Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada

Navy Integrated Natural Resource Management Plan, Amendment to the BLM Lahontan Resource Management Plan, and Environmental Assessment

September 2001

Department of the Navy

Naval Air Station Fallon
Fallon, Nevada

US Department of the Interior

Bureau of Land Management
Carson City Field Office

Bureau of Land Management Mission

The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based upon 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.

NAS Fallon Mission

To provide the most realistic integrated air warfare training support available to carrier air wings, Marine air groups, tenant commands and individual units participating in training events including joint and multinational exercises, while remaining committed to its assigned personnel. In support of these critical training and personnel requirements, NAS Fallon will continually upgrade and maintain the Fallon range complex, the airfield, aviation support facilities and base living/recreation accommodations, ensuring deployed unit training and a local quality of life second to none.

BLM/CC/PL-01/014+1790

FINAL BUREAU OF LAND MANAGEMENT AND NAVY RESOURCE MANAGEMENT PLAN FOR CERTAIN FEDERAL LANDS IN CHURCHILL COUNTY, NEVADA

NAVY INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN, AMENDMENT TO THE BUREAU OF LAND MANAGEMENT LAHONTAN RESOURCE MANAGEMENT PLAN, AND ENVIRONMENTAL ASSESSMENT

INTRODUCTION

Upon passage of the Military Lands Withdrawal Act of 1999, Congress directed the Secretary of the Interior to prepare, in consultation with the Secretary of the Navy, a management plan for withdrawn lands at Naval Air Station (NAS) Fallon. This requires the Bureau of Land Management (BLM) to amend the Lahontan Resource Management Plan (RMP). The Management Area includes all lands controlled by the Navy in addition to three BLM parcels requiring management updates (Figure 1-1).

Under the Sikes Act Improvement Act of 1997 (16 U.S.C. Section 670a et seq. and Public Law 105-85), Congress directed the Secretary of Defense to implement a program to conserve and rehabilitate natural resources on military installations. To facilitate the program, the secretary of each military service (e.g., Department of the Navy) shall prepare and implement an Integrated Natural Resources Management Plan (INRMP) for each military installation located in the United States. For NAS Fallon, lands subject to the Act include NAS Fallon Main Station, Navy acquired lands within the B-20 Training Range, and Navy acquired lands within the Dixie Valley Training Area (Figure 1-1).

The BLM Carson City Field Office and NAS Fallon agreed that one plan to meet both agencies' requirements should be prepared. This approach is cost effective, provides consistent management across differing jurisdictions, avoids unnecessary redundancy, optimizes the use of scarce resources, and promotes collaboration and partnering. The result of this cooperative effort is the combined document entitled "Final Bureau of Land Management and Navy Natural Resources Management Plan for Certain Federal Lands in Churchill County, Nevada" that includes the Navy Integrated Natural Resources Management Plan, Amendment to the Bureau of Land Management Lahontan Resource Management Plan, and Environmental Assessment. This combined document is hereafter referred to as the "INRMP/RMPA".

PURPOSE AND NEED

The purpose of the INRMP/RMPA is to identify natural resource management issues within the Management Area, to define management responsibilities, and to guide management practices

for these issues. This Final INRMP/RMPA supports the military mission, protects the ecological condition, and provides for appropriate public uses of Navy-owned and withdrawn lands.

The need for this document is based on the requirements of the Military Lands Withdrawal Act of 1999 (Act), which states that "during the period of the withdrawal of lands under this subtitle, the Secretary of the Interior shall manage the lands withdrawn by section 3011 pursuant to the Federal Land Policy and Management Act..." and that the "Secretary of the Interior, after consultation with the Secretary of the military department concerned, shall develop a plan for the management of each area withdrawn by section 3011 during the period of withdrawal under this subtitle." Section 3014(c) of the Act stipulates that the Secretary of Interior, in consultation with the Secretary of the Navy, is required to prepare a management plan for withdrawn lands at NAS Fallon.

The need for the document is also based on the requirements of the Sikes Act Improvement Act of 1997 (SAIA), which requires military installations to develop INRMPs that provide, to the extent appropriate and applicable, for the "...establishment of specific natural resource management goals and objectives and time frames for the proposed action." An INRMP is needed to formalize the principles of ecosystem management as part of NAS Fallon's natural resources program. It is the Department of the Navy's policy to incorporate ecosystem management as the basis for planning and managing Navy lands.

LOCATION

All lands within the Management Area are located in Churchill County, Nevada and are divided into four geographic/management areas: NAS Fallon Main Station (six miles southeast of Fallon, NV), Fallon Range Training Complex (FRTC) (training ranges B-16, B-17, B-19, B-20), Dixie Valley Training Area (north of US Highway 50, 35 miles east of NAS Fallon Main Station), and Other Lands (Grimes Point/Hidden Cave Archaeological Area, Sand Mountain Recreation Area & Sand Springs Parcel, Cold Springs Historical Area, Shoal Site) (Figure 1-1).

INRMP/RMPA MODIFICATIONS

A Proposed Action and a Continuation of Current Management Alternative (No Action Alternative) were analyzed in the May 2001 environmental assessment, included as part of the proposed INRMP/RMPA. Based on that analysis, subsequent public and internal input, consultation with U.S. Fish and Wildlife Service, Department of Energy (DOE), Nevada Division of Wildlife (NDOW), Churchill County, and other agencies, the final INRMP/RMPA was developed. Several wording modifications have been included in this final document to provide explanation or clarification of the decision. Based on comments received, the following addition was included in the final INRMP/RMPA decision:

- Added the following title and bullets under Other Lands

  Water Resources and Water Rights

  - At the Shoal Site institutional control of the deep subsurface will be maintained and long-term subsurface monitoring and surveillance is planned for at least 50 years by the Department of Energy (DOE).
  - The Navy and BLM will not allow access to the subsurface by drilling or by any other means and/or removal of any subsurface material from

the Project Shoal Site, without thorough evaluation and coordination with the DOE.

