED FAIRVIEW - OR THE CLAM ALPINE OR - COLD SPRINGS? OR ACCIDENTS LIKE THE BURNING OF EASTGATE RANCH - OR THE MUTILATION OF ANIMALS

WE WANT ANSWERS, WHO CAN ANSWER OUR QUESTIONS? MMM-1

Letter MMM
Russell Stevonson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter MMM. Letter MMM has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter MMM comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
MMM-1	29i

Letter NNN

9-15-97

Commanding Officer
Naval Facilities
Sam Dennis

Mr. Dennis;
I am writing to protest anymore land being given to the navy in our state of Nevada. It was criminal what the navy and our 'lawmakers' did to the Dixie Valley area. Now you are proposing to do the same in Smoky, Monitor and most of central Nevada?
Definately not!
This land is sacred land, and your war mentality is not welcome here.
I oppose you for all the wildlife that will suffer, all the petroglyph sites which will be destroyed and unavailable, all the memory and relationship which you wipe out and most of all, I oppose you for all you stand for in the name and rights of future generations.
I am third generation Nevadan, and I am saddened that the navy has moved in on this wonderful state. I do not want our quality of life destroyed by further military intrusions. I am a tax payer...I don't want my money going to the navy.

NNN-1

Vivian Olds

c.c. Senator Bryan
C.C. Harry Reid Senator

Letter NNN
Vivian Olds

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter NNN. Letter NNN has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter NNN comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
NNN-1	28a

Letter 000

Sir

4 Sept 97

I live in The Smoky Valley AREA AND I enjoy watching The Jets Fly over. AND I would and will support you on Air Space but I can not support you on more land withdrawal in This Area. 000-1

And as for The complaints From Austin if you flew a hang-glider over Them They would complain, I am surprised The buildings don't fall down when The Trucks drive Them That Town is so run down I am surprised Theres Any Thing still standing. If you want to withdraw lands withdraw AUSTIN, NV

A satisfied Citizen

Letter OOO
A Satisfied Citizen

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter OOO. Letter OOO has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter OOO comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
OOO-1	28a

Letter PPP

9-5-97

You do Not Need Any More Navajo land if you Need More Area, Go to Vermont, Maine, New York State or New Jersey. Bomb it + use your Sonic Booms there. PPP-1

John Lamm

Letter PPP
John Green

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter PPP. Letter PPP has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter PPP comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
PPP-1	28a

Letter QQQ

The U.S Navy's attempt to annex 189,000 additional acres of Nevada public lands should be stopped. The cold war is over but the thirst for power of our own military over its citizens is criminal and infuriating. QQQ-1

Thank you.

R. Damian Jarvaden
305 CPOT WAY
CARSON CITY, NV
89704

185

ENGINEERING FIELD ACTIVITY WEST
NAVAL FACILITIES ENGINEERING COMMAND
900 COMMODORE DRIVE
SAN BRUNO, CA
94066-5006

Letter QQQ
R. Damian Janssen

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter QQQ. Letter QQQ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter QQQ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
QQQ-1	28a

Letter RRR

59 Rowntree Lane
Smith, NV 89430
October 4, 1997

Commanding Officer
Naval Facilities Engineering Command, Attn: Sam Dennis
900 Commodore Dr.
San Bruno, CA 94066-0720

Dear Sirs:

I am writing today to send my disapproval of the "Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon". It is my belief that the military already controls enough of Nevada's formerly public and private lands. The noise and damage done to existing towns such as Austin and Gabbs and the threat to ranchers and miners in other areas is an insult to the people and a power show from the military. RRR-1

Open spaces for recreation, grazing, hunting, etc. is part of the quality of life for Nevada people. This quality of life will be destroyed by the takeover of thousands of acres by the Navy in Central Nevada. I say no to this planned expansion and no again to the 10,000 square mile expansion in the future. RRR-2

In our community which has not been bothered in the past by Navy sonic booms, we are beginning to experience these booms and they are annoying. It seems that no place in Nevada will be exempt from the Navy flyovers. Will we soon see cracked walls and broken windows here too? I hope not. RRR-3

I support a strong national defense, but I reject the idea that Nevada has to give up such a large area of it's sovereign land for your use. What of the wildlife in the area? What about the chaff strewn about? What about the strategic minerals our nation will need that will go undiscovered and unmined. What about the people who have lived here for generations and whose lives and livelihood will be ruined such as ranchers and the townspeople? RRR-4

The Air Force has land tied up in Southern Nevada. Learn to share this land, or go out to sea where the Navy belongs. Don't take over Central Nevada. You have enough. The Navy has not been a good neighbor and has not treated all people fairly. RRR-5

Thank you for adding my comments to the public record.

Sincerely yours,

Lura Weaver

Lura Weaver

Letter RRR
Lura Weaver

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter RRR. Letter RRR has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter RRR comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
RRR-1	28a
RRR-2	28b
RRR-3	26oooooooo
RRR-4	26ppppppppp
RRR-5	3b

Letter SSS

P.O. Box 861
Eureka, Nevada 89316
(702) 237-7063

October 4, 1997

Commanding Officer
Naval Facilities Engineering Command
Attn: Sam Dennis
900 Commodore Drive
San Bruno, Ca 94066-0720

Dear Commanding Officer,

I am writing to express my opposition to the Navy's proposed withdrawal of 127,365 acres of BLM land for the expansion of the Fallon Naval Air Station. The proposal is not in the public's or the environment's best interest. I do agree that minor ecological benefits are gained from the withdrawal of public lands for military use such as the termination of resource extraction (grazing, mineral and water) and the creation of biological reserves for native grasses and ecological communities. However, I feel that the proposal would be detrimental to the current wildlife utilization on these lands, would hamper the economic status of the local communities that use these lands for economic gain and would halt the continuous access to the land for recreational use. In addition, I feel that the United States military already controls enough land in the State of Nevada to adequately conduct land and air training missions for the protection of the American people. I am sure that the Navy could cooperatively work with the Air Force to share the use of their enormous tracks of military land in south central Nevada. All branches of the military work together during the time of war. Why can't they work together during times of peace? SSS-1 SSS-2 SSS-3 SSS-4

On a more serious note, the Draft Environmental Impact Statement's addressment of the Navy's future plans to create a 10,000 square mile military air expansion in Central Nevada is of a higher concern to myself and the community of Eureka. These Military Operation Areas (MOAs) will not only disrupt the integrity and quality of life in Eureka and surrounding Central Nevadan communities (as it has in the community of Austin, Nevada), they will adversely affect the wildlife and ecosystems of the desolate mountain ranges that the MOAs will encompass. I currently work on contract with the United States Government in the Roberts Mountains and the Diamond Mountains under which these proposed MOAs will cover. I have spent over one thousand hours surveying riparian ecosystems and the wildlife they support in these mountain ranges and, on a half of a dozen occasions while I was observing wildlife, mid-level flying military aircraft have flown over the range and have let off a sonic boom. In each instance, the species that I was observing, whether it was a Mule Deer doe and her fawn or a pair of rare Northern Goshawks, was adversely affected and stressed by the noise disturbance. During my observation of a pair of Goshawks hunting for small rodents, a sonic boom was triggered by a military aircraft and the hawks instantly changed course, stopped their hunting and took refuge in an adjacent Aspen grove in fear of an unknown threat. It is these kinds of disturbances, which will be concentrated and increased in frequency in these areas by the proposed expansion of the Military Operation Areas, that will have a detrimental impact on these ecosystems. SSS-5

I urge you and the Navy to find an alternative plan to avoid the removal of these lands from the public domain and to find alternative airspace to conduct training operations. Thank you for your time and the consideration of my comments.

Sincerely,

Jeffrey Gray Shellberg

Letter SSS
Jeffrey Gray Shelburg

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter SSS. Letter SSS has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter SSS comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
SSS-1	28a
SSS-2	26qqqqqqqqq
SSS-3	13b, 17a, 20d
SSS-4	3b
SSS-5	12g

Letter TTT

oct 3 1997

To John Balliette

Ref. air Space by Fallon Naval Base
There is a abandond air Base on the
Island of Oahu and there is
an air craft Carrier in Moth Balls. "Saratoga"
the two could be put together and make
a much better training program for
those top Gun Pilots.
the Islands need the money that
it would create.
my wife & I, came here because of
the quite atmosphere, we have now - 40
Jets zooming over head 24 hrs a day and
Busting the sound Barrier over our house
Plus they crash and burn thousands
of acres. needlessly.
that why they were transfered from
Miramar air Base in San Diego.

TTT-1

Friendly Kenneth J Washburn
KENNETH. J. WASHBURN
237517I

Letter TTT
Kenneth J. Washburn

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter TTT. Letter TTT has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter TTT comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
TTT-1	28b

Letter uuu

9-8-97

I, Richard W. Emucher
HC 61 P.O. Box 6112
Austin, Nv. 89310-9001

Commanding Officer
Navy Fac. Eng. Comm. Attn: Sam Dennis
900 Commodore Drive
San Bruno, Ca., 94066-0720

Dear Sam Dennis;

I repeat these connected land and airspace expansion proposals will detrimentally impact the natural environment of Central Nevada. uuu-1

Also: It is vitally important that Nevadas "quality of life not be destroyed by further piecemeal military intrusions. uuu-2

Also; The bombing range outside Fallon off hwy. 50 is hardly used. I lived here with my wife and family for 4 years now. I seen them use it (thats the aircraft fighters) 4 times that once a year. Its ludicrous to expand something you "don't use". uuu-3

Last but not least, why when low flying flys over Reese River Valley, out uuu-4

Austin. Why do they constently circle in approximately a 15 to 20 sq mile area? Over & over & over again, and call it "military maneuvers"? & call it Harrisment. My wife is an asmatic. She uses ventalin, a steroid to keep her lungs passages open. The more noise between the hours of 9 pm & midnight the more she has to use her medicine. It make her hyper, and she can't sleep!! We are ranchers with school children who go to bed @ 8 to 9 pm. Plus roaring over the Austin School @ daytime hours. Last person I talked to was Commander Worthington @ ENAS about this. We've had a little more peace since then. Praise God! Why is it the very military forces we pay to defend us have to be "our enemy" with constant noise, "disturbance of the peace" which is against the law for us civilians to do but not them. Also why UUU-4

Quieted. Why do they constently circle in approximately a 15 to 20 sq mile area? Over & over & over again, and call it "military maneuvers"? & call it Harrisment. My wife is an asmatic. She uses ventolin, a steroid to keep her lung passages open. The more noise between the hours of 9 pm & midnight the more she has to use her medicine. It make her hyper, and she can't sleep!! We are ranchers with school children who go to bed @ 8 to 9 pm. Plus running over the Austin School @ daytime hours. Last person I talked to was Commander Worthington @ FNAS about this. We've had a little more peace since then. Praise God! Why is it the very military forces we pay to defend us have to be "our enemy" with constant noise, "disturbance of the peace" which is against the law for us civilians to do but not them. Also why

UUU-4

Letter UUU
Richard W. Smucker

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter UUU. Letter UUU has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter UUU comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
UUU-1	12g
UUU-2	12f
UUU-3	26rrrrrrrrr
UUU-4	26sssssssss
UUU-5	26sssssssss

Letter VVVs

Carl Slagowski
HC 65 Box 30
Carlin, NV 89822

August 19, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

Previous documents such as the Special Nevada Report, indicate the proposed Diamond, Duckwater and Smoky MOA's are an integral part of the military's plans for land and airspace withdrawals. The withdrawal of these MOA's should be analyzed in the DEIS for Fallon NAS. VVV-2

Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Carl Slagowski

Jim Gallagher
HC 62 Box 143
Eureka, NV 89316

August 21, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

Previous documents such as the Special Nevada Report, indicate the proposed Diamond, Duckwater and Smoky MOA's are an integral part of the military's plans for land and airspace withdrawals. The withdrawal of these MOA's should be analyzed in the DEIS for Fallon NAS. VVV-2

Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Jim Gallagher

Ken Conley
PO Box 111
Eureka, NV 89316

August 19, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

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Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Ken Conley

Laurel Etchegaray
PO Box 462
Eureka, NV 89316

August 20, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

Previous documents such as the Special Nevada Report, indicate the proposed Diamond, Duckwater and Smoky MOA's are an integral part of the military's plans for land and airspace withdrawals. The withdrawal of these MOA's should be analyzed in the DEIS for Fallon NAS. VVV-2

Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Laurel Etchegaray

Laurel Etchegaray

Jim Baumann
PO Box 308
Eureka, NV 89316

August 18, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

Previous documents such as the Special Nevada Report, indicate the proposed Diamond, Duckwater and Smoky MOA's are an integral part of the military's plans for land and airspace withdrawals. The withdrawal of these MOA's should be analyzed in the DEIS for Fallon NAS. VVV-2

Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Jim Baumann

Jerry Todd
PO Box 73
Eureka, NV 89316

August 18, 1997

Sam Dennis
Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Sam:

I am requesting a copy of the Draft Environmental Impact Statement (DEIS) for the withdrawal of Public Lands for Range Safety and Training Purposes at Naval Air Station (NAS) Fallon, Nevada. Because this document has not been widely distributed in Central Nevada, I am also requesting a 60 day extension on the comment period for this DEIS. VVV-1

Previous documents such as the Special Nevada Report, indicate the proposed Diamond, Duckwater and Smoky MOA's are an integral part of the military's plans for land and airspace withdrawals. The withdrawal of these MOA's should be analyzed in the DEIS for Fallon NAS. VVV-2

Last I am requesting local scoping meetings for the DEIS. The people of Central Nevada will be affected by Fallon NAS and an opportunity for public testimony should be available. VVV-3

Sincerely,

Jerry Todd

Letter VVV
Carl Slagowski, Jerry Todd, Jim Baumann, Jim Gallagher, Ken Conley, Laurel Etchegaray
(Submitted same letter individually)

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter VVV. Letter VVV has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter VVV comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
VVV-1	2b, 2c
VVV-2	12e
VVV-3	2b

Letter WWW

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [X] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: DEL L. HAAS
Organization (if applicable):
Street Address (optional): HC 60 BOX 54802
City/State/Zip (optional): ROUND MOUNTAIN, NEVADA 89045
Phone # (optional): 1-702-377-2934

Did you receive a copy of the DEIS? [ ] Yes [X] No Have one
Do you wish to speak this evening? [X] Yes [ ] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: Would like to have the comment time extended to one year. There are many important issues to discuss & resolve.
Thanks
Del Haas

WWW-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

Letter WWW
Del L. Haas

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter WWW. Letter WWW has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter WWW comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
WWW-1	2c

Letter xxx

Commanding Officer
Naval Facilities Engineering Command
Attn: Sam Dennis
900 Commodore Drive
San Bruno, Ca. 94066-0720

Sir:

My Husband and my self Moved to Eureka Because we liked the "Quietness" and Layed Back life. If the air force move into our air space it would be everything but Quit, I do hope you Can find some place else to do your Training.