FINAL INRMP/RMPA DECISION

The overall goal of the INRMP/RMPA is to provide a means for BLM to manage the natural resources on the newly withdrawn lands in accordance with the Military Lands Withdrawal Act of 1999 and to provide a means for the Navy to meet regulatory requirements of the Sikes Act Improvement Act of 1997 and to sustain military readiness on lands administered by NAS Fallon. The INRMP/RMPA also defines the cooperative and independent roles and responsibilities of NAS Fallon and BLM Carson City Field Office in managing the natural resources on withdrawn lands within the Management Area. Any requirement for the payment or obligation of funds, pursuant to the INRMP/RMPA, shall be subject to the availability of funds appropriated by Congress, and no provision herein shall be interpreted to require obligation or payment of funds in violation of any applicable law, including the Anti-Deficiency Act, 31 U.S.C. Section 1341 et seq.

The final decision consists of the following elements:

Measures Common to All Areas

The following management measures apply to the entire Management Area.

Noxious Weeds Management

- Navy and BLM will coordinate with appropriate agencies and will implement approved integrated pest management plans to control and remove undesirable vegetation.

Fire Management

- The BLM will integrate all Navy closed and open lands, except the Main Station, into the Fire Management Final Plan Amendment (BLM 1998). Currently fire management is handled by the NAS fire department. Due to the location and proximity to BLM lands, incorporation of Navy lands (not including the Main Station) into the Fire Management Final Plan Amendment is effective and efficient. The plan amendment assigns fire management categories to all public lands managed by the Carson City Field Office. The four categories are as follows:

  - Category A. Those areas where wildfire suppression is warranted, including threatened and endangered species habitat and urban/wildland interface. Full suppression of wildfires will be the objective.
  - Category B. Those areas where wildfire suppression is not warranted, but where, if fires occur and escape, management options on how to suppress the fire are available. Escaped fire will be closely analyzed to protect life, then property, then natural resources, and suppression strategies that will most effectively meet these goals will be used.
  - Category C. Those areas where fire has a significant role in the environment and where wildfire should be used to accomplish resource management goals. Constraints exist but are generally localized (e.g., small towns, ranches, riparian

sites), and will require buffer zones of full protection and fuels treatments; but as a whole, the areas are delineated for the beneficial effects of fire.
- Category D. Those areas where wildfire should be allowed to burn in a mostly unrestricted fashion to achieve resource objectives. All fires receive a response and will be evaluated for potential threats or negative impacts. Fire suppression will be limited to protecting small sites with constraints (such as ranches, improvements, or riparian zones).

- All Navy withdrawn and owned lands will be assigned a category to match those of adjacent BLM lands, most likely Category D.
- BLM will assist the Navy in developing and implementing fire prevention measures pursuant to the Military Lands Withdrawal Act of 1999.
- Pursuant to the Navy and BLM mutual aid agreement, both agencies would conduct air and ground suppression activities where they are determined to be necessary and safe.
- The Navy and BLM will coordinate with the appropriate agencies (i.e., State of Nevada and Churchill County) for fire suppression activities.

Wildlife Management
- BLM and Navy will jointly coordinate with Animal Plant Health Inspection Service (APHIS) for predator control, when needed.
- BLM and NDOW will coordinate to assess the potential for sage grouse habitat within the Management Area.

Recreation Management
- All organized recreation activities will be managed by BLM in consultation with the Navy.

Cultural Resources
- BLM and Navy will preserve, protect, and interpret significant cultural resources by preparing an agreement document between the Navy, BLM, and the Nevada State Historic Preservation Officer (SHPO), which defines how the Navy and BLM will implement the National Historic Preservation Act (NHPA).
- The Navy/BLM will coordinate with Native American tribes and individuals in accordance with BLM policy.
- Navy/BLM will prepare treatment options for contextual studies.
- Navy/BLM will perform research projects to aid contextual studies.
- Navy and BLM will share cultural information.
- All proposed Navy/BLM activities will be subject to NHPA Section 106 review.

NAS Fallon Main Station

- The following management measures apply to the NAS Fallon Main Station only.

Wildlife
- The Navy will explore the potential to develop a hunting program, for game birds and deer, on lands away from military facilities and runways.

Recreation

- The Navy will assess improvements to the nature trail (for example, tree plantings) to benefit the public and natural resources.

Fallon Range Training Complex (FRTC)

- The following management measures apply to the FRTC only.

Livestock Grazing

- BLM will manage livestock grazing on the open withdrawn lands at B19 in a manner consistent with adjacent public lands.
- BLM will amend the existing permits for livestock grazing on lands closed to public access by the Military Lands Withdrawal Act of 1999. This amendment will consist of a livestock management decision to reduce animal unit months (AUMs) as a percentage of the allotment converted to closed status. The Navy will investigate the purchase of lost livestock AUMs contingent on Congress approving funds.

Wildlife Management

- The Navy, BLM, and NDOW will coordinate to develop a cooperative agreement to provide access to the six wildlife guzzlers located south of Fairview Peak.
- Per agreement with NDOW, the Navy will provide access for the annual bighorn sheep hunt on closed lands at B-17. Safety briefings and range access are required components of this agreement.

Minerals and Energy

- The Navy will assess the purchase of patented mining claims on closed lands, contingent on Congress approving funds.

Dixie Valley Training Area

The following management measures apply to the Dixie Valley Training Area only.