Sincerely
Mr & Mrs Hodson

XXX-1

Letter XXX
Mr. and Mrs. Hodson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter XXX. Letter XXX has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter XXX comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
XXX-1	28b

Letter YYY

Susan J. Stevenson
HC 65 - Box 20 (Will Sp.)
Austin, NV. 89310-9103
Big Smoky Valley.

I do not want this military over my home, our mountain, our valley. The noise is a problem, our live's are in Danger, we don't like it. If we wanted this noise we would live in the city. Stay out. Our Quality of life is Being Questioned - our Children, Wild life scared By noise - We DO NOT Want this. We Live here because it is a peaceful place to enjoy. Stay Away YYY-1

Susan J Stevenson

We Should have a Say -

Out.

Letter YYY
Susan J. Stevenson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter YYY. Letter YYY has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter YYY comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
YYY-1	12f, 28b

Letter ZZZ

Amanda Stevenson
HC 65 Box 20 (Gill SP)
Austin NV 89310-9103

Big Smoky Valley

There is a reason that we live so far away from people and the reason is all of the NOISE and when you guys fly your jets over our homes you're "disturbing the peace" creating a lot of noise the EXACT reason we moved OUT of the city and way out here away from NOISE And the Sonic Booms scare me and my siblings. TAKE A HINT WE DONT WANT THE NOISE SO STAY ZZZ-1

OUT!!!

Amanda Stevenson

Letter ZZZ
Amanda Stevenson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter ZZZ. Letter ZZZ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter ZZZ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
ZZZ-1	12f, 28b

Letter AAAA

SEPTEMBER 3, 1997

ROUND MOUNTAIN, NEVADA

COMMANDER SAN DENNIS

NAVAL FACILITIES ENGINEERING COMMAND

900 COMMODORE DRIVE

SAN BRUNO, CALIFORNIA 94066-0720

ATTENTION: MR. SAN DENNIS

REFERENCE IS HEREBY GIVEN TO THE NAVY PROPOSAL TO CONDEMN OR WITHDRAW LANDS, "MASTER LAND WITHDRAWAL," OF WHICH I SPECIFICALLY DIRECT YOUR ATTENTION TO, --- SMOKY VALLEY AND THE RANCHES AND LANDOWNERS, SOME WHOSE FAMILIES AND HEIRS HAVE RESIDED HERE SINCE 1863.

IT IS TO BE NOTED THAT I STRONGLY OBJECT TO NAVY PLANES TRAVERSING THIS VALLEY AND OVER MY 800 ACRES RANCH AND HOME.

THE TRANQUILITY OF HOME LIFE IS DISRUPTED. THE JET ROARING BLASTS WHICH THE NAVY PLANES FLY, --- AT 200 - 300 FOOT LEVELS HAS A DEVESTATING IMPACT ON MINE AND ADJOINING NEIGHBOR RESIDENTS AND LAND OWNERS, MAINLY, HEALTH ENDANGERMENT AND LOSS OF QUALITY OF LIFE. AAAA-1

NAVAL TRAINING IN PEACE TIMES NEED BE ONLY AT A MINIMUM. EXPANSION FOR TRAINING MANEUVERS SHOULD NOT COMPEL FAMILIES TO VACATE BECAUSE OF ABOVE VALUE FINANCIAL HANDOUTS.

REFERENCE IS HEREBY GIVEN TO WHAT HAPPENED IN DIXIE VALLEY!

RESPECTIVELY,

Lillian Darrough

LILLIAN DARROUGH

HC-60 BOX 56202

ROUND MOUNTAIN, NEVADA
89045

Letter AAAA
Lillian Darrough

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter AAAA. Letter AAAA has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter AAAA comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
AAAA-1	28b

Letter JJJJ
Terry Kopts

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter JJJJ. Letter JJJJ has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter JJJJ comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
JJJJ-1	20c

Letter JJJ

Draft Environmental Impact Statement for the
Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [X] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: Terry Kapp
Organization (if applicable): individual
Street Address (optional):
City/State/Zip (optional):
Phone # (optional):

Did you receive a copy of the DEIS? [ ] Yes [X] No
Do you wish to speak this evening? [ ] Yes [X] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: I Am a very proud American and I Support our Military 100% but please do not lock us out of Public lands.

JJJJ-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

Letter IIII
Tomas Tuerino

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter IIII. Letter IIII has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter IIII comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
IIII-1	26uuuuuuuuu
IIII-2	20c

Letter IIII

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- [X] Individual (no affiliation)
- [ ] Private Organization
- [ ] Federal, State, or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: TOMAS TIERNO
Organization (if applicable):
Street Address (optional): 1677 LA BELLE ST.
City/State/Zip (optional): FALLON, NEVADA
Phone # (optional): (702) 867-5364

Did you receive a copy of the DEIS? [ ] Yes [X] No
Do you wish to speak this evening? [ ] Yes [X] No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments:
AS A FORMER STUDENT IN GEOPOLITICAL SCIENCE AND STUDENT OF CORE CURRICULUM OF THE MILITARY SCIENCES I AM FULLY AWARE OF THE SHIFT IN INTERNATIONAL POWER SOURCES. I AM CONCERNED ABOUT MILITARY INACTION ON THE PART OF THE ELECTRONIC ECONOMY WE KNOW LIVE IN TODAY. WORLD. THERE IS NO IMMEDIATE CONCERN OF KEEPING THE EXPLOSIVE GROWTH OF POPULATION WAS AND THE HOUSING SHORTAGE IN THE AREA WHICH HAS PERMANENT HOUSING CONSTRUCTION NEAR WATERSHEDS. IT HAS A DIVERSE EFFECT ON HOW OUR YOUTH CAN EXHIBIT ROOM TO GROW THROUGH NATURAL RECREATIONAL AREAS AREAS SUCH AS SF, CALIF. WHERE POPULATION DENSITY IS

IIII-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

IIII-2

A MAJOR PROBLEM OUR RIGHT TO ACCESSIBLE RECREATIONAL AREAS SUCH AS SODA LAKE IS NOT OBTAINABLE IN MY OPINION. I DO FAVOR THE NAVY'S WITHDRAWAL PROPOSAL, BUT NOT AT THE DIRECT COST OF PROPERTY.

Letter HHHH
Tammy Manzini

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter HHHH. Letter HHHH has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter HHHH comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
HHHH-1	28a

Letter HHHH

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes Naval Air Station Fallon, Nevada
September 17, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- ___ Individual (no affiliation)
- ___ Private Organization
- ✓ Federal, State, or Local Government
- ___ Citizen's Group
- ___ Elected Representative
- ___ Regulatory Agency

Name: Tammy Manzini
Organization (if applicable): Lander Co. Commission
Street Address (optional): P.O. Box 10
City/State/Zip (optional): Austin, NV 89310
Phone # (optional): (702) 964-2447

Did you receive a copy of the DEIS? ☐ Yes ☑ No
Do you wish to speak this evening? ☐ Yes ☐ No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments:
My one and only comment is that the Federal Government already controls about 87% more land in Nevada than they should. We have 13% of Nevada left after the Fed's have taken over, Give us some slack, leave us at least enough land left so when we walk out our front door we are not encroaching on some restricted Federal land. Nevada has sacrific enough, pick on someone else for once HHHH-1

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006 Attn: Mr. Sam Dennis (Code 1851).

Letter GGGG
Ray and Irene Salisbury

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter GGGG. Letter GGGG has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter GGGG comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
GGGG-1	2c

Letter GGGG

Ray and Irene Salisbury
510 N.E. Main St
P.O. Box 28
Austin, NV 89310-0028
P.H.-702-964-2306

Mr, Sam Dennis
Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Dr
San Bruno, CA 94066--5006

Mr, Dennis:

RE: Navy's DEIS Document. dated June 1997.

My wife and I have read the Navy's DEIS, and we have also read a copy of Eureka County's comments on the DEIS, and we fully agree with them, however we are also asking for an extension so we may be able to more fully analyze the document, and be able to contact our elected officials to get their opinion on it.. Remember, it took the Navy teh (10) years to develop this document, How can you expect us to read, understandit, and to be intelligently comment on it in less than ninety days? GGGG-1

Thank You;

Ray and Irene Salisbury
October 9, 1997

Ray & Irene Salisbury

Letter FFFF
Allyn Niles

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter FFFF. Letter FFFF has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter FFFF comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
FFFF-1	2d
FFFF-2	11c
FFFF-3	11c, 12h
FFFF-4	3b
FFFF-5	6a

3

Furthermore, the Navys basic premise is that any public or private person or concern that holds a valid claim to any area proposed to be withdrawn, would be denied any monitary compensation for their loss.

This is completely unacceptable. FFFF-5

Miners, ranchers and any other holder of land rights must be compensated for any and all losses, both present and future, resulting from this proposed land withdrawal.

Thank you for the opportunity to record my concerns.

Allyn Niles

Letter FFFF

Oct 2, 1997

ALLYN WILES
BOX 115
EUREKA, NV 89316

Mr. Sam Dennis Code 7031
Engineering Field Activity West
Naval Facilities Engineering Command
Enviormental Planning Branch
900 Commodore Drive
San Bruno, CA 94066-5006

Sir,

This document is to be entered into the record for the Final EIS concerning the withdrawal of Public Lands For Range Safety and Training Purposes, Fallon Naval Air Station, Nevada.

The scope of this DEIS is too broad and vague to give approval to. FFFF-1

The Navy is not only attempting to withdraw public lands but also public air space in a completely un attached and unrelated area FFFF-2

(2)

in relation to the surface area they want to restrict. These two different areas should be treated as two mutually exclusive draft environmental impact study areas.

Instead, the Navy is trying to sneak one in with the other with the catch-all clause "reasonably foreseeable future."

If the Navy is allowed to gain control of the air space between Austin and Eureka, this will place an unnecessary and undue burden on any private and commercial aircraft that want to enter this area. I can envision the public airports at Austin and Eureka, and many private air strips, becoming useless because of sporadic and difficult access. FFFF-3

The Navy and the public in general would be much better served if the Navy coordinated their need and use of existing areas specifically designated for these kinds of activities. FFFF-4

Letter EEEE
Jerry L. and Trina L. Machacek

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter EEEE. Letter EEEE has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter EEEE comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
EEEE-1	28b

Letter EEEE

Jerry L. & Trina L. Machacek
P.O. Box 239
Eureka, NV. 89316

September 15, 1997

Commanding Officer
Naval Facilities Engineering Command, Attn Sam Dennis
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Commander Dennis:,

We feel that it is necessary to write you a letter giving our concerns over the proposed Navy take over of public lands here in our area.

We own several business in this area, including a True Value Hardware Store, Machacek Iron Works, The Travel Place, and a 650 acre farm. We moved here 37 years ago and homesteaded our own farm. As you can see, we have very deep roots in this area and we want it left just like it is! We live here because we enjoy the peaceful life style and the ability to hunt and camp on public lands as we desire. We also do not need low flying, noisy aircraft flying over us. Please don't include this area in your proposal, there are other valleys like Little Fish Lake and Monitor Valley that have no inhabitants at all, why not do your training in these areas. EEEE-1

Again, we are adimately apposed to the Navy controlling anything in this area, PLEASE GO AWAY!!!!! .

Sincerely,

Jerry L. Machacek
Trina L. Machacek

Jerry L.& Trina L. Machacek

Letter DDDD
Krysta Stevenson

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter DDDD. Letter DDDD has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter DDDD comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
DDDD-1	12f, 28b

Letter DDDD

Krysta Stevenson
HC 65-Box 20 (Gill. Sp.).
Austin, NV 89310-9103
Big Smoky Valley

I do not wont this military ~~[illegible]~~ over my home, Or over our mountians, our valley. The noise is a problem exspechty the sonic booms it scares us. Our Lives are in danger and we don't Like it. If we want this noise we would Live in the city. Stay out of our Quality of Life is being questioned - our children's wild Life is Beaing there tend DDDD-1

Krysta
Stevenson

We Should have a say.

Stay Out

Letter CCCC
Gary Olander

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter CCCC. Letter CCCC has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter CCCC comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
CCCC-1	2b, 2c, 12e

Letter CCCC

August 26, 1997

Mr. Sam Dennis
% Naval Facilities Engineering Command
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-0720

Dear Mr. Dennis,

Having taken time to peruse the Draft Environmental Impact Statement (DEIS) of June 1997 relating to activities of the Fallon Naval Air Station, I am very concerned about the potential environmental impact by the Navy's plans for eastern Nevada.

This study lists the Diamond MOA, Duckwater MOA and Smokey MOA as "Proposed and Reasonably Foreseeable Military Airspace Designations." If your intentions are to include this area, you should be honorable about it! Not using clandestine methods bring it in the "back door" of this study. CCCC-1

First, these areas should be included with in the scope of your plans. Next, public hearings should be held in the towns and areas affected. Finally the comment period should be extended to accommodate these hearings.

Sincerely,

Gary Olander
P.O. Box 476
Eureka, NV 89316

c.c. Eureka County, Nevada, County Commissioneers

Letter BBBB
Smokey Valley Joe

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter BBBB. Letter BBBB has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter BBBB comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
BBBB-1	28a, 28b, 26ttttttttt

SMOKEY VALLY JOB - UNIT 3
HC-60 —BOX 56202
ROUND MT., NEV. 89045

Letter BBBB

SEPTEMBER 3, 1997

LAS VEGAS, NEVADA

COMMANDING OFFICER

NAVAL FACILITIES ENGINEERING COMMAND

900 COMMODORE DRIVE

SAN BRUNO, CALIFORNIA 94066-0720

ATTENTION; SAM DENNIS

I AM REFERRING TO YOUR "LANDBRIDGE" AND "MASTER LAND WITHDRAWAL" PROPOSAL AND YOUR "PREPARED" HEARINGS.

I HAVE RELATIVES AND I SPEND MANY MONTHS IN SMOKY VALLEY.