Livestock Grazing

- The BLM will manage livestock grazing on Navy-owned and withdrawn lands in a manner consistent with grazing practices on adjacent public lands and as per amended BLM allotment management plans (AMP).
- The existing BLM AMPs for the three allotments adjacent to Navy Lands will be amended to include the management of the Navy lands.
- The BLM will consult with the Navy prior to construction or removal of range improvements on Navy-owned and withdrawn lands.
- The Navy will maintain fences and gates to prohibit grazing from Horse Creek.

Wetland and Riparian Management

- The Navy and BLM, in coordination with NDOW, will determine if additional management

is required for the riparian area at Horse Creek.

Water Resources and Water Rights

- The Navy will coordinate with appropriate agencies to determine what specific ponds (if any) should be maintained in Dixie Valley. Specific management responsibilities will be defined through a cooperative agreement, and the appropriate agency would apply for the water rights.

Vegetation Management

- The Navy and BLM will delineate existing vegetation areas that depend on water from existing flowing wells (e.g., in Settlement Area), which support both military training and wildlife habitat.
- Management of delineated areas will require a new water right filing with the State of Nevada for a new beneficial use for wildlife. Management of these areas will include fencing.

Sensitive Species Management

- The Navy will coordinate with the appropriate agencies (e.g., BLM, USFWS, NDOW, and Churchill County) to develop a tui chub conservation agreement. In the interim, the Navy will continue to manage the ponds using existing management practices.

Lands

- The Navy will assess the feasibility of transferring the 760-acre Dixie Meadow to the BLM.
- Interim management of the Dixie Meadows will be to maintain existing natural aquatic and riparian conditions.

Recreation

- The Navy will maintain the current level of public access to the newly withdrawn lands as compatible with the military mission.
- The Navy will open its lands to public access to the extent compatible with the military mission.
- The Navy and BLM will assess improving existing recreation facilities at Horse Creek and establishing a trailhead to the Clan Alpine Wilderness Study Area (WSA).
- The Navy will change the existing "open" designation for off-highway vehicle (OHV) use to "limited to existing roads and trails" on Navy-owned and open withdrawn lands.

Minerals and Energy

- BLM will manage leaseable and saleable minerals on Navy-owned and withdrawn lands in coordination with the Navy.

Other Lands

The following management measures apply to the specific areas described only.

Livestock Grazing

- BLM will manage livestock grazing on the open withdrawn lands at the Shoal Site in a manner consistent with grazing practices on adjacent public lands.

Lands

- The Navy will assess the feasibility of transferring the jurisdiction of the 86-acre Sand Springs Parcel to BLM.

Minerals and Energy

- BLM will pursue withdrawal of locatable minerals from operation of the 1872 Mining Law at Grimes Point Archaeological Area, Sand Mountain Recreation Area, and the Cold Springs Historical Area.

Water Resources and Water Rights

- At the Shoal Site institutional control of the deep subsurface will be maintained and long-term subsurface monitoring and surveillance is planned for at least 50 years by the Department of Energy (DOE).
- The Navy and BLM will not allow access to the subsurface by drilling or any other means and/or removal of any subsurface material from the Shoal Site without thorough evaluation and coordination with the DOE.

CONSULTATION AND COORDINATION

Scoping

This INRMP/RMPA has been developed through a joint planning process for BLM and NAS Fallon. Public scoping was initiated with a notice published in the Federal Register in May 2000. Notices of public open houses and invitation for public comment were published in local newspapers and sent to known interested parties, government entities, and the Nevada State Clearinghouse. This was followed by two public open houses held in Fallon and Reno, Nevada in June 2000. A total of five scoping comment letters were received.

Draft INRMP/Proposed RMPA

A Notice of Availability, Public Meeting, and Protest Period for the proposed "Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada" was published in the Federal Register on May 16, 2001. A news release was sent to area newspapers and the document was sent to 122 interested parties, government entities, and the Nevada State Clearinghouse. A public open house was held in Fallon, Nevada on June 6, 2001 and was attended by two individuals. A summary of comments and BLM/Navy responses from the four letters received are found beginning on page 10 of this document. No protests were filed and an expedited Governor's Consistency Review, negotiated with the Nevada State Clearinghouse, was completed.

Native American Consultation

Consultation has been conducted and is ongoing with the Fallon Paiute Shoshone Tribe, and the Walker River Paiute Tribe in conformance with the Native American Graves Protection and

Repatriation Act, the American Indian Religious Freedom Act, and the Environmental Justice Executive Order 12898.

DECISION RECORD/FINDING OF NO SIGNIFICANT IMPACT

DECISION

The "Final Bureau of Land Management and. Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada" is approved, as proposed.

RATIONALE

Upon passage of the Military Lands Withdrawal Act of 1999 (PL 106-65, section 3014), Congress directed the Secretary of the Interior, in consultation with the Secretary of the Navy, to prepare a management plan for withdrawn lands at the Naval Air Station Fallon (Navy). Under the Sikes Act Improvement Act of 1997 (16 U.S.C. Section 670a et seq. And Public Law 105-85), Congress directed the Secretary of Defense to implement a program to conserve and rehabilitate natural resources on military installations. To facilitate the program, the secretary of each military service (e.g., Department of the Navy) shall prepare and implement an Integrated Natural Resources Management Plan (INRMP) for each military installation. The Bureau of Land Management Carson City Field Office (BLM) and the Navy agreed that one plan to meet both agencies' requirements would be prepared as a personnel and cost-saving strategy. The Draft Integrated Natural Resources Management Plan (INRMP - Navy), Proposed Amendment to the BLM Lahontan Resource Management Plan (RMPA - BLM), and Environmental Assessment (EA) were developed and issued jointly by the BLM and the Navy in May 2001 as the "Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada". The EA analyzed two alternatives, the Proposed Action and the Continuation of Current Management Alternative (No Action). A total of four comment letters were received during the 30-day comment and protest period and several editorial changes were made to the document for clarification. All modifications are within the scope of the two alternatives and have, therefore, been fully analyzed in the EA. This Final INRMP/RMPA defines the cooperative and independent roles and responsibilities of the Navy and BLM in managing the natural resources on withdrawn lands within the defined Management Area.

FINDING OF NO SIGNIFICANT IMPACT

Pursuant to Council on Environmental Quality regulations (40 CFR 1500-1508) implementing procedural provisions of the National Environmental Policy Act, the Department of the Interior and the Department of the Navy gives notice that an Environmental Assessment (EA) has been prepared and an Environmental Impact Statement is not required for the implementation of the combined document entitled "Final Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada". that includes the Navy Integrated Natural Resources Management Plan, Amendment to the Bureau of Land Management Lahontan Resource Management Plan, and Environmental Assessment.

The proposed action is to implement the proposed management measures as described in the above document to fulfill the requirements of the Military Lands Withdrawal Act of 1999 and the Sikes Act Improvement Act of 1997. Environmental impact issues addressed in the EA include Livestock and Rangeland, Wild Horses Management, Water Resources and Water Rights, Wetland and Riparian Habitat, Vegetation, Noxious Weeds, Wildlife, Sensitive Species,

Soil and Air Resources, Fire Management, Lands, Recreation, Visual Resources, Minerals and Energy, Cultural Resources, Socioeconomics and Environmental Justice.

U.S. Fish and Wildlife Service, Department of Energy (DOE), Nevada Division of Wildlife, Churchill County, Fallon Paiute Shoshone Tribe, Walker River Paiute Tribe, and other agencies provided input to the development of this document. Letters of accord for the U.S. Navy's Integrated Natural Resources Management Plan portion of the "Final Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada" have been received from the U.S. Fish and Wildlife Service and Nevada Division of Wildlife.

The EA also addresses cumulative impacts that could result from the incremental impact of the proposed action when added to other past, present, or reasonably foreseeable future actions occurring at NAS Fallon. Review of the potential environmental impacts of this project, combined with those associated with implementation of the proposed action, indicated that no significant cumulative impacts would occur.

Based on the information gathered during preparation of the EA, the Department of the Interior and the Department of the Navy find that implementation of the proposed action would not have a significant impact on the quality of the human or natural environment or generate significant controversy.

APPROVED:

Date 10 Oct 2001

A.E. Rondeau
Rear Admiral, U.S. Navy
Deputy Chief of Staff for
Shore Installation Management,
U.S. Pacific Fleet

Date 10-16-01

Robert V. Abbey
State Director, BLM Nevada

SUMMARY OF COMMENTS AND RESPONSES

Total of 4 comment letters received.

General to all areas

1. *Concern that the coordination required by the BLM and Navy created conflicts of interest between the public and military needs.*

Preparation of the INRMP/RMPA was coordinated with local government, state government, other federal agencies, Indian Tribes, and the general public.

2. *Concerned that the Navy portion of the planning process was driven by traditional mission requirements.*

The INRMP/RMPA balances military training needs with natural resource management in accordance with the withdrawal legislation and other applicable laws.

3. *Desire for BLM to not issue the final plan amendment until the Navy completes decontamination report, or state in the plan that such a report has not been completed.*

Congress mandated the completion date for the INRMP/RMPA. The decontamination report is not applicable to INRMP/RMPA.

4. *Request for clear statement in Users Guide as to who NEPA reviewers are.*

The users guide was designed to aid anyone reviewing the INRMP/RMPA.

5. *Request for document to be sent to Region 9, Office of the U.S. Environmental Protection Agency (EPA) and the Council on Environmental Quality (CEQ) in Washington D.C.*

Land Use Plans and Environmental Assessment are not sent to the EPA or CEQ.

6. *Concern that there was a lack of information of existing Navy wildlife management.*

This information is addressed in Chapter 3, Existing Environment.

7. *Requested specific circumstances under which predator control would be allowed.*

Predator control is initiated when private individuals request assistance from Animal Plant Health Inspection Service (APHIS). This is on a case-by-case basis and is unavailable for inclusion in the INRMP/RMPA.

8. *Requested specific strategies to protect land on which sage grouse are found.*

Sage Grouse are not found anywhere on the lands managed by the INRMP/RMPA, however the INRMP/RMPA proposes to continue to look for Sage Grouse in the most likely areas. If Sage Grouse should start using these lands, specific management measures would be developed.

9. *Recommended a section on noise from training be included.*

The INRMP/RMPA does not address noise because no management actions will affect the amount of noise associated with training. Additionally, training noise has been previously analyzed in previous EISs.

10. Concerned with the lack of information on contaminants and how they affect soils, and air and water quality,.

Additional information has been added to the text in Chapter 3, Existing Environment.

11. Requested information on the Installation Restoration Program (IRP).

The IRP is independent of the INRMP/RMPA. The IRP conducts regular public meetings regarding clean up of contaminated sites. Limited text has been added in Chapter 3, Existing Conditions.

12. Requested information on rifle ranges and the potential for lead contamination of wetlands.

Separate NEPA was done for the rifle range on B-19. Lead contaminant migration is dependent on water, and the range is in a sand dune with no water resources and there are no jurisdictional wetlands on Navy Ranges.

13. Suggested the Navy manage all wetlands whether jurisdictional or not.

Navy is unable to manage for anything beyond the legal requirement due to reduced budgets.

14. Concerned with a lack of information on the current management for noxious weed control.

Text added to Chapter 3, Existing Conditions.