THE RANCHERS, THE FARMERS AND RESIDENTS IN THIS ENTIRE AREA OBJECT TO YOUR AIR SPACE AND LAND EXPANSION OF WHICH YOU PURCHASE THESE LONG TIME OWNERS FOR ABOVE MARKET PRICE. DIXIE VALLEY IS THE PRIME EXAMPLE OF MILITARY OCCUPATION IN PEACE TIME.

YOUR LOUND BLASTING PLANES IS A HEALTH HAZARD. NOT ONLY TO HUMANS, BUT TO ANIMALS AND BIRDS AND OTHER WILDLIFE.

AN EXAMPLE, ISRAEL USES AMERICAN BOMBS, GUNS AND PLANES TO FORCE PALESTINIAN PEOPLE OFF THEIR LAND,- WITH ONE PURPOSE TO EXPAND THEIR COUNTRY BOUNDARIES, OF WHICH THIS IS ENCOURAGED BY THE AMERICAN CLINTON ADMINISTRATION. ALL OF THIS WITH 12 BILLION 100 MILLION DOLARS OF AMERICAN GIFTS AS FOREIGN AID. BBBB-1

AM I TO SAY THAT THE NAVY TOO WANTS TO EXPAND ITS BOUNDARIES WITH "WELL PREPARED HEARINGS" AND WITH BLM "MASTER PLAN WITHDRAWAL" PEPER WORK PROPOSALS."????

IT IS PEACE TIME, MR. DENNIS, IT IS PEACE TIME. HERE IN THE BACK BRUSH COUNTRY WE DO NOT BELIEVE IN FOREIGN ENTANGLEMENTS.

YOU ONLY HAVE TO LOOK AT DIXIE VALLEY TO SEE WHY WE THE PEOPLE OBJECT TO YOUR LAND GRAB.

S.V.J.

Letter KKKK
Verna Campbell

Each comment letter received on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a letter designation. This letter has been designated Letter KKKK. Letter KKKK has been divided into discrete comments as delineated by the comment designation in the right hand margin of the letter and in the left hand column of the table below. Responses to each discrete Letter KKKK comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters in this volume of the Final EIS.

Comment Designation	Response Location
KKKK-1	26vvvvvvvvv

Letter KKKK

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 16, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- ___ Individual (no affiliation)
- ___ Private Organization
- ___ Federal, State, or Local Government
- ___ Citizen's Group
- ___ Elected Representative
- ___ Regulatory Agency

Name: VERNA CAMPBELL
Organization (if applicable):
Street Address (optional): 3912 SARAH CT.
City/State/Zip (optional): RENO, NV. 89509
Phone # (optional): (702) 828-6050

Did you receive a copy of the DEIS? ☐ Yes ☐ No
Do you wish to speak this evening? ☐ Yes ☑ No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: I received the information that I wanted from Mr. Jones + Mr. Dennis. Thanks
VC

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes
Naval Air Station Fallon, Nevada
September 16, 1997
SPEAKER REGISTRATION/COMMENT CARD

Please check your affiliation below:

- ✓ Individual (no affiliation) HAVE MINING CLAIMS IN AREA.
- ___ Private Organization
- ___ Federal, State, or Local Government
- ___ Citizen's Group
- ___ Elected Representative
- ___ Regulatory Agency

Name: VERNA CAMPBELL
Organization (if applicable): 3912 SARAH CT.
Street Address (optional): RENO, NV. 89509
City/State/Zip (optional):
Phone # (optional): (702) 828-6050

Did you receive a copy of the DEIS? ☑ Yes ☐ No
Do you wish to speak this evening? ☐ Yes ☑ No

If you wish to provide written comments only, please write your comments below and turn them in at this meeting. Thank you.

Comments: THE NAVY PERSONAL PRESENTED A VERY INTERESTING + INFORMATIVE PROGRAM.

Comments also may be mailed by October 10, 1997 to: Engineering Field Activity West, Naval Facilities Engineering Command, 900 Commodore Drive, San Bruno, CA 94066-5006. Attn: Mr. Sam Dennis (Code 1851).

NAVY ENVIRONMENTAL PLANNING

PUBLIC HEARING

FOR

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES AT NAS FALLON, NEVADA

-oOo-

Wednesday, September 17, 1997

Fallon Convention Center

100 Campus Way

Fallon, Nevada

Reported by: Kristine A. Bokelmann, CCR #165

ORIGINAL

APPEARANCES:

REAR ADMIRAL B. J. SMITH

CAPTAIN SCOTT RONNIE
Commanding Officer
NAS Fallon

SAM L. DENNIS
Leader, Operational Bases Group
U.S. Navy, EFA, West
900 Commodore Drive
San Bruno, California

FRANK A. COLON
Lieutenant-JAGC USNR
NAS Fallon

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largest amount of people first.

After we have heard from all of those who have filled out cards, and if time allows, we will open up the proceedings subject to the three-minute time limit at -- after we've concluded with the cards.

When you are called to speak, please approach the microphone in the center hallway there, tell us your name and spell your last name so that the court reporter here to my left can get an accurate record for the transcript.

And then after you've stated your name and spelled your last, let us know what organization you represent or what community you're from.

Finally, I'll be keeping time and I'll give you a silent 30-second warning, as long as you're facing the podium. After the 30 seconds, so that I can allow everyone else who's signed up cards an opportunity to speak, we will stop the recorder and we'll proceed with the next speaker.

As far as the order, I'll announce who's going to be speaking first and then who's going to be following that person. That way you can prepare your final thoughts and comments and be ready to speak after that person has completed.

So without any further delay, we'll begin with Mr. Steve Endacott, and he'll be followed by Gene Gerdes.

MR. ENDACOTT: Good evening, gentlemen. I'm Steve

NAVY ENVIRONMENTAL PLANNING

PUBLIC HEARING

FOR

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE WITHDRAWAL OF PUBLIC LANDS FOR RANGE SAFETY AND TRAINING PURPOSES AT NAS FALLON, NEVADA

-oOo-

Tuesday, September 16, 1997

Peppermill Hotel Casino Reno

2707 South Virginia Street

Reno, Nevada

ORIGINAL

Reported by: Cindy Lee Brown, CCR #486

LASER BOND FORM A PENGAD - 1-800-631-6989

APPEARANCES

REAR ADMIRAL B.J. SMITH

CAPTAIN SCOTT RONNIE
Commanding Officer
NAS Fallon

SAM L. DENNIS
Leader, Operational Bases Group
U.S. Navy, EFA, West
900 Commodore Drive
San Bruno, California

FRANK A. COLON
Lieutenant-JAGC USNR
NAS Fallon

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Endacott, E-n-d-a-c-o-t-t. I'm the emergency management director for the City of Fallon. Mayor Ken Tedford sends his regards and he has asked me -- he has written a letter to you, Mr. Dennis, on this issue, and he's asked me to put it into the record for him, so I'll just read it here. It's not my words.

Dear Mr. Dennis, my staff and I have reviewed in detail the Draft EIS and I would like to convey our unequivocal support for this public safety initiative as proposed in Alternate II, the Preferred Alternative. The proposed action will occur within Churchill County and will positively affect the citizenry. My reasons for this endorsement are as follows:

The redesignation of the small amount of federal land around the bombing ranges to Category A is a prudent safety precaution for the residents of Nevada, especially considering the significant leaps in tactical aircraft performance which have occurred since these ranges were first designed. PHF-1

The remaining land redesignation from Category -- to Category B allows co-usage of our citizens while easing restrictions on important national defense training such as combat search and rescue.

The Navy has been a good neighbor to the citizens of Nevada. In contrast to other federal agencies, the US Navy has continually worked to meet fundamental national goals while

minimizing, to the greatest extent possible, the total amount of land withdrawn from public use. Additionally, their willingness to work with the responsible citizens of Nevada has been demonstrated by the following recent US Navy initiatives:

The realignment of the flight paths around Bravo-16, an action which will all but eliminate noise and overflight issues for the 2400 people in the Sheckler District.

The installation of sound monitors on the ranges near noise sensitive areas.

The rerouting of low-level training flights to the local area -- within the local area.

The formation of a Citizens Outreach Program.

The creation of a Bureau of Land Management advisory position at NAS Fallon.

Attaining local authority to adjudicate noise damage claims. A process that has -- that used to take months now takes days.

Number seven, the Navy's request to extend the comment period of this EIS from 45 days to 90 days to allow the widest possible participation by Nevada citizens, despite the fact that there are no airspace changes and this land realignment proposal only affects Churchill County.

NAS Fallon Search and Rescue helicopter crews have saved the lives of numerous citizens throughout Northern Nevada

Pt 1

and California and currently hold the record for the highest number of helicopter rescues in the Navy; 44 in the last three years.

Local military issues are easy to demagogue and paid lobbyists from antimilitary and environmental extremist groups have a history of successfully doing so. However, I am certain that if citizens of the City of Fallon were to review the Navy's draft EIS in a rational and measured approach, they would conclude, like I have, that this proposal is a prudent public safety policy and appropriate co-usage of the environment. PHF-1

Sincerely, the Honorable Ken Tedford, Jr., Mayor of the City of Fallon.

Thank you very much, gentlemen.

LIEUTENANT COLON: Thank you, Mr. Endacott. We'll now hear from Gene Gerdes. After Mr. Gerdes, Grace Bukowski.

MR. GERDES: Gene Gerdes, that's spelled G-e-r-d-e-s, with the Nevada Trappers Association. I'm going to summarize our statement and hand in to you the full text of our comments here. PHF-2

The EIS failed to mention hunting and trapping of fur-bearing mammals. This is a low density, high value activity that takes place on land proposed for withdrawal. There are no legal descriptions for the lands in the proposed withdrawal. It is difficult to accurately ascertain what lands PHF-3

are included in the DEIS. PHF-3

We feel that 25-year proposed withdrawal is much too long. Withdrawal of the Navy B-20 range and the Nellis Air Force Range both received congressional approval for a 15-year period. PHF-4

Included in the DEIS is the implication that naval allies will be using the Navy's facilities here. I'm sure that members of the organization I represent will not take kindly to being locked out of their public lands while a foreign military power is training here. PHF-5

We can remember that not too far back our country was somewhat closely with both Iran and Iraq. The Category B lands east of the Dixie Valley Road and northward corridor lands connecting to Navy owned lands in Dixie Valley and the lands west of the road running from Highway 50 to the Mountain Wells Canyon Road may look good on a map to the Navy, but they could cause problems for the public trying to access adjacent public lands. PHF-6

Further, there does not appear to be any sound military reason for including these lands in the withdrawal. Recently the Bureau of Land Management reopened the road to the public east of Range B-19. This road follows a gas pipeline. PHF-7

The DEIS does not indicate if this road will remain open if surrounding lands are withdrawn. Maps indicate that much of the Slate Range will be classified as Category A PHF-8

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LASER BOND FORM A ● PENQUAD • 1-800-631-6989

TUESDAY

MS. GREEN: My name is Sandy Green. I am a Eureka County Commissioner in Nevada.

LIEUTENANT COLON: Thank you.

Sandy, not to cut you off, just one more comment. As you approach the three minutes, I'm going to flash up a 30-second warning. This means you have 30 seconds left. Once the watch beeps, then that will be the end of the three minutes, and I'll have to interrupt and say, Thank you. And we can proceed to the next person.

MS. GREEN: Okay.

LIEUTENANT COLON: Thank you very much.

MS. GREEN: Thank you very much for this opportunity.

I am here today on behalf of the Board of County Commissioners, and I also represent a community which has 120-plus year history, which is rich in mineral and agriculture tradition.

I would first like to address our objections to the process, and then make some comments about the document itself. We intend to submit extensive written comments as well.

Eureka County has already requested a 60-day extension on the comment period for the review of this document. At the county level, we never received the document. In fact, it was a constituent of mine who made us

PHR-1

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aware that the document had been released.

When we requested five copies of this document, we only received two, and that was well after the beginning of the comment period. This is a very complex and detailed proposal, and in order for the local governments and members of the public to participate, additional time is needed. PHR-1

We also requested that hearings be held in central Nevada, including the town of Eureka. The impact of the proposal will be felt in all of central Nevada. And hearings should be held in each county affected, so that the public will be informed about the Navy's plans and will have an opportunity to participate without taking time off of work or without making a long-distance trip. PHR-2

The Draft states that the land in Dixie Valley will be used for training ground troops. When the Navy condemned the private property in Dixie Valley and bought out the ranchers, there was never a mention of a need for additional ground to practice on, just the need for the airspace. PHR-3

This use of Dixie Valley for ground maneuvers should have been part of the original proposal. To propose it now is an indication that the Navy's initial plans or what the Navy is proposing for any part of this withdrawal are not the end, but just the beginning of land and airspace grabs in central Nevada. We wonder how we can trust this proposal and

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its promises when we look to the example of Dixie Valley.

I live in the farming community of Diamond Valley, which is just north of the town of Eureka. In reviewing the document's discussion of the need to continue to practice on Bravo-16, which is southwest of Fallon, I wonder if in 25 years I might be reading the same rationalization about why the Navy cannot stop flying Diamond Valley, which is one of the most progressive and productive ag lands in the country and is home to some of the highest producing mineral land in the country. PHR-4

This proposal to install threat emitters throughout central Nevada in conjunction with the proposed military operations is totally unacceptable. This is the first step to the domination of our land by the military.

The future of our county and rural Nevada depends on our ability to attract business, to be able to utilize our airport and for people to be able to live in our county without enduring sonic booms and intrusive overflights. PHR-5 No temporary or permanent noise contamination should be permitted. PHR-6

The Navy should cooperate with the other services. This would be expected in time of war, to share land-based resources. At the present time the Navy and Air Force control over three million acres of land in Nevada, and surely that is enough. PHR-7

LASER ECHO FORM A ● PENLOAD • 1-800-631-4999

land closed to the public. A map showing the footprint developed by hazard methodology also includes the same area.

It is interesting to note that maps of ordnance sweeps of this area indicate that no ordnance was found. This seems to contradict the accuracy of the footprint. Slate Range has high wildlife values including mule deer, bighorn sheep, chukar, and several fur-bearing species. PHF-8

It should be mentioned that I personally do not know of any injury or harm to civilians in the last 20 years caused by military activities on lands surrounding training ranges. PHF-9

And finally, we see that no mitigations are offered for these proposed withdrawn lands. I'll give you the comments. PHF-10

LIEUTENANT COLON: Thank you, Mr. Gerdes. We'll hear from Grace Bukowski. Following her we will hear from Alice Schneider.

MS. BUKOWSKI: Good evening. That's Grace Bukowski, B-u-k-o-w-s-k-i.

Captain Ronnie, just a suggestion, when you talk about the lands that are contaminated, you're not going to be taking back land. You're going to be taking public land because they were never yours to take back. Okay. PHF-11

I just want to point out that I don't see a map up of the proposed airspace expansion up here, including the

Diamond. It is in the Draft Environment Impact Statement. It would have been nice to see a map. PHF-11

I want to talk about the Category B lands and your use of those lands 30 to 36 weeks, 30 hours a week. I don't think we're convinced that there's not going to be conflicts out there. There have been conflicts. There will continue to be conflicts. I just don't see you with Navy SEALS out there and someone goes out to use the public lands, you stopping your operations. I think it's more likely that the public's going to be asked to leave. PHF-12

And I mean, when we look at the history of what's happened in Dixie Valley, you bought out all that land because of the supersonic operation area, and I was around then. I've been around for a long time. I have a long memory. Okay. PHF-13

There was no discussion of ground maneuvers at that time. Those lands have been fenced and closed off.

Now, if you really had a good resource management plan, those lands could have been used by the public all these years. And in particular, two parcels of land, one during the memoranda of agreement when you created the supersonic operation area, the Navy agreed to look at turning over Ed Robbins' fish farm to the Department of Wildlife. Hasn't happened. You had an agreement. It didn't happen. PHF-14

Then we look at Horse Creek Ranch. Not only do you close off access to the ranch, but you've closed off access

The services would better coordinate the use of the land and airspace that they already control, rather than expanding into other areas of Nevada. PHR-7

We support the Navy's proposal to withdraw lands already contaminated on existing ranges and to withdraw buffer zones around those lands for public health and safety reasons. However, we recommend two conditions:

One, additional contamination should occur only on lands already contaminated, not on uncontaminated lands; two, no military activity should be permitted in the buffer zones, so that they will remain as buffers. PHR-8

The Navy should not need to come back at some later date to request a buffer for the buffer. Because the buffer land was used for military activity.

We appreciate this opportunity to talk face-to-face with you today. Thank you.

LIEUTENANT COLON: Thank you, Sandy Green.

We'll now here from Julie Butler.

MS. BUTLER: Good evening. My name is Julie Butler, B-u-t-l-e-r, and I represent the State of Nevada.

Over the past several years the State has followed closely the Navy's plan to withdraw public lands in central Nevada for military use. In fact, the State has long participated in this evolving withdrawal proposal. PHR-9

We provided our first comments in 1985, some 12

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years ago. Most recently, we provided oral and written comments at the June 6, 1995, public hearing held at the Airport Plaza Hotel in Reno.

At the 1995 hearing we said the State generally supports the proposed withdrawals, with the exception of the withdrawal for the Bravo 16 bombing range. Bravo 16 is located between the City of Fallon and the Lahontan Reservoir. In 1995 we said the continued use of Bravo 16 would increase ongoing health and safety threats for local residents. PHR-9

The restricted airspace for Bravo 16 overlies private residential property. To reach the target, military jets must fly low and fast over homes, causing ongoing noise and safety hazards.

Following our longstanding opposition to Bravo 16, the State now understands that the Navy is proposing to reconfigure the airspace to avoid residents in the Sheckler district.

We must point out, however, that this airspace change, which is connected to the land withdrawal, may cause impacts to the residents of the Walker River Indian Reservation. To assess those impacts, the Navy must comply with the Presidential Executive Order on Environmental Justice. This Order requires an evaluation of disproportionately high and adverse human health or PHR-10

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to public lands. Now we hear that there's going to be some limited access. Why should we have limited access to public lands? That's not acceptable. I mean, just open up the road. Let people go through. PHF-14

Continuing on, in the Draft Environmental Impact Statement it's very obvious that you use crash data from the decade of the 1980s. We've had I don't know how many crashes out here in the 1990s, but several, including a head-on. PHF-15

You need to update that crash data. I'm not going to accept nor will the public accept crash data from the 1980s when you had a flurry of crashes in the 1990s.

When I look at the Draft Environmental Impact Statement regarding Bravo-16 and the RAICUZ Report, it's real obvious you're going to begin armed overflights one mile south of the range, and you admit in your RAICUZ study that there's a possibility of inadvertent ordnance releases. So once again, we're going to have a Navy bomb public lands. PHF-16

You can't tell me because it's just inert ordnance that it's not dangerous. I know that it is titanium tetrachloride inert ordnance. It's a chemical. It should not be inhaled by you or animals or anyone else, and I will include that information in my comments. PHF-17

We're going to have more land closures with this proposed flight operation of Bravo-16, and I don't see how you can piecemeal that analysis, when during 1995 this entire PHR-18

process was about Bravo-16.

Finally, I'm going to say BLM's a cooperating agency. Why aren't they sitting at this table? Where is the BLM? Why aren't they here? What is their position on this? PHF-19

And with that, I'll say thank you for the opportunity again.

LIEUTENANT COLON: Thank you, Ms. Bukowski. We'll now hear from Alice Schneider. Following her, Don Bowman.

MS. SCHNEIDER: My name is Alice Schneider, S-c-h-n-e-i-d-e-r.

The start of this is mainly on what has happened in past years. Our concern is the withdrawal of more land around Bravo-16. We have always felt Bravo-16 should be closed as recommended by the FAA in 1984 and more recently by Governor Miller, Senator Bryan, and Senator Reid.

It is technically an in-town bombing range and was originally meant for propeller type planes, not fast, low-flying jets. There have been seven crashes on Bravo-16 resulting in at least two deaths. PHF-20

We live six miles north and one mile east of Bravo-16. When we bought our property in 1974, we were not advised by anyone that there was a bombing range in the area. For many years the low-flying jets screamed by and over us from early morning till often late at night.

In the 1980s the Navy brought in a company from

environmental effects on minority or low-income populations.

Our review of this EIS suggests that such an assessment has not been done, at least in terms of defining the potential cumulative noise and safety impacts associated with new flight patterns and operations proposed at B-16, along with ongoing bombing activities conducted at the Bravo 19 range. Bravo 19 borders the reservation near Highway 95. PHR-10

Meanwhile, and regardless of the flight approach to Bravo 16, the State still believes the long-term use of B-16 is inconsistent with principles of environmental quality, economic diversification and overall community health for the citizens of Churchill County and the Native Americans in the region. We are also disappointed with the Navy's decision not to address the abandonment of Bravo 16 as part of the land withdrawal proposal. PHR-11

In a related matter, we do recognize the level of support enjoyed by the Navy in Nevada. The State agrees that significant economic benefits are generated by NAS Fallon. With this understanding, however, we continue to disagree with the notion that if the Navy's expansion plans are not enacted, then NAS Fallon will somehow wither away as a major Naval training facility. PHR-12

Clearly, with the Congressional implementation of the Base Realignment and Closure process, NAS Fallon has enjoyed significant expansion in recent years. With this

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expansion, however, the question that remains is whether growth at NAS Fallon can be accomplished in a sustainable way that does not jeopardize environmental quality in the region. PHR-12

At this point I want to briefly discuss the Navy's proposed ground-training program in Dixie Valley and the controversy over the expansion of the Navy's threat emitter sites in north-central Nevada.

As mentioned before, we do support the Navy's land withdrawals, where such withdrawals would expand bomb footprints to accommodate modern aircraft and deployment of new weapon systems. Specifically, the withdrawal of 33,400 acres for the B-17 and the 12,200 acres for B-19 are clearly warranted and should be enacted by Congress. PHR-13

I am going to ask your indulgence at this point, since this proposal has been going for about 12 years. I'm going to go about six minutes, actually, if you would permit me to do that. Thank you very much.

We are, however, not convinced that the Navy has clearly articulated the proposed action and alternatives for the requested 68,600 acres in Dixie Valley.

Until publication of this most recent land withdrawal Environmental Impact Statement, the State was unaware of the Navy's planned use for an expanded withdrawal in Dixie Valley. According to the Navy, the 68,600 acres would be used for combat search and rescue, close air support PHR-14

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back east to set up noise monitors on our property to record the decibel level of the jets. It was business as usual up to the date the noise monitor was set up. The jets did not fly by us at all during the time the monitor was there, and the day after it was removed it was back to business as usual. So to anyone looking at that report there was no noise problem here.

The same with the EIS issued about 1984. It showed about six noise complaints called to the base from our address, when in fact we had called in hundreds of times over the years.

Even now the number of noise complaint calls reported to the press is lower than the actual number, and the number of people in this area was recorded lower.

PHF-20

According to a state survey done over a year ago, there were 2400 people living in this area and there could be even more now. People who bought property and built homes closer to Bravo-16 after we bought our property had been advised by the Navy that Bravo-16 was going to be abandoned in the near future, but this never happened.

The end of June we were part of a group attending a demonstration of low-flying jets, jets breaking the sound barrier, sonic booms, and so forth. The noise monitor set up to record the decibel level showed the low-flying jets were as loud as some of the sonic booms, and this is what we lived with for many years.

Since Captain Ronnie has been the base commander, things have been considerably better. He has worked hard to try to come up with a solution to the problem that will be beneficial to both the Navy and the residents affected by Bravo-16, for which we commend him.

He has proposed a change in the flight pattern so the jets will approach the bombing range from the south where there are no residences instead of from the north which is heavily populated, and now is seeking FAA approval to make the change.

On July 26 jets made test runs using the proposed new flight pattern and we could barely hear them from our place. We do not know how it affected those living closer to Bravo-16.

PHF-20

On February 12th we went to the Senate hearing on closing or relocating Bravo-16 and then to the subsequent hearing where the Senate voted to let the Navy try the new route it has proposed. However, Senator Rose said if the FAA does not approve the new flight pattern or if it is not beneficial to the residents of the area, they will look again at closing or relocating Bravo-16. Thank you.

LIEUTENANT COLON: Thank you, Miss Schneider. We'll now hear from Don Bowman, and then following Don Bowman, Ira Kent. Don Bowman? All right. We'll move on to Ira Kent. Following Ira Kent, Bonnie Eberhardt.

and other ground-training operations, such as special-forces training.

These lands would be managed through regulated development programs operated by the Navy in conjunction with the BLM. The lands would only generally remain open for public use. The proposal would also consolidate all of the lands that were condemned in the Dixie Valley area to mitigate noise impacts for the Navy's supersonic operations area. PHR-14

The State is concerned that the Dixie Valley withdrawal was the only alternative considered for ground-training activities. We note that the Department of Defense controls more than three million acres in Nevada.

We believe the Navy should have evaluated the potential for co-use of other military lands, such as the northern part of the Nellis range for it's planned 200 training events per year. Had the Navy's plan for development of a ground-training program been disclosed in 1995, the State would have insisted that the Nellis range be considered for such an activity. PHR-15

The State is also unconvinced that a co-management program with the BLM is workable, given the large number of ground-training events planned for the Dixie Valley Area. PHR-16

In reference to the electronic warfare sites, PHR-17

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we agree with BLM that the expansion of these sites represents a permanent commitment of public lands. We also contend that there is a direct relationship between the expansion of these sites and the Navy's long-term plan to double its existing airspace in the region. PHR-17

The Environmental Impact Statement does outline the Navy's reasonably foreseeable airspace needs, which includes the creation of the Diamond, Duckwater and Smokey Military Operations Areas. The combined area that these MOAs would overlie totals more than 10,000 square miles.

In a related matter, I want to point out that last October the State of Nevada formally asked the Navy to create a citizens advisory committee under the authority of the Federal Advisory Committee Act. We proposed establishing the advisory committee to help the Navy involve the public in discussing issues and alternatives concerning the Navy's desire to acquire additional public land and airspace in the region. PHR-18

While the Navy decided not to entertain this proposal, it is worth noting that the State has both encouraged the development of and has successfully participated in the federal advisory board process with other agencies such as the Air Force, the BLM and the Department of Energy.

In summary, we are not convinced that the

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MR. KENT: May name is Ira H. Kent, K-e-n-t.

We have a grazing permit north of Bravo-17. The north boundary has been moved several miles north than what it originally was proposed and now joins the proposed wilderness area.

We have a number of appropriated water developments in this area. Some of these waters were appropriated clear back to the turn of the century.

I would like to see a half mile area around these springs and water developments that the Navy will not enter because helicopters and personnel in these areas will run the cattle away from these waters. In the past year we have experienced these problems.

PHF-21

The BLM gave permits to the Marine Corps several times and the first time they observed it. After that they ignored it, and in fact, one time they was ten miles from where they were supposed to have been.

And they run the cattle all the way from the water, the cattle are moved on and a lot of them come back to the ranch, and I think I'd like to see that a half mile around each one of these water developments where helicopters will not land, personnel and whatnot go in there, because otherwise we're going to run our cattle out. That is all. Thank you.

LIEUTENANT COLON: Thank you, Mr. Kent. We'll now hear from Bonnie Eberhardt and then Lynn Boyer.

MS. EBERHARDT: It's Bonnie Eberhardt, E-b-e-r-h-a-r-d-t.

I just got a chance to look at the Draft Impact Statement today and what I mostly spent my time on was the methodology section. I'm concerned of how the methodology was set up and how inadequately it's described in that brochure.

First, you say the first step is determining a regional base line, and my concern with that is that the base line being used has already been altered. It not a true base line. It's already been altered and elevated because of the existing proximity to the flights that are occurring and the activities that are occurring. PHF-22

Also it seems mostly that you're having qualitative statements and qualitative words rather than quantitative measurements. It's really hard to get a grip on quantitative measurements. PHF-

For example, in the next step you say that the focus of cumulative effects analysis is on incremental effects of the action when added, when added to other past, present, and future actions.

And I'm suggesting to you that that's very simplistic methodologically, that I don't think you necessarily -- I don't know. I don't think you could necessarily maintain an additive approach. I think it's probably an interactive approach. Probably an exponential PHF-24

68,600 acres in Dixie Valley has been fully defined, and we remain disappointed in the Navy's unwillingness to address the abandonment of the Bravo 16 bombing range.

We will submit written comments after this. Thank you.

LIEUTENANT COLON: Thank you, Miss Butler.

For the remaining of the folks we call out, I'm going to call the person who is next to speak and the one who will be after that. That way you can prepare your notes.

Now we will hear from Heather Estes, and then after her, Charles Watson.

MS. ESTES: Good evening. My name is Heather Estes, E-s-t-e-s. I'm a County Commissioner from Lander County, Nevada.

I need to state for the record, I'm not here tonight on behalf of the Board of Commissioners. I am here as an individual commissioner sharing comments and concerns that I have been getting from residents in the southern end of our county.