15. Requested additional information be added to the Environmental Consequences, Cumulative Impacts section of Chapter 4 .

Additional information added.

16. *Requested additional information in Table C-1 Management Responsibility and Alternative Comparison.*

This table is a summary of the text in the INRMP/RMPA. Textual changes made earlier in the INRMP/RMPA are be reflected in the table.

17. Concerned with conflict of hunting Sage Grouse as it is defined as a sensitive species.

This is beyond the scope of the INRMP/RMPA. The Navy and the BLM manage habitat and the State of Nevada regulates hunting.

NAS Fallon Main Station

18. Requested clarification of the meaning of "generating long-term cost savings is warranted" in the fire management section.

Additional text has been added to Chapter 3, Existing Environment to show that cost savings applies to weed control and burning of agricultural ditches.

19. *Requested information on water quality monitoring to include storm water discharge, wastewater, surface water, and groundwater contamination.*

Water quality is monitored under the state requirements and NAS Fallon maintains compliance

with all permit limits. Text has been added to Chapter 3, Existing Conditions.

Fallon Range Training Complex (FRTC)

20. Concerned with the lack of existing wildlife management in the FRTC.

Wildlife management was covered under the common to all areas in Chapter 3, Existing Environment

Dixie Valley Training Area

21. Recommended the INRMP/RMPA be consistent in use of the term "plan" or "agreement" in regard to the tui chub

Text has been modified throughout the INRMP/RMPA to reflect a tui chub agreement.

22. Concerned with inconsistency for management of the tui chub in the INRMP/RMPA.

The text has been modified in Chapter 2, Proposed Action and Continuation of Current Management Alternative, and in Chapter 3, Existing Environment.

23. Requested information on origin of the tui chub and which ponds in which it currently resides.. Also requested that the fish not be identified as the "Dixie Valley tui chub" until genetic testing determines it to be a distinct species.

Text modified to address comments in Chapter 3, Existing Environment.

24. *Requested that all lands be left open to off highway vehicles.*

This is incompatible with military training and the military desires this self-imposed restrictions for environmental protection.

25. Requested additional information on livestock grazing management and suggested fencing of marsh and pond areas to keep out livestock grazing.

The existing BLM Allotment Management Plans (AMPs) will be amended upon the approval of the INRMP/RMPA. Specific management for both livestock and wildlife will be addressed at that time.

26. Requested specify information about vegetation dependent on flowing wells.

Currently Nevada State Water Law does not allow a beneficial use for military purposes. The INRMP/RMPA has a management action to maintain some vegetation necessary for training and wildlife. To implement this management action the water rights would have to be applied for with a beneficial use of wildlife. Coordination among Churchill County, US Fish and Wildlife Service, Nevada Division of Wildlife, BLM, the Navy, and the Nevada State Water Engineer would be required.

27. Concerned with how the Navy will manage their 25 permitted wells.

The water rights must show a beneficial use and are currently designated for agriculture. These water rights will likely be canceled because the water is not being used for the designated purpose. See comment above.

28. *Requested information on the current ecological condition of the Clan AlpineHorse*

Management Area (HMA)

The HMA overlaps the newly withdrawn lands in one small area (see INRMP/RMPA figure 3-2). No changes in horse management will result from this plan and therefore this information is not included. Additional information is available from the BLM.

29. Requested the number of ponds and acres of habitat supported by artesian wells be added to the INRMP/RMPA.

The number of ponds is listed in Chapter 3 Existing Conditions under Water Resources. Acres of habitat change based on precipitation and well discharge. Due to the potential for well as required by the Nevada State Water Engineer, average acerages of habitat have not been calculated.

30. Concerned with amphibian species and their management.

Due to the State Water Engineers requirement to close wells information is currently not available on what water resources will be available for management. The two proposed management actions, the sensitive species management and vegetation management presented in chapter 2, provide a means to include the management of amphibian species during the implementation of these actions. Amphibian species are listed in appendix D.

Other Lands

31. Request for additional information concerning the Shoal Site.

DOE is the responsible manager for all subsurface activity at the Shoal Site. BLM and Navy jointly manage surface resources. Additional text has been added to the INRMP/RMPA, Chapter 3, Existing Environment, to clarify DOE responsibilities. The details of subsurface contamination exceeds the scope of the INRMP/RMPA.

32. Request for the Shoal Site to be placed on the National Register of Historic Places.

According to BLM and Navy Archaeologists, the Shoal Site does not meet the criteria for listing on the National Register.

33. The continuation of current management section should include the DOE groundwater characterization and monitoring program and the BLM and Navy not allow access to the subsurface by drilling or by any other means at the shoal Site.

The INRMP/RMPA has been modified to address this concern. A management action was added in Chapter 2 and additional text to Chapter 3, Existing Environment.

34. Requested that DOE be added to the section under Alternative Considered But Eliminated, Development of Individual Plans.

This comment was not incorporated into the INRMP/RMPA. Consideration was not given to having DOE complete an individual plan in addition to the plans prepared by BLM and the Navy.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

NEVADA FISH AND WILDLIFE OFFICE
1340 FINANCIAL BOULEVARD, SUITE 234
RENO, NEVADA 89502-7147

October 5, 2001
File No: NAVY 2-3

Captain Brad T. Goetsch
Naval Air Station Fallon
Environmental (Code N45F)
4755 Pasture Road
Fallon, Nevada 89596-5000

Dear Captain Goetsch:

Subject: Integrated Natural Resource Management Plan for Navy Lands in Churchill County, Nevada

We appreciate your meeting with me and my staff on October 5, 2001, to introduce yourself and discuss the Integrated Natural Resource Management Plan (INRMP) for Naval Air Station Fallon and other Navy lands in Churchill County. We are particularly impressed with your interest in conserving natural resources on Navy lands and are looking forward to working with you to implement the INRMP. We have been pleased to work with the Navy in development of the INRMP since its inception.

We have reviewed the final Environmental Assessment and Record of Decision (ROD) for the Navy Integrated Natural Resource Management Plan and Amendment to the Bureau of Land Management Lahontan Resource Management Plan. In part because of the provisions in the plan for future coordination with interested parties, of which the Fish and Wildlife Service is one, to conserve fish and wildlife resources, we concur that the document satisfies our objectives pursuant to the Sikes Act Improvement Act of 1997 (16 U.S.C. Section 670a et seq. and Public Law 105-85) for an INRMP for Naval Air Station Fallon. As discussed in the plan and ROD, future coordination will include development of a cooperative agreement for conservation of the Dixie Valley nui chub, development of a cooperative agreement for management of water resources and water rights associated with ponds in Dixie Valley, re-evaluation of allotment management plans, and determination and conservation of habitats valuable for wildlife as well as military training. We look forward to working with you, your

Captain Brad T. Goetsch File No: NAVY 2-3

staff, the Bureau of Land Management, and other appropriate entities to achieve implementation of these provisions of the INRMP.

Again, it was a pleasure to meet you and discuss this important issue. We appreciate your interest in fish and wildlife resources and the opportunity to participate in conservation of these resources on Navy lands.

Sincerely,

Robert D. Williams
Field Supervisor

cc:
State Director, Bureau of Land Management, Reno, Nevada

KENNY C. GUINN
Governor

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WILDLIFE
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R. MICHAEL TURNIPSEED, P.E.
Director
Department of Conservation and Natural Resources

TERRY R. CRAWFORTH
Administrator

October 1, 2001

Captain Brad T. Goetsch
Naval Air Station Fallon
Environmental (Code N45F)
4755 Pasture Road
Fallon, Nevada 89496-6000

RE: Integrated Natural Resource Management Plan

Dear Captain Goetsch:

Thank you for taking the time to meet with our agency on September 28th in Fallon. During the past year, the Bureau of Land Management and United States Navy have made extensive efforts to consult the affected parties during the preparation of the environmental assessment.

We have reviewed the final environmental assessment and record of decision for the "Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada". Provisions of this land use plan allow for our agencies to pursue common resource objectives, through Memorandum's of Understanding (MOU), to protect and restore wildlife habitats on Navy administered lands.

Our agency agrees that the document satisfies our objectives, as required by the Sikes Improvement Act of 1997 (16 U.S. C. Section 670a et. seq. And Public Law 105-85). The implementation of this plan relies on joint future opportunities (MOU's) within the Navy's mission and the cooperation of the NAS Fallon command.

We appreciate your commitment to Nevada's wildlife resource and the Nevada Division of Wildlife.

Sincerely

Terry R. Crawforth

Terry R. Crawforth
Administrator

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USERS GUIDE

USERS GUIDE

This document is intended to serve a slightly different purpose for each of three different types of user:

- US Navy – Integrated Natural Resource Management Plan;
- BLM – Proposed Lahontan Resource Management Plan Amendment; and
- NEPA Reviewers – Environmental Assessment.

The Table below outlines the various pertinent sections for each managing/reviewing entity.

BLM RMPA

As an RMPA, the document amends the Lahontan Resource Management Plan. Only BLM actions that are new or that have significantly changed from those described in the Lahontan RMP are included. BLM resource managers can refer to the text in Chapter 2 or Table C-1 in Appendix C to determine which management measures are the responsibility of BLM.

NAVY INRMP

As an INRMP, the document is a guide to natural resource management on lands administered by the Navy at NAS Fallon for the next five years. Both the existing and proposed management measures to be implemented by the Navy have been included in this document. Naval resource managers can refer to the text in Chapter 2 or Table C-1 in Appendix C to determine which management measures are the responsibility of Navy. Navy funding priorities for each management measure have been included for individual projects in Table C-3.

The Navy's resource managers also should examine those management measures to be implemented by the BLM to determine which management measures are likely to require coordination.

NEPA

NEPA reviewers should use this document as an environmental assessment. Those sections that are required for NEPA analysis are identified in Table UG-1. Note that this EA is only an evaluation of proposed changes to existing natural resource management measures and not an evaluation of other military activities.

Table UG-1
Users Guide to the INRMP/RMPA

Document Section	BLM RMPA	US Navy INRMP	NEPA Analysis
Inside of Front Cover	Includes the mission statement for the BLM.	Includes the mission statement for the US Navy at NAS Fallon	NA
Final Decision and FONSI	Serves as an Abstract and Finding of No Significant Impact.	Serves as an Abstract and Finding of No Significant Impact	NA
Executive Summary	Briefly describes the Proposed Action, alternatives, environmental consequences, and mitigation measures.	Briefly describes the Proposed Action, alternatives, environmental consequences, and mitigation measures.	The **Executive Summary** briefly describes the Proposed Action, alternatives, environmental consequences, and mitigation measures.
Section 1 Introduction	**Sections 1.3 and 1.4** describe the purpose and need for the INMRP/RMPA; **Section 1.7** describes the BLM planning process; **Section 1.8** describes the public involvement process.	**Sections 1.3 and 1.4** describe the purpose and need for the INMRP/RMPA; **Section 1.5** describes the NAS Fallon mission and relationship to natural resources; **Section 1.8** describes the public involvement process and coordinating agencies.	**Sections 1.3 and 1.4** describe the Proposed Action's purpose and need; **Section 1.1.2** describes the integration of NEPA into this document; **Section 1.8** describes the public involvement process.
Section 2 – Proposed Action and Alternative	**Section 2.4** defines the Proposed Action; **Section 2.5** identifies the proposed management measures to be implemented.	**Section 2.4** defines the Proposed Action and describes the federal compliance requirements and DOD guidance driving the INRMP; **Section 2.5** identifies the proposed management measures to be implemented.	**Section 2.4** defines the **Proposed Action.** (Note: the management measures to be implemented under the Proposed Action include the proposed measures identified in **Section 2.5** and the existing management measures identified in **Section 3**.)

Table UG-1
Users Guide to the INRMP/RMPA *(continued)*

Document Section	BLM RMPA	US Navy INRMP	NEPA Analysis
Section 2 – *continued*			**Section 2.6** defines the Continuation of Current Management Alternative (No Action). (Note: the management measures to be implemented in the **Continuation of Current Management Alternative** are defined in **Section 3** as existing management measures.)
Section 3 – Existing Environment	Provides resource managers with information on the existing conditions within the management area; it identifies the existing natural resource management measures.	Provides resource managers with information on the existing conditions within the management area; also, it identifies the existing natural resource management measures (the Proposed Action includes continued implementation of these measures).	Fulfills the requirement of an **Affected Environment** section, pursuant to NEPA, by describing the existing environmental setting; also, the existing management measures identified in this section define the Continuation of Current Management Alternative. The Proposed Action includes continued implementation of these measures.
Section 4 –Environmental Consequences	Provides resource managers with a description of the potential environmental consequences.	Provides resource managers with a description of the potential environmental consequences.	Provides the **Environmental Consequences**.
Section 5 - List of Preparers	Identifies the persons who prepared the document and their qualifications.	Identifies the persons who prepared the document and their qualifications.	Identifies the persons who prepared the document and their qualifications.
Section 6 – References	Provides bibliographical information for cited sources.	Provide bibliographical information for cited sources.	Provides bibliographical information for cited sources.
Section 7 – List of Acronyms	Lists acronyms used in the document.	Lists acronyms used in the document.	Lists acronyms used in the document.
Appendix A – Federal Laws and Compliance Requirements	Describes the federal compliance requirements and DOD guidance driving the INRMP.	Describes the federal compliance requirements and DOD guidance driving the INRMP.	

Table UG-1
Users Guide to the INRMP/RMPA *(continued)*

Document Section	BLM RMPA	US Navy INRMP	NEPA Analysis
Appendix B – Distribution List	Includes the distribution list	Includes the distribution list	Includes the distribution list
Appendix C – Management Responsibilities, Projects, and Navy Funding Priorities	Table C-1 includes all of the actions to be implemented under the **Proposed Action** and associated management responsibilities.	Table C-1 includes all of the actions to be implemented under the **Proposed Action** and associated management responsibilities. Table C-3 identifies Navy funding priorities for individual projects.	Table C-1 includes all of the actions to be implemented under the **Proposed Action** and associated management responsibilities.
Appendix D – Species Lists	**Appendix D-1** includes a list of all the species common names and associated scientific names.	**Appendix D-1** includes a list of all the species common names and associated scientific names.	**Appendix D-1** includes a list of all the species common names and associated scientific names.
	Appendix D-2 lists all potential sensitive species.	**Appendix D-2** lists all potential sensitive species.	**Appendix D-2** lists all potential sensitive species.
Appendix E – Status of Memoranda of Understanding/Cooperative Agreements	Describes the status of MOUs and cooperative agreements between the BLM, Navy and other agencies.	Describes the status of MOUs and cooperative agreements between the BLM, Navy and other agencies.	
Appendix F – Resource Management Plan Amendment Protest Procedures	Describes the BLM protest procedures and schedule.		Describes the BLM protest procedures and schedule.
Appendix G – Existing Management Plans		Lists the existing Navy management plans affecting natural resources.	
Appendix H – Military Withdrawal Act of 1999	Includes relevant Withdrawal Act language	Includes relevant Withdrawal Act language	

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION

Upon passage of the Military Lands Withdrawal Act of 1999, Congress directed the Secretary of the Interior to prepare, in consultation with the Secretary of the Navy, a management plan for withdrawn lands at Naval Air Station (NAS) Fallon (Appendix H). This requires the BLM to amend the Lahontan Resource Management Plan and Environmental Impact (EIS) (Bureau of Land Management (BLM) 1986). The management area covered in this report includes all lands under the control of the Navy in addition to three BLM parcels that need management updates (Figure 1-1).

The Carson City Field Office of BLM and NAS Fallon agreed that one plan to meet both agencies' requirements should be prepared. Those requirements include the Federal Land Policy and Management Act of 1976 (FLPMA) and the Sikes Act Improvement Act of 1997 (SAIA). The result of this cooperative effort is the combination document termed an Integrated Natural Resources Management Plan (INRMP) and Resource Management Plan Amendment (RMPA).

In addition, the requirements of the National Environmental Policy Act (NEPA) are completed in the INRMP/RMPA. The Navy and the BLM require NEPA analysis on INRMPs and RMPAs in order to assess the potential environmental impacts of implementing natural resource management measures. Pursuant to NEPA and its implementing regulations, and in order to streamline the compliance process and to provide comprehensive planning, this document integrates the requirements of an environmental assessment (EA) with the INRMP/RMPA.

PURPOSE AND NEED

The purpose of the INRMP/RMPA is to identify natural resource management issues within the Management Area, to define management responsibilities, and to guide management practices for these issues. The Navy must review and possibly update its INRMP every five years to ensure it is still accurate. This INRMP/RMPA supports the military mission, protects the ecological condition, and provides for appropriate public uses of Navy-owned and withdrawn lands.