As you're very much aware and have been working with the residents around the Austin area, the main concern of those folks is the airspace issues: the military overflights, the supersonic issues that we have been dealing with.

I recognize the fact that the proposed action

PHR-19

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will not create an increase in total numbers of air operation. I think there's a trust issue here.

I think the current residents in the southern end of Lander County are trying very hard to work with the Navy and believe that strides are being made to have a process in place that can work with residents in trying to avoid future disturbances, and the trust is not there that an expanded area of operation will not increase air operations.

So I encourage you to continue your efforts as far as working with the folks in that end of the county. I'm sure tomorrow night in Fallon you will get an earful from individual residents in that area and hope that we can resolve our issues as far as working together, trying to find complaint processes developed and have a better communication between us and the Navy. Thank you.

And I do agree with Sandy Green from Eureka County that these scoping meetings need to be in the area where the residents are living. Certainly, the folks that can come into Reno, they tie in shopping trips.

But most of the residents have a very hard time coming this long ways. You would get much better comments, much better public participation by going to those folks instead of asking them to come to you. Thank you.

LIEUTENANT COLON: Thank you, Miss Estes.

You'll now hear from Charles Watson, and after

PHR-19

PHR-20

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approach in some of your data.

Also, whenever you talk about the traditional Native American areas, you admit that they are not well defined, and I'm very concerned about that. PHF-25

Another statement you have in there that just kind of baffles my mind, I can understand where you're coming from, but it doesn't quite make sense to me. Quote, noise -- this is Section 547. Quote: "Noise levels in the rest of the future region are generally lower because of sparse distribution of population."

I'm like, well, you know, if a noise level is, you know, this for 30,000 people, it must be this for two people. PHF-26 You know, it's like do they hear a tree when it falls in the forest if nobody's there.

I think what you mean is that the base line would be lower because there's less traffic and less people to make noise. However, that's not an accurate -- you're not, you know, measuring apples and oranges. You know, traffic noise is not the air flight and the sonic booms that I'm hearing from the Yomba Reservation.

Section 548, when you speak of health and safety, you talk about a small risk, and I'd be really concerned with how you measure small risk quantitatively when I have three kids on a bus coming up the hill. What is small risk to you? PHF-27

Section 5522, your references are to an NDOW study PHF-28

in 1989 and you're monitoring the effects of air operations on wildlife and you say that they merely show a startle effect, and I wasn't here in 1989 but I'm willing to bet that there were less flyovers and less activity in those specific areas in 1989, and I wonder again if you're getting an actual measure of increase. PHF-28

You also say in there that one of your measurements is the difference in reproductive success. I would suggest that in addition to reproductive success, you measure mortality rate and any other developmental delay effects. PHF-29

Throughout the whole article all I see is confirmation biases. You're finding what you're looking for, and I'm not blaming you for that. We all do that as scientists, but it seems like all of your studies are funded by either you or the BLM or another governmental agency or somebody affiliated or paid for by a governmental agency, and I would be interested in another study where I'm seeing more open information. PHF-30

LIEUTENANT COLON: Thank you very much. We'll now hear from Lynn Boyer and then from -- would Vernon Brechin like to speak? You didn't check yes or no.

MR. BRECHIN: Yes, I do.

LIEUTENANT COLON: You would like to speak?

MR. BRECHIN: Yes.

Mr. Watson, Grace Bukowski.

MR. WATSON: Thank you for this opportunity to testify. My name is Charles S. Watson, Jr., W-a-t-s-o-n, Jr., cofounder and director of the Nevada Outdoor Recreation Association, Carson City.

On August 13th we addressed this hearing, and I received a letter from San Bruno requesting that I come to this hearing and address it again, so I'm doing so. I have a prepared statement to submit.

For 39 years we've been in existence. We were founded in 1958, and we began exploring the Churchill County area as early as 1959 for a number of -- and other areas of concern including -- we had a major concern about certain wilderness study areas that were mandated by the Federal Land Policy and Management Act. PHR-21

Incidently, I'm the coauthor of a book "The Lands No One Knows," which was highly influential in the enactment of FLPMA.

The Job Peak Wilderness Study Area, we have a number of unique wonders in this WSA: the grand champion largest and probably the oldest grove of ancient limber pine found in Nevada; perhaps the two canyons with desert-bound waterfalls; extensive and threatened raptor habitat in the pinnacles and tall rock formations of the eastern area of this wilderness study area, and exceptional exposures of the

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1954 Dixie Valley earthquake fault deserving special status as a unique geological area.

The two other alternatives, all the alternatives in the document -- I'm not talking about the changes over here on the bulletin board, but there are serious admissions in the document itself, the Draft document, which I think makes this wholesale, generic in concert. PHR-21

The document seems to violate sections 404 of the Clean Water Act and probably the Endangered Species Act in its complete inability to examine wildlife issues. On the Turley Ranch there is endemic species of tui-chub found there and no place else. PHR-22

That's not mentioned in the document at all. We don't talk about eagles. We don't talk about any wildlife issues in this document.

Gentlemen, that's illegal.

There is no discussion of the Gabbs Valley Range wilderness study area and the closure, the blocking of such approaches as Cow and Deep Canyon on the west side of this WSA. PHR-23

The necessity for this proposed withdrawal is highly questionable given the disappearance of the Soviet threat. Clearly, the US Air Force in 1990/91 actions in Kuwait and Iraq showed they have sufficient lands and PHR-24

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LIEUTENANT COLON: Yes, sir. Okay. After Lynn Boyer, Mr. Brechin, you'll be next.

MR. BOYER: My name is Lynn Boyer, B-o-y-e-r. I live on the boundary of the Sheckler Reservoir, which is in the considered withdraw. I'm a retired trooper with the Nevada Highway Patrol.

I've been to the NAS Fallon on thousands of occasions on company business and private business, having lunch and dinner with commanders and captains. I have absolutely no animosity towards the Navy, and I'm a very strong proponent of our military.

However, I've been with personnel out there and I know the situation that's going to be in this vicinity. The Navy base is going to grow and they're going to attempt to take land through the years. PHF-31

Now, I've been in that area when a jet went down not more than a couple miles away from it. I've given both oral and written statements to the fact of what happened at that incident. There's no way that any buffer zone is going to help whether or not a jet goes down. It's unfortunate. It's a very hazardous occupation that you do. You're going to have accidents.

So closing off a small portion of land right here isn't going to do anything when a Navy jet pilot flies over my house and other houses way off course and it goes down and hits

a facility. What's going to stop that? Nothing.

They do it all the time. They fly right over my house, and if they fly on the range where they're supposed to be flying right now, there's never been trouble and we don't have a problem with the noise.

We can look right out our front window. We see the flares out there. We see them flying. There's never been a problem.

The range out there was designed, as stated earlier, for propeller aircraft. They used to have the old range building up there where they could look at the bombs drop and now it's all electronic. PHF-31

I've been to the Navy pilot training there on the base. I know how the jets fly. They know exactly where the jets at at all times. They know where the bombs hit, so trying to say that if a bomb hit outside this area they would know if it's outside the area, they go take care of it. It's as simple as that.

The Dixie Valley land withdrawal, again getting back to the Horse Creek area, that was supposed to be not ever taken away from the public. They were supposed to be able to go out there and fish, go through the land and everything else. They closed it down, they locked the gates, they drained the reservoir so people can't use it. PHF-32

The problem gets to be is all of these statements

airspace to carry out any mission given the circumstances involving the end of the Cold War.

The Navy did their assigned task with no evidence they were hampered by the four million acres plus that now exists in DOD withdrawal in the State of Nevada alone. In the instance -- we have an instance of live ordnance threatening candidate areas or area of critical environment concern, that involves sections 102(a) and 201(a) of the Federal Land Policy and Management Act. PHR-24

Both the Navy, Army and Air Force have chronically abused the national security rationale for these unwarranted seizures of environmentally sensitive BLM Public Lands in the Great Basin. And those in southern Nevada, we're going to have to file a Freedom of Information Act to determine 110,000 acres being sought down there. PHR-25

I prefer to close my statement. But I have three copies for your perusal, which I will give to the thing. Thank you very much for allowing me to testify.

LIEUTENANT COLON: Thank you, Mr. Watson.

We'll now hear from Grace Bukowski, and then following her, Tom Myers.

MS. BUKOWSKI: Hi everyone. My name is Grace Bukowski. I'm here tonight representing the Rural Alliance Military Accountability. We're a national nonprofit organization that's been keeping track of military expansion PHR-26

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around the nation for quite sometime.

My first reaction to the Draft EIS was, Surprise, surprise. All of the sudden we have ground troops and ground maneuvers. We didn't have any scoping on this, no discussions, no maps, no mention of it, zip, during the scoping process. PHR-26

And we have no analysis of alternatives for those ground maneuvers can be found in the Draft EIS. It's going to be here, or it's going to be nowhere. So we look at the Draft EIS, and we look and we see that they want 68,000 acres for electronic warfare sites and ground maneuvers. PHR-27

Well, the ground maneuvers, as they describe them, we're talking about four vehicles, two helicopters, 15 personnel. It seems like quite a bit of land to me for that type of training. And they should have analyzed alternatives, including Nellis Air Force Base.

We were very disappointed that the Navy did not address the closure or relocation of Bravo 16, yet we find in the Draft EIS that they want to withdraw 6,100 acres because off-range ordnance on the ground and for ground maneuvers. PHR-28

We now know that the Navy wants to change the flight pattern going into Bravo 16. We, again, are very concerned about the impact to the Walker River Paiute Reservation, and, again, the Navy should comply with the Executive Order on Environmental Justice, regarding not only PHR-29

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that we're going to do this, we promise you this and then they're changed, five years later, ten years later. It's not what was told.

PHF-32

Bravo-16 was going to be closed years ago. They withdrew 180 some thousand acres back in '82, '84, all around Churchill County, Pershing County, all that. We're going to get rid of Bravo-16. It's outdated. We don't need it. We need the land out in these areas for our long-range bombing areas.

Now here we go wanting land out of Bravo-16. So the problem is it keeps changing. Granted, new captains come in and you've got long-range things that change. Military changes. Everything changes.

PHF-33

As you said with the Cold War and then Russia and everything else, it's going change, but to take areas that are really not needed, and it may be needed by you, but it's not designed for that. It's too close.

And pretty soon it's going to be, well, we need more and you're going to take a little bit here. Okay. Now we need the reservoir. Now we can't fish. Now we can't ride our bikes. Now we can't ride our horses. So that's what you get into with that.

I do appreciate the opportunity to speak here. Thank you.

LIEUTENANT COLON: Thank you, Mr. Boyer. We'll

now hear from Vernon Brechin and then Ray Salisbury.

MR. BRECHIN: Yes. My name is Vernon J. Brechin. That's B-r-e-c-h-i-n, and I'm speaking for myself.

One of the proposed land withdrawals considered in all the alternatives except for the no-action alternative involves a shoal site which lies just east of Bravo-17 and about 31 miles southeast of Fallon, Nevada. On the map it appears right here. Okay.

I believe that the draft EIS virtually ignored a highly significant aspect of this existing environment. To begin, I would like to mention a single listing that appears in Appendix G. Archaeological sites and surveys, Table G-2, cultural resources survey conducted at NSA Fallon. This is the last listing on page G-4, which is for area B-17. PHF-

The cultural resource project name is GZ Canyon Guzzler number one. Essentially this cultural resource consists of a water trough for wildlife. This is the only cultural resource listed in the GZ area. GZ is an acronym for ground zero, which is in this case refers to the center of an underground nuclear explosion that was conducted near the center of the shoal site in 1963.

This nuclear explosion yielded about 80 percent of the energy of the bomb dropped on Hiroshima, Japan. The shoal site was named after the code name of the test project shoal.

Such underground nuclear explosions are

the land withdrawal, but the over-flight issues and the impacts to that reservation.

In conclusion, I'm having a real hard time understanding what's going on with the military throughout the west. We have the Berlin Walls down. The Cold War is over, yet we have a new bombing range in Idaho. We have an expansion of the Newman Training Grounds in Arizona.

We have a major expansion in Colorado called the Colorado Airspace Expansion. We have a 330,000 acre expansion at Fort Erwin. We have a new military training route and a doubling of the Lacine MOA in Utah. We have a new bombing range for the Germans in New Mexico. We have new airspace expansions in Texas.

PHR-30

What is going on? I don't understand.

These are all being done in a piecemeal fashion. No one is taking an overall look at what impact this is having on the southwest.

I believe that a programmatic Environmental Impact Statement should be prepared immediately to address all of these expansions as one, because there is a plan. They are linking all of these ranges, and we are part of it.

In conclusion, I also want to say that we oppose any expansion or designation of land or airspace for military expansion until there is a national-needs

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assessment. For such an assessment to truly measure all direct and indirect impact of these designations, we must involve all branches of the military, the Department of Interior, the Department of Agriculture, the FAA, GAO, appropriate state and local government and Congress.

It is crucial that a strategy for strong public participation, including that of Native Americans, be developed and implemented. Upon completion, the national-needs assessment should be released for public comment and review and a series of public hearings held across the nation. PHR-30

Thank you very much. I'll be submitting written comments.

LIEUTENANT COLON: Thank you, Miss Bukowski.

We'll now hear from Tom Myers. After Mr. Myers we'll hear from Marjorie Sill.

MR. MYERS: My name is Tom Myers, M-y-e-r-s. I guess tonight I'm primarily going to speak for myself. I will submit comments for an organization or two prior to the end of the comment period. I don't have any really good prepared comments here, so I'm just going to ramble a little bit. PHR-31

I fully agreed with just about everything Grace just said. Although, I don't really feel qualified to comment on the military mission. It is probably something I

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effectively the same thing as the explosion of a small nuclear reactor in the earth. Such nuclear explosions leave several pounds of high-level nuclear waste.

The waste was left buried without engineered containment structures mixed in tens of thousands of tons of porous and fractured rock which lies below the watertable.

The Yucca Mountain site may or may not be approved for the storage of similar nuclear waste. The fact that the shoal site is associated with an underground nuclear explosion is mentioned on one line on page 3-32 in the draft EIS.

I wonder what sort of priorities are responsible for treating a watering trough as more important than an uncharacterized and unlicensed nuclear waste dump that will remain a potential hazard for at least 10,000 years. PHF-34

So the shoal site is now the subject of a multi-million dollar groundwater monitoring program by the Department of Energy. The Navy DEIS provides not a hint of this activity.

I believe that shoal site is a DOE environmental albatross which the DOE would gladly love the Navy to take over.

In closing, I believe this third round of this land withdrawal process is deficient, and therefore, by default, the no-action alternative should be chosen. I will be submitting my written comments later.

Thank you for this opportunity to comment.

LIEUTENANT COLON: Thank you, sir. We'll now hear from Mr. Ray Salisbury and then after Mr. Salisbury, Nikki Reynolds.

MR. SALISBURY: Thank you for speaking tonight. My name is Ray Salisbury, S-a-l-i-s-b-u-r-y. I'm the chairman of the Lander County Land Use Advisory Planning Commission, and as we know, none of this land would be withdrawn in Lander County. It's all in Churchill County, but Churchill -- or Lander County has always got all the bad things out of the Navy, like overflights.

For example, last night we had airplanes circling Austin clear close to 11 o'clock and maybe they turn around. It's the same airplane. I went outside and I watched that plane went over here, turned, come back over Austin till just about 11 o'clock.

PHF-35

Seems to me like they're harassing us, and so I think that the more land that's withdrawn from the Navy -- for the Navy puts it closer into Lander County, and we get no benefit from the Navy except the noise and things like that.

Sure, it's good for Churchill County. They get all the financial benefits and we get the other stuff, flights at night.

And another thing, there's helicopters fly out there at night and in Lander County and it's sort of scary.

should take up with my politicians, rather than you guys, but I do agree with the questions Grace was just raising.

The first comment I have with regards to EIS, the maps in EIS stink. I mean, it's really hard to tell where we're at here. Unless I pull out a map, a topographic map with townships and ranges and sections on it, it's really hard to see what I'm looking at, because the base map to all of the different, all the different maps in the EIS just show sections and ranges with a couple of roads and I think the Stillwater Wetlands area.

It's really hard to determine exactly what I'm looking at. It would be good to see some mountain outlines, for example. PHR-31

I question the proximity of the Clan Alpine Range to the Dixie Valley. In other words, you show something called the Louderback Mountains between Dixie Valley and the Clan Alpine.

That's very, very small and almost inconsequential. It makes us feel like we're much further away from the Clan Alpines, which is a very significant area. So the maps are kind of misleading.

I'm concerned about the withdrawals of land near the wilderness study areas. The map back there talks about the Job Peak area. PHR-32

I think that in the EIS you need to address

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impact on not only Job Peak, but also Stillwater, Clan Alpine and maybe the impact of airspace on some of the other WSAs, for example, the Desatoyas. I know from experience there is a lot of impact on the Desatoyas. PHR-32

As Charlie Watson mentioned, there is not much discussion on the impact of wildlife. It would be good to see how these withdrawals impact, especially sheep. I believe there's some sheep in a couple of these different ranges. I think it would be good to see -- I know there are in the Desatoyas, and I think there are closer. But it would be good to take a look at that. PHR-33

I guess I would like to wonder why the category B land needs to be withdrawn at all. I mean, it seems like this will cut down on the access, like the Horse Canyon on the west side of the Clan Alpines. Also I question how we'll be able to access the east side of the Stillwaters. PHR-34

I guess until I came tonight I only skimmed the EIS. I hadn't even read much about the ground maneuvers. I would be concerned as well about the ground maneuvers in the Dixie Valley. PHR-35

I guess with that I will close. I really don't -- like I said, I didn't have very much prepared to say. So I will submit additional comments later. Thank you.

LIEUTENANT COLON: Thank you, Mr. Myers.

We'll now hear from Marjorie Sill, and after

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There's three of them in the Smith Creek Valley the other night.

We've had seven airplanes crash in the few years that I've been in Austin. I've been there in Central Nevada 30 years, and I've seen at least seven planes crash out there. Granted, one of them was an Air National Guard plane, but it still endangers us.

We have these planes come over Austin at much lower than the heights that what the demonstration on that Frenchman was, and they're still doing it. We've got a sonic boom today. It wasn't a bad one, but it's -- and maybe it does fly from your operation area, but we're still getting them.

And another thing, in February when all the damage was done to the buildings, it says in the newspapers the Navy's paid for this damage. It is not the Navy. It's US taxpayers that pay for this, and it was unnecessary. PHF-35

And I don't know what you did to them pilots. I hope you didn't pull their wings because we've got too much money invested in them. I'd like to see them pay for some damage, and that would stop some of this stuff.

Probably this is a little emotional tonight, but I have a right to be here where I live and why I live there, and I don't want anybody taking it from us and the people in Central Nevada.

There was no overflights when I first moved there,

and people that move there now should not expect to go through what we've been going through. Thank you.

LIEUTENANT COLON: Thank you, Mr. Salisbury. We'll now hear from Nikki Reynolds. And then Robert Pierson, I believe.

MS. REYNOLDS: Nikki Reynolds, R-e-y-n-o-l-d-s. I'm on the board for the Lahontan Valley Trail Riders. It's a horse group. We're about 30 members now and we use the approach to Bravo-16 quite often. In fact, we're going to go there tomorrow morning.

We don't mind really being flown over by jets. That's just another hazard. There are many of them. And we don't want to be locked out, though. We've come across locked gates at the block house on our way to Hooten Wells and had to go over a very dangerous rocky ridge to get around that fence. It was not easy. My horse almost fell. We could have been hurt. PHF-36

And we were told that the fence wasn't locked there when we complained about it, and I just don't want to see more fences going up and being locked out of the recreational areas.

My son goes out to Sheckler Reservoir for science projects. We don't want to see that drained. We realize the wild fowl there will probably get into the jet engines now and then and that's why I assume that you want to take that as a PHF-37

her -- forgive me if I slaughter your name -- Norvi Enns will be after Marjorie Sill.

MS. SILL: My name is Marjorie Sill, S-i-l-l. I am representing tonight the Toiyabe Chapter of the Sierra Club. We have 4200 members in Nevada and eastern California.

I testified at the scoping hearing at the Airport Plaza. However, I did not receive a Draft EIS. I did call Mr. Dennis's office and ask him to send me one. I still did not receive a Draft EIS, and I borrowed one from a friend this morning and read it for an hour.

So I can only speak to a limited amount of information, what I was able to peruse in an hour in this complicated document. However, I will be submitting written comments, if I can have a copy of the Draft EIS, please. PHR-36

I also made comments about the fact that we need a citizen participation group, and I think I wrote twice to the Commander about this. And I received an answer to my first letter, which I thought was unsatisfactory.

I did not receive an answer to my second letter, and I still think that public participation is the way to go. Because whether we like it or not, I firmly believe that the Navy are the servants of the citizens of the United States, and we are the important people.

I see no reason for the Category B lands to be PHR-37

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withdrawn at all. The BLM can continue to manage these lands if all of the activities can take place, with the exception of building a 50-foot tower. There aren't many 50-foot towers built on BLM lands, and the BLM can say, Don't build any 50-foot towers. PHR-37

If you leave the authority for the Category B lands with the BLM, I think most of us would feel a lot more secure that additional lands, our public lands, our multiple-use public lands would not be taken over.

I would also -- I am also concerned. I notice that your alternative to -- which is your preferred alternative, did drop the withdrawal of the Job Peak Wilderness Study Area, which is listed in Alternative 1. But the boundaries of your withdrawal are extremely close to that area. PHR-38

And the primary interest of the Sierra Club in public lands is wilderness, recreation, wildlife. I think that is much better administered by the Bureau of Land Management. Thank you. PHR-39

LIEUTENANT COLON: Thank you, Miss Sill.

We'll now hear from Norvi Enns, E-n-n-s, and then Gail Chud after Mr. Enns.

MR. ENNS: Yes. I'm Norvi Enns, member of the Reno Gem and Mineral Club and also on the Board of Directors of the California Mineralogical Society. PHR-40

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buffer so you could drain the reservoir. I'm not sure, you know. This is what it looks like. Thank you.

LIEUTENANT COLON: Thank you, Miss Reynolds. We'll now hear from Robert Pierson, I believe it is. And then after Mr. Pierson, Diane Woods.

MR. PIERSON: My name is Bob Pierson, spelled P-i-e-r-s-o-n. We live in the Sheckler District right on Candy Lane.

You really bothered me quite a few times but what bothers me the most is the withdrawal of the ground. We use it for 22 years. We've worked with you people and we've used it. The horse people, motorcycles. No complaints. PHF-38

Now you, like she said, the gates are locked. Last time I was out there, the gate was locked. If we had an emergency, you couldn't get through. Excuse me. I've got an allergy here. I have a tough time breathing tonight.

But they told me at the last meeting down here at Eagle's Hall, I asked them about a withdrawal out there. They said no, they're not going to withdraw anything. This is just strictly going to be for a new approach.

Now we get this, and we have a withdrawal. And I know you guys are going to build a fence around it because everything you get, you build a fence around it. You're as bad as the government. Build that building. PHF-39

So I'd really appreciate it if you didn't build a

fence around it because a lot of people use that feel the same way. Thank you. PHF-39

LIEUTENANT COLON: Thank you, Mr. Pierson. And if I could ask the audience to please refrain from commenting or laughter. The court reporter has a hard time hearing the speakers's comments and we'd like to get an accurate record.

Diane Woods, and then after Diane Woods, Joe Dahl.

MS. WOODS: Hello. My name is Diane Woods, W-o-o-d-s, and I'd just like to say that I think everybody has a lot of legitimate concerns here.

I've been raised in the State of Nevada. My parents live out there, as Captain Ronnie knows, but I think we need to look at the big picture too, and I'd like it to where there's no foreign pilots training on my taxpayer dollars, you know. I don't think we should have German pilots in here. I don't think we should have pilots from any other countries here. I'm a little opposed to the fact that we're leasing out our bases to foreign powers. I don't think there should be any other military on American soil besides US military. That's one thing I think we need to look at. PHF-40

And as far as maneuvers go, if anybody was at home tonight and watched the news, there was a helicopter that went down in Bosnia. Are you aware of that? Well, the only survivors were the Ukrainians on a Soviet helicopter. Five

We've estimated there's probably 1500 ~~mandates~~ days spent in that area collecting gemstones, petrified wood, and we'd like to see that Category B area kept open. Thank you. PHR-40

LIEUTENANT COLON: Thank you, Mr. Enns.

We'll now hear from Gail Chud, and after that Clyde Porter.

MS. CHUD: I'll speak from here. I must have checked the wrong box, because I didn't intend to speak. I am just totally and adamantly opposed to this withdrawal because I think it's unnecessary. PHR-41

LIEUTENANT COLON: Thank you, Miss Chud.

We'll now hear from Clyde Porter, and after Mr. Porter, Mr. Dale Ryan.

AUDIENCE MEMBER: Mr. Porter had to leave.

LIEUTENANT COLON: We'll hear from Mr. Dale Ryan, and then after that Vernon Brechin.

MR. RYAN: Yes. My name is Dale Ryan. It's R-y-a-n. I'm representing the National Pony Express Association and the American Discovery Trial. I'm the Nevada coordinator for the Nevada Discovery Trail.

We're concerned about the accuracy of the map and where it shows the Pony Express Trail. In the 1861 land survey, it appears to us it goes across Bravo 16, the tail end of Bravo 16. PHR-42

The other thing the map doesn't show on the

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Pony Express Trail, the reach between Faraway Site and the Stillwater section. It doesn't show on the map there, which is not at this present time, the Pony Express Association doesn't use that trail, but it is part of the National Historic Trail. PHR-42

The other thing is, we do appreciate the fact the Navy's desire to work with us and become a good neighbor in such allowing the continuation of the Pony Express route. One of the things we're most concerned about is that there be an adequately safe trail across or around the lands.

And we would like to have it marked for the safety of the people that are going to traverse this trail, not only the organized people, but the people that are traveling the trail as individuals of such. Particularly with the interest of the ordnance and such around there. It needs to be marked for some distance preceding in and out of those areas. PHR-43

One of the other things we're real concerned about is, how come the Navy wasn't there 137 years ago to help the keep the Pony Express alive? It would have been really appreciated.

In summary, we would like to work very much with you in adjusting these maps and recognizing the alignment of the trail, and that concludes my speech on this. Thank you.

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Americans died, I think one Canadian, one Frenchman, several others, but I think you ought to study that maneuver, you know. I really do, because I don't think we need foreign powers in this country, and I don't think we should keep giving them our bases or letting them lease them.

If we're that hard up for money, we'd better get it somewhere else. I think we ought to take a cold, hard look at that. Right there. We're losing people overseas on foreign craft. How is it the Ukrainians are alive but all the Americans are dead? You know. Have you wondered about that, or have an explanation to that? I think that's pretty incredible. PHF-40

That I think we better look at the big picture, too, and I don't want, you know, if our memories are only as long as our fanny packs, maybe we need to go back and read our history books. I don't think that my taxpayer dollars should go to fund any other pilots from any other countries here to come over and practice on our soil. And I just wanted to say that. Thank you.

LIEUTENANT COLON: Thank you, Miss Woods. Joe Dahl, and then after Joe Dahl, it looks like Johnnie Bobb.

MR. DAHL: Thank you for this opportunity. I'm Joe Dahl, D-a-h-l. My wife and I live at Smith Creek Ranch between Fallon and Austin, and we live under the military operation area and under the supersonic operations area, and we PHF-41

have an ongoing rapport with the personnel, some of the personnel from NAS Fallon, and we know some of them personally and we admire them. We're patriots and we admire the Navy and we thank God for the protection that they provide us.

We have problems with the Navy living under their operations to the extent that many times the pilots don't obey the rules. There certainly is a safety factor. The issue of tonight, the safety factor of this proposal seems to be a weak excuse in comparison with the safety factor under the entire operations of the Navy. PHF-41

We're opposed to this proposal for tonight. To the extent that we feel that if the -- as Captain Ronnie said in his opening remarks, NAS Fallon does a very good job and we feel that they have enough to continue to do a very good job, and we would like to see them continue do that good job with what they have.

We feel that this is just another step to continuing the expansion which will go beyond Central Nevada clear across Nevada and put a lot more of the residents of Nevada in the situation that we're in.

On the Category B lands, I would like to say that since those lands will then be managed by the Navy and not by the Bureau of Land Management, that we're afraid that the Navy will be able to do, as the years go by, whatever they would like to do with those lands, and the status that we are told PHF-42

LIEUTENANT COLON: Thank you, Mr. Ryan.

We will now hear from Vernon Brechin, and then Wendell Alcorn.

MR. BRECHIN: My name is Vernon Brechin, B-r-e-c-h-i-n. I live in the San Francisco Bay Area Silicon Valley and came up here to comment on NAS Fallon's everlasting and renamed Master Land Withdrawal.