The need for this INRMP/RMPA is based in the requirements of the Military Lands Withdrawal Act of 1999, which states that "during the period of the withdrawal of lands under this subtitle, the Secretary of the Interior shall manage the lands withdrawn by section 3011 pursuant to the Federal Land Policy and Management Act . . . " and that the "Secretary of the Interior, after consultation with the Secretary of the military department concerned, shall develop a plan for the management of each area withdrawn by section 3011 during the period of withdrawal under this subtitle." Section 3014 (c) of the Military Lands Withdrawal Act of 1999 stipulates that the Secretary of Interior, in consultation with the

Secretary of the Navy, is required to prepare a management plan for withdrawn lands at NAS Fallon.

An INRMP is needed to fulfill requirements of the SAIA, DoD Instructions, and naval guidance for natural resource management. These directions require that military facilities implement INRMP's to support the military mission and to sustain military readiness, to provide flexibility to meet mission changes, and to integrate other resource-specific management plans and data studies. In addition, an INRMP is needed to document the application of ecosystem management as part of NAS Fallon's natural resource program.

PROPOSED ACTION

The Proposed Action would implement the proposed management measures, as described in Section 2.5, while continuing to implement existing management measures as appropriate. The existing management measures fall into two categories: BLM management measures and Navy management measures. Existing BLM management measures have been addressed in the Lahontan Resource Management Plan and EIS (1986). Existing Navy management measures are included in Section 3, Existing Environment. A table listing all of the management measures to be implemented under the Proposed Action is included as Table C-1 of Appendix C.

The Proposed Action will focus on sustaining military readiness and promoting ecological stewardship and biodiversity for those lands administered by the BLM and US Navy for use by NAS Fallon. This action would meet the Navy's underlying need to train military personnel in a realistic setting that is in compliance with environmental regulations and policies, including FLMPA, the Sikes Act, and the Military Lands Withdrawal Act of 1999. The Proposed Action covers the same five-year planning period as the INRMP/RMPA.

Within the context of ecosystem and adaptive management, NAS Fallon and BLM environmental personnel have identified the following general objectives to achieve these goals:

- Ensure no net loss in the capability of the land and natural resources at NAS Fallon to support its current and future military mission;
- Ensure compliance with applicable laws and regulations as they pertain to natural and cultural resources;
- Maintain and enhance the level of biodiversity within the constraints of the military mission;
- Outlease lands that are suitable and available for agricultural production and grazing;
- Implement adaptive management techniques to provide flexible and responsive management strategies based on scientific data gathered from monitoring programs, literature, and resource experts;
- Provide for public access wherever possible in areas not exposed to military hazards;
- Protect the quality of wildlife habitat where feasible; and ensure that existing multiple use grazing decisions and habitat management plans continue to be implemented;
- Maintain sufficient, professionally trained natural resource personnel to implement, manage, and monitor the management strategies of the INRMP.

These general objectives are supported by several resource-specific management measures for obtaining the desired outcomes. Specific management objectives have been further divided into those that are applied to all areas areas within the Management Area and those which only apply to the defined geographic/management areas: NAS Fallon Main Station, Fallon Range Training Complex (FRTC), Dixie Valley Training Area, and Other Lands. Detailed management actions are described in Section 2.4 of the INRMP/RMPA.

CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE (NO ACTION)

The Continuation of Current Management Alternative (No Action), serves as a benchmark against which proposed federal actions are evaluated. The Continuation of Current Management Alternative consists of two components. The first component is the continuation of existing BLM management measures. These measures were addressed in the Lahontan Resource Management Plan and EIS (BLM 1986). The BLM maintains that the legal requirements of the Military Lands Withdrawal Act of 1999 limit implementation of the existing resource management plan because of the inherent changes from public lands to withdrawn lands used for military training. Therefore, only feasible portions of the existing RMP would be implemented under the Continuation of Current Management Alternative. The second component is the continuation of Navy management measures as directed by the existing Natural Resources Management Plan (US Navy 1991). This plan, however, was prepared before the SAIA and does not meet SAIA requirements. A list of all the management measures which would be implemented under the Continuation of Current Management Alternative is in Table C-1.

EXISTING ENVIRONMENT

The INRMP/RMPA focuses on two major components of the existing conditions, the existing environmental conditions and existing natural resource management measures. Existing conditions are defined as the physical characteristics of the ecosystems within the Management Area. Existing management measures describe the current management actions and the direction being implemented by NAS Fallon to manage natural resources. Existing management measures being implemented by BLM have been presented and analyzed in the Lahontan Resource Management Plan and EIS (BLM 1986), and existing amendments.

Resources potentially affected by the proposed management actions include livestock grazing, wild horse management, water resources and water rights, wetland and riparian habitats, vegetation, noxious weeds, wildlife, sensitive species, soil and air resources, fire management, lands, recreation management, visual resources, mineral and energy, cultural resources, socioeconomic, and Environmental Justice.

ENVIRONMENTAL CONSEQUENCES

The environmental consequences that would likely occur from implementing the proposed action and from the Continuation of Current Management Alternative are insignificant, as are the cumulative impacts. The implementation of the proposed action would provide the benefit of improved Navy and BLM resource management cooperation and coordination.

Livestock and Rangeland

The Proposed Action would have no adverse effect on livestock or rangeland. Grazing would continue to be managed by BLM under existing practices on open withdrawn lands and the BLM would assume management responsibility on adjacent Navy owned lands in Dixie Valley. This would provide for consistent management and could reduce the incidence of unauthorized grazing. The Navy would continue to manage livestock grazing on agricultural lands at NAS Fallon. Under the Continuation of Current Management Alternative, existing management programs there would be no effects to livestock management.

Wild Horses Management

The Proposed Action would have no effect on wild horse management. There are no changes to existing management under the Proposed Action. BLM would continue to maintain