I have spent several years reviewing various federal EIS reports, and this report is consistent with many of the others. It does function to promote the desires of the lead agency NAS Fallon, while treating the natural environment as if it were a well-understood technological machine.

PHR-44

According to Appendix A, the latest round of this withdrawal process started in 1981 with the Range Air Installation Compatible Use Zone Study. Since then two major EIS studies have taken place, and then been shelved before being finalized.

How much has been spent on these terminated studies during the intervening 16 years, and who is held responsible for the massive waste of the public funds and time?

Perhaps the military figures have the resources to outmaneuver those members of the public who oppose its expansion plans. The primary reason I came here has to do

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with an aspect of the proposed withdrawal, which was described in four words in the existing environment section of the several-pound Draft EIS document.

Many of the people here have looked at the displays in this room and have even spent dozens of hours reviewing the archaic EIS report.

Please raise your hand if you remember seeing anything concerning the burial of several pounds of nuclear waste materials at one of these sites?

Okay. I suggest that almost no one knows about this rather significant fact, because the Navy is much more interested in protecting itself from potential liability than it is in protecting the environment and the American people.

PHR-44

In 1963 the DOD, not the AEC, conducted an underground nuclear explosion test at a depth of 1205 feet that yielded 12.5 kilotons of energy or 80 percent of the energy released by the explosion over Hiroshima, Japan. This left something like a million curies of radioactivity below the Schol Site, a site which is named after the explosion code name.

The deposited radionuclides is likely to contain around 2.5 kilograms of plutonian, which will remain a potential hazard for around a million years. In the DEIS section dealing with existing land uses at the Schol Site no mention is made about the ongoing and very expensive

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will put those lands will be under tonight could very likely change as the years and the demands go by.

We feel that if the NAS Fallon could get their pilots to be accountable and obey the rules, the flight rules of their training, then our situation living under them would be much greater and we would have less opposition to any kind of expansion. We feel that before they're given more, that they should learn to behave with what they've got. Thank you.

LIEUTENANT COLON: Thank you, Mr. Dahl. The next speaker was not sure if they wanted to speak or not. Bobb, did you want to speak? And if you could spell your first name because I can't read that.

MR. BOBB: Okay. My name is Johnnie Bob, J-o-h-n-n-i-e, Johnnie. My last name is Bobb, B-o-b-b. I'm from the Yomba Shoshone Tribe by Austin, south of Austin.

My concern was about how many people like the tribes have you guys talked to? Who's all the people that you guys talk to? It seems to me that a lot of these people is complaining about you guy's air flight and the tribe that the people sit in supposed to contact us people, but they haven't been doing that.

It's you guys contacting the ones that's in the office and then -- and they're not replying to us, so I need you guys to maybe send out some kind of a letter to the tribe to tell them, to let us people know what you people are doing.

PHF-42

PHF-43

PHF-44

And then -- let me see. And Western Shoshone Nation, I don't see where you guys on the wall show it, and then I don't see all the places where -- above where the Shoshone peoples are located. I don't see any maps on that. You guys need to get together and, you know, get together with the Indians down on the reservations and talk with them. PHF-45

That's all. Thanks. I'll send in my comments later.

LIEUTENANT COLON: Thank you, Mr. Bobb. That concludes the speaker cards that I have. We'll now open the floor to walk-ups for three-minute intervals. Please state your name, spelling your last name for the record, especially since we don't have a card. Do we have any walk-ups for speaking?

All right. Sir, if you could please state your name, spelling your last name.

MR. STEPHANS: Yes, my name is William E., that's Bill, Stephans, S-t-e-p-h-a-n-s. I'm speaking for myself and I'm an interested resident of Fallon.

What I want to say is I fully support this US's military and this proposal, and I think we really need to look at it from a broad perspective. It seems to me like the comments I've heard tonight are from individuals, isolated cases, and this sort of thing. PHF-46

It seems to me that the sacrifices by us residents

groundwater monitoring program costing over a million dollars.

I believe the DOE considers the Schol Site to be a major thorn in its side and would love the Navy to take over the enormous potential liabilities associated with the site. Even though the DEIS indicates that the Navy consulted with the DOE, there are no DOE references in the reference section of the document. PHR-44

Thank you for your time.

LIEUTENANT COLON: Thank you, Mr. Brechin.

We'll now hear from Mr. Wendell Alcorn, and then after him, Frank Lewis.

MR. ALCORN: Good evening. I'm Wendell Alcorn, A-l-c-o-r-n. I represent the Sierra Nevada Squadron of the Association of Naval Aviation. I most strongly voice my support for Alternative 2 of the Draft Environmental Impact Statement for the withdrawal of public lands for range safety and training purposes at Naval Air Station Fallon, Nevada.

National defense is an issue of critical concern to US citizens. A primary objective of our federal government is to provide for secure borders. Unless this objective is fulfilled, all other aspirations of the American people are in jeopardy. PHR-45

The aviation arm of the US Navy is most often the first to be called to respond to crises around the world.

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The Fallon Training Range Complex is the keystone for assuring Naval aviation forces are prepared to meet any challenge. Our US Navy must be provided the means to train for today's threat and to be able to adapt to rapidly-changing technology, which will bring even more formable threats to our fighting forces.

Millions of taxpayer dollars have been spent in developing the NAS Fallon Training Range Complex, one of the most sophisticated and effective training complexes in the world. The Base Realignment and Closure Act of 1993 recognized the importance of NAS Fallon and transferred numerous functions from other bases to Fallon.

The entire Nevada Congressional Delegation supports these actions. This land withdrawal is necessary to achieve maximum effectiveness for our tax dollars spent and to accommodate the base realignment functions.

PHR-45

The current target complex at NAS Fallon was withdrawn in 1953 and was designated to accommodate World War II and Korean vintage aircraft attackers. The Navy has done a terrific job adapting modern jet aircraft into this confined space, and the results of the training and preparation of our Naval aviation forces was amply demonstrated in the Persian Gulf War.

The point has come that the current Fallon ranges can no longer support the training scenarios that

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of Fallon are small compared to the value, overall value of the training our military people are receiving out here. After all, we're asking our young men and women to defend our country and to sacrifice their lives if necessary and that we ought to be giving them the best training possible.

PHF-46

And we talk about safety here, and I didn't hear anyone mention that the real safety here is in the safety to the United States, safety and security of the United States and all that is provided by our military. Thank you.

LIEUTENANT COLON: Thank you, sir. Are there any other walk-up comments?

Thank you. This concludes our public hearing portion.

(Hearing adjourned at 8:43 p.m.)

STATE OF NEVADA,)
) ss.
COUNTY OF WASHOE.)

I, KRISTINE A. BOKELMANN, a Certified Court Reporter, in and for the County of Washoe, State of Nevada, do hereby certify:

That on Wednesday, September 17, 1997, at the Fallon Convention Center, 100 Campus Way, Fallon, Nevada, I was present and took verbatim stenotype notes of the above-entitled hearing, and thereafter transcribed the same into typewriting as herein appears.

That the foregoing transcript is a full, true, and correct transcription of my stenotype notes of said hearing.

Dated at Reno, Nevada, this 23rd day of September, 1997.

Kristine A. Bokelmann

KRISTINE A. BOKELMANN, CCR #165

would prepare our fighting men and women for the 21st century demands.

In the mid-1960s the Navy showed its good faith by returning over 800,000 acres to the public domain when it was no longer deemed necessary for Navy training functions. I am convinced the same good faith reasoning stands behind this requested withdrawal, and the need truly exists for the additional 125,000 acres.

On a much more personal note, I was one of the people who went into combat in North Vietnam in 1965 without the assistance of the training facility like NAS Fallon. I spent seven and a half years in the jails of North Vietnam and largely because we did not have the knowledge, we did not go into combat nearly as well prepared as what our men and women do today after their training at NAS Fallon. PHR-45

I would contend that those who disagree with this land withdrawal would perhaps be putting more emphasis on, as we've heard, the tui-chub than they would on the safety and combat effectiveness of our Naval forces.

The State of Nevada has historically supported the needs for our military forces. The need for a strong Navy exists as much today as ever in the history of our country.

It is time to move forward on this issue. This has languished and froze in controversy too long. This is

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the time to support Alternative 2 of this Draft EIS. Thank you.

PHR-45

LIEUTENANT COLON: Thank you, Mr. Alcorn.

We'll now hear from Frank Lewis, and then after Mr. Lewis, Melissa Smith.

MR. LEWIS: My name is Frank Lewis, L-e-w-i-s. I live in Reno, Nevada. And I find this Environmental Statement is inadequate where people's private property access is taken away from them, and the statements in this document do not address such things.

I own property in Fairview, patent-deeded property. I own patent-deeded property in Wonder, and I own Water Right Number Six of the State of Nevada on the Horse Creek Ranch.

PHR-4

None of those things are addressed as to when a person might receive compensation for the property that's been taken away from people like myself. And I'm not the only one. There are a lot of people involved, 40 or 50 people at least, whose property access has been taken away from them.

And the only property right they have left is the right to pay taxes to the Churchill County. I don't think any withdrawal should take place until the private parcels of land in these areas are purchased and paid for in a fair and honest fashion.

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I don't think that this Category B is necessary. And the problem is that once it's Category B, it will soon be Category A. That's the way it goes. PHR-46

Thank you very much for listening to me.

LIEUTENANT COLON: Thank you, Mr. Lewis.

We'll now hear from Melissa Smith, and after Miss Smith, Lois Frazier.

MS. SMITH: My name is Melissa Smith, S-m-i-t-h.

Greetings.

Greetings, Commander.

I do have in concerns regarding DEIS for the proposed Master Land Withdrawal for NAS Fallon. Very briefly, I do have a friend who I asked point blank if this land withdrawal was absolutely necessary, was the range adequate at this time.

And he said, Yes, this range is adequate at this time for our needs in the future, because Desert Storm sent over something like 4,000 body bags and a hundred or so were used. It's because of the training, the excellent training that has been done at NAS Fallon. PHR-47

Meanwhile, I would like to complain that while you want to withdraw quite a bit of land around Sheckler Reservoir, it's only a reservoir. TCID fills it every year, except during drought years. PHR-48

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Sheckler is not only used for irrigation. Many migratory birds use this area for flying to and from where they migrate from. Changing the management of Sheckler could lead to a dry reservoir, or worse, a contaminated reservoir. PHR-48

The seepage from Sheckler feeds many wells in the Sheckler District. The groundwater movement has not been studied at all. Not a word of it is in this Draft EIS.

This year during the floods in January, Bravo 16 was flooded. Okay. The water, granted, went to Highway 95, but it could possibly affect the wells in the Sheckler District. PHR-49

Many new homesites are being developed around this reservoir, i.e., Fallon Way. Some are 10 acres, all with a well, all with septic. A groundwater study is very important for this area.

To the east of Sheckler is the Carson Lake area. To the northeast is Stillwater National Wildlife Refuge. These areas have been designated as part of the Western Hemispheric Shore Bird Reserve Network. Though Sheckler reservoir is not included, the passing birds do not know this and stop there. PHR-50

One bird in particular that is mentioned in the back of the book but not in the specific areas is the Loggerhead Shrike. It's a very beautiful bird, but it's a very shy bird. It's very hard to spot and to study. This PHR-51

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bird would not be compatible with any ground exercises whatsoever.

Migratory birds do use all of the watering areas. It's most important to keep these areas available to them. One must keep in mind, some of these birds fly well above some of these areas, such as the American White Pelican, gulls and like the Turkey Vultures.

PHR-52

I have seen very large birds in Dixie Valley, Gabbs Valley, above Allen Springs, Red Mountain, et cetera. They're all through this area. The continuation of jet overflights in the Sheckler/Carson Lake area jeopardizes birds, as well as your pilots.

The Navy has stated it does not need to withdraw all the lands around Bravo 16, yet this still shows in the DEIS. Why?

Would the Navy use this land for ground exercises? What kind of fire protection would you provide? What kind of litter control would be used for pocket flares and ammo? What would the people along Helen's Way think about it?

PHR-53

Okay. 30 seconds.

Chaff, nothing has been mentioned yet about chaff. I counted nine studies. One from the Naval Research Lab 1995, which says it is harmful.

PHR-54

Folks, I'd like to see a copy of this, if

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possible.

I will go on, but my time is pretty much out. I do want to ask about air expansion map. I don't see one in the room. PHR-55

Also, very briefly, the Desert Research Institute has ongoing water studies of the Schol Site. They're monitoring the ground movement, the water movement because of the nuclear explosions. PHR-56

And I very strongly suggest that we do take the no-action alternative. Thank you. PHR-57

LIEUTENANT COLON: Thank you, Miss Smith, and if you'd turn any of your additional comments in to the court reporter, we'll make sure they get into the record.

We'll next hear from Lois Frazier, and then Jerry Lowery.

MS. FRAZIER: My name is Lois Frazier, F-r-a-z-i-e-r. I've heard some very verbal speakers. I'm speaking without notes. I'm representing my progeny, who are native Nevadans, my three-year-old grandson and my 16-year-old grandson. PHR-58

I would like to believe that they're going to have the same opportunity to know Nevada that I've had, and that includes the boondocks, those places that a lot of people view as vast nothingness, and that many of us Nevadans view as vast somethingness.

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I don't know the ins and outs of your technology. I don't know the ins and outs of Navy needs.

I know an awfully lot of people in Millgate, all nine of them. I know a lot of people in Austin. I know a lot of people in Gabbs. I read the media.

And I feel -- and I'm talking emotionally. I'm not trying to talk like these other people have talked. I feel that the Navy has come in and has the attitude of a bunch of city slickers who consider us country -- whatever.

I think that you have shown very little respect for the rights of the people whom you have sonic-boomed. I know people who have lost a lot of money. I know that if my children came to your residences and through rocks and broke windows, if they had sledge hammers and cracked your walls, either I pay up or I get sued.

PHR-58

I don't think that's been happening with the Navy. I feel that you have had very little regard for the people of Nevada and the people whose properties you have damaged. I think your public relations is lousy. I think that barbecues is helping, but they're not doing the job.

I'd like to take this opportunity to thank you for letting me, as an insignificant mosquito, try to bite the butt of an elephant. Thank you.

LIEUTENANT COLON: Thank you, Miss Frazier.

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We'll now hear from Jerry Lowery, and after Mr. Lowery, Minor Kelso.

MR. LOWERY: I'm Jerry Lowery, L-o-w-e-r-y, formerly of Millgate, Nevada. My folks still live there.

My concern is the amount of property or the land that's required by the different agencies, the Air Force, the Navy, Army. I've heard somewhere between 4,688 square miles to somewhere between there and 6,250 square miles. Kuwait is less than that, and you kicked their butts. PHR-59

Why do you need more property in Nevada?

You want to add more. I think it's just way too much more. You did in Kuwait to that country in less time than I think is necessary for this country. I don't think you need that much room in one state equal to what you did in one country.

My biggest concern, though, is wildlife. I don't think there's been enough consideration for the access to guzzlers along the Clan Alpine Range, along Fairview Mountain. You've cut access to hunters. PHR-60

I don't think that -- without compensation, I don't think -- going back to my folks' place out there, that property has been devalued because of your very presence in the area. I think those are my main issues. Thank you. PHR-61

LIEUTENANT COLON: Thank you, Mr. Lowery.

We'll now hear from Minor Kelso, and then from

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Carl Peterson.

MR. KELSO: My name is Minor Kelso, spelled K-e-l-s-o. I'm satisfied the in depth impact studies were conducted concerning the area in question. Nothing was disclosed that precludes the expansion.

Expanded Navy mission at Fallon demands expansion. Nothing in the foreseeable future indicates a lesser need for a well-trained Naval Air Force. PHR-62

Conclusion: The Fallon Naval Air Station should be provided the necessary training area, the additional 127,000.

I might add that the Navy's needs is for all of us. Thank you.

LIEUTENANT COLON: Thank you, Mr. Kelso.

We'll now hear from Carl Peterson, and then from Donald -- I'm going to spell this last name, Ten Eyck, T-e-n-e-y-c-k

MR. PETERSON: My name is Carl Robert Peterson. My last name is P-e-t-e-r-s-o-n. I live in Reno. I've lived here since 1932. I served three years in the Marine Corps. I spent most of my time on an aircraft carrier, the Bon Homme. PHR-63

What I'm saying is, the Navy has to have the finest training. Many of these people here are not familiar with the ocean. When those aircraft carriers are out there, those pilots have to have the finest training. If they

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don't, they don't get back from those carriers.

A lot of people aren't aware that when those carriers are out there, they're out there for months at a time. When I was out there with them, I saw many hundreds and hundreds and thousands of airplane takeoffs and landings, and a lot of them landed in the ocean.

PHR-63

A lot of men were killed, and a lot of pilots. We owe it to them and the Navy to have the best Naval Air Station in the United States, and that's Fallon Nevada. Thank you.

LIEUTENANT COLON: Thank you, Mr. Peterson.

We'll now hear from Donald Ten Eyck, and then Lee Carter.

MR. TEN EYCK: My name is Donald Ten Eyck, spelled T-e-n, capital E-y-c-k. My comments will be brief because I will mail written comments to the address provided.

I support the Navy's requested land withdrawal. I understand that the Navy has been requesting additional land for training for over 12 years. It is now time to approve their request.

PHR-64

It is also my understanding that NAS Fallon has been addressing the problems of their neighbors in Churchill County and will continue to do so. It is very important to me that Navy and Marine Corps pilots have the best possible training facility as possible, and that the land withdrawal

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will help protect the public.

PHR-64

Thank you very much.

LIEUTENANT COLON: Thank you, Mr. Ten Eyck.

We'll hear from Mr. Lee Carter, and then Christina Graf.

MR. CARTER: I had written no on mine. I'm Lee Carter.

LIEUTENANT COLON: Yes, sir. Do you just wish to submit written comments?

MR. CARTER: I have.

LIEUTENANT COLON: All right. Thank you.

Christina Graf, you said you wished to speak this evening. Graf, G-r-a-f?

Okay. We have another request from Craig Bell.

MR. BELL: My name is Craig Bell, B-e-l-l. I'm presently the President of the Reno Counsel of the Navy League. I've served as a department head on one of the carriers during the Vietnam War.

And I'd like to highly endorse what's going on here, as far as the Navy. I think it's been a well-studied procedure that they've gone through. They've bent over backwards to accommodate the people that can voice an opinion on this.

PHR-65

When we ask our young men and women in this day and age of very technical warfare to go in harm's way, we owe

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them only the very best. And I think this expansion will help provide that. Thank you.

LIEUTENANT COLON: Thank you, Mr. Bell.

We'll now hear comments from Christine Smith.

MS. SMITH: Boy, that was fast. I just handed in my paper.

Although I have a number of written comments that I'm going to submit, I wanted to take the opportunity to read a couple of them. PHR-66

Captain Ronnie, you mentioned earlier this evening that these mitigations would be taken care of when it came to the grazing, water rights and the oil and gas lease, but it doesn't really say how it's going to be taken care of in the Draft EIS.

I'm strongly opposed to the concept that adverse impacts to mining, grazing, water rights, and the oil and gas lease are unmitigable, as it says in the DEIS. The Navy's proposed mitigation is vague. PHR-67

The Navy should assess the potential adverse impact to effected minors and ranchers and oil and gas lease holders and water rights holders, and include compensation as part of mitigation. A plan for compensating effected miners, ranchers, et cetera, should be included in the final draft. PHR-68

Thank you. That takes care of it.

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LIEUTENANT COLON: Thank you, Miss Smith.

That concludes the cards that were turned in earlier.

Oh, we have another card?

MS. STRICKLAND: Not a card, just a request to speak.

LIEUTENANT COLON: Since we've finished with the people who have turned in cards, you may speak. We're still going to hold everybody subject to the three-minute rule. That way if there's other people that want to speak, they'll have an opportunity.

If you would please, since I don't have a card for you, state your name and spell your last name and what group you're representing or what community you're from.

MS. STRICKLAND: My name is Rose Strickland. I live in Reno, Nevada, and I represent myself. Good evening. Thank you very much for holding this hearing in Reno tonight.

Much of the recreational use of the area proposed for withdrawal comes from Nevada's urban areas. I will submit written comments, but I wanted to have a few oral comments tonight based on my sketchy review so far of the EIS.

I may be the only one in the room, but I actually opposed withdrawal of areas contaminated with

PHR-69

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ordnance. I believe this is a negative incentive for good stewardship of land.

It's an incentive for the Navy to keep on expanding areas contaminated with ordnance outside of its ranges. I think instead that the Navy should clean up the contaminated areas and return them to public multiple uses. PHR-69

I was a little confused about how dangerous these areas are, because I think I read in the EIS that some of these areas will be used for military ground activities. I don't want Navy guys out there if they're dangerous either. If they're too dangerous for the public, they're too dangerous for the military to use on the ground. PHR-70

I believe that the joint management of the areas with the BLM is unworkable. BLM has a multiple-use mandate, and the Navy has its own military mandate. PHR-71

It's difficult to mesh -- I know it's difficult to mesh both of these missions. What I would recommend is that the Navy follow through and appoint a citizen advisory committee, because a citizen advisory committee could help accommodate both missions. PHR-72

Also the BLM has a resource advisory committee made up of a broad spectrum of public land users. Naval needs, military needs could be brought in front of the resource advisory committee too. And certainly the Navy could conduct its activities under special-use permits, the PHR-73

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same as anybody else who wants to do special activities on public lands.

In terms of public health and safety, the withdrawal is proposed for this purpose, I would prefer that the Navy work on preventing sonic booms over Austin and other inhabited areas, as well as reduce the impact of very low, on-the-deck flights over the rest of the public lands, which is very intimidating for those of us who are out there on the land, especially on horseback.

I'm disturbed the ground maneuvers are included without prior public notice. I couldn't find any alternatives in the DEIS for other of NAS controlled areas or other of the four million DOD areas in Nevada for ground-use maneuvers, nothing in the DEIS to support the need for additional lands due to technological improvement.

It seems like to me that new technology would require less land, not more land. If new technology will continue to require more and more public land withdrawals, does this mean that we'll be having constant Navy requests for more and more public land withdrawals in the future as technology improves?

Also I'd like you to consider a new alternative: The Navy should convey it's acquired land in Dixie Valley to BLM for multiple uses in mitigation for public lands already withdrawn for Navy use around Fallon.

PHR-73

PHR-74

PHR-75

PHR-76

PHR-77

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Thank you.

LIEUTENANT COLON: Thank you, ma'am.

Would anyone else like to speak?

Please come forward to the microphone, state your name, spelling your last, and what community or organization you represent.

MR. PORTER: You have a card from me. It's Clyde Porter.

LIEUTENANT COLON: All right, sir.

MR. PORTER: I would say that as an individual and as a fond supporter of the ANA, I really appreciate the spirit of these particular hearings and the rationale behind both sides.

I, as a citizen of the United States, ultimately respect the rights of private property, but in my working in personal experiences with the Navy, I have witnessed absolute reasonable behavior on your behalf to take care of any responsibility regarding a person's freedom and rights to property.

And as I viewed the actual size of the area being something like 200 square miles ultimately, and I realize that that is really about the size of the Reno/Sparks area in a spot 10 by 20. That seems to be not very big in Nevada, but, of course, it's huge if you own the property that's on it.

PHR-78

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But in the spirit of the entire matter, I would confess that I dream of a better world in which this is all not necessary. But in the face of the fact that it is and we stand constantly facing criminals who consistently carry bigger guns, I think it's absolutely essential that we have well-trained people to deal with our protection and the protection and the rights of others. And I see no other way around it.

PHR-78

Of course, if I owned the property I'd like you to pick something else. If you can't pick something else, I certainly know that you'll be seeing to the remuneration and settling of differences regarding these properties.

I have to say I wholeheartedly support the land acquisition and anything that you want to do with it. Thank you.

LIEUTENANT COLON: Thank you, Mr. Porter.

Is there anyone else who would like to speak?

All right. Thank you very much. This concludes our proceedings. You can stay if you'd like and ask questions. And if you have any written comments, please turn them in.

(Proceedings concluded at 9:15 p.m.)

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STATE OF NEVADA,)
) ss.
COUNTY OF WASHOE.)

I, CINDY LEE BROWN, Certified Court Reporter of the State of Nevada, do hereby certify;

That I was present in the above-entitled proceeding on September 16, 1997, and took verbatim stenotype notes of the proceeding, and thereafter transcribed the same into typewriting, as herein appears;

That the foregoing transcript is a full, true and correct transcription of my stenotype notes of said hearing.

Dated at Reno, Nevada, this 1st day of October, 1997.

Cindy Lee Brown

CINDY LEE BROWN, CCR #486

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Fallon Public Hearing Transcript

The transcript from the public hearing held in Fallon, Nevada, on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a designation of PHF. The PHF transcript has been divided into discrete comments as delineated by the comment designation in the right hand margin of the transcript and in the left hand column of the table below. Responses to each discrete PHF transcript comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters and transcripts in this volume of the Final EIS.

Comment Designation	Response Location
PHF-1	27a
PHF-2	20m
PHF-3	25h
PHF-4	1c
PHF-5	29b
PHF-6	20a
PHF-7	20b
PHF-8	22d
PHF-9	29c
PHF-10	6c
PHF-11	26wwwwwwwww
PHF-12	5a, 5l
PHF-13	26xxxxxxxxx
PHF-14	26xxxxxxxxx
PHF-15	26xxxxxxxxx
PHF-16	7c
PHF-17	21c
PHF-18	2e
PHF-19	29k
PHF-20	7a
PHF-21	19a
PHF-22	26yyyyyyyyy
PHF-23	29l
PHF-24	26zzzzzzzzz
PHF-25	26aaaaaaaaa
PHF-26	26bbbbbbbbbb
PHF-27	26ccccccccc
PHF-28	26ddddddddd
PHF-29	26eeeeeeeee
PHF-30	29m
PHF-31	7a
PHF-32	26xxxxxxxxx
PHF-33	7a, 7b

Fallon Public Hearing Transcript

Comment Designation	Response Location
PHF-34	8a
PHF-35	29n
PHF-36	6d
PHF-37	13f
PHF-38	6d, 7b
PHF-39	5f
PHF-40	29b
PHF-41	27a
PHF-42	5f
PHF-43	29h
PHF-44	16o
PHF-45	16j
PHF-46	27a

Reno Public Hearing Transcript

The transcript from the public hearing held in Reno, Nevada, on the Draft Environmental Impact Statement for the Withdrawal of Public Lands for Range Safety and Training Purposes has been given a designation of PHR. The PHR transcript has been divided into discrete comments as delineated by the comment designation in the right hand margin of the transcript and in the left hand column of the table below. Responses to each discrete PHR transcript comment have been provided in the Response to Comments section of the Final EIS in the location indicated in the right hand column of the table below. The Response to Comments section precedes the comment letters and transcripts in this volume of the Final EIS.

Comment Designation	Response Location
PHR-1	2c
PHR-2	2b, 13h
PHR-3	9b
PHR-4	10b
PHR-5	12f, 12h
PHR-6	12f
PHR-7	3b
PHR-8	1b, 22c
PHR-9	7a
PHR-10	16a
PHR-11	7a
PHR-12	29j
PHR-13	1b
PHR-14	1j
PHR-15	1e
PHR-16	5c
PHR-17	10b, 10f
PHR-18	2e, 4a
PHR-19	29n
PHR-20	2b
PHR-21	2d
PHR-22	13a
PHR-23	20a
PHR-24	29a
PHR-25	26fffffffff
PHR-26	9b
PHR-27	1e
PHR-28	7a
PHR-29	16a
PHR-30	3a, 3c, 29a
PHR-31	25a
PHR-32	20p
PHR-33	13c
PHR-34	20a
PHR-35	26gggggggggg

Reno Public Hearing Transcript

Comment Designation	Response Location
PHR-36	4a
PHR-37	5d
PHR-38	20p
PHR-39	5d
PHR-40	18h
PHR-41	28a
PHR-42	25l
PHR-43	20n
PHR-44	8a, 8e
PHR-45	27a
PHR-46	6a
PHR-47	26hhhhhhhhhh
PHR-48	13f
PHR-49	21d
PHR-50	13f
PHR-51	13a
PHR-52	13j
PHR-53	7b
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PHR-55	26wwwwwwwww
PHR-56	26jjjjjjjjjj
PHR-57	28a
PHR-58	29h
PHR-59	29a
PHR-60	13c, 20m
PHR-61	6a
PHR-62	27a
PHR-63	27a
PHR-64	27a
PHR-65	27a
PHR-66	6a
PHR-67	6a
PHR-68	6a
PHR-69	22b, 22c
PHR-70	21g
PHR-71	5c
PHR-72	4a
PHR-73	5c
PHR-74	26kkkkkkkkkk
PHR-75	9b, 1e
PHR-76	29o
PHR-77	6c
PHR-78	27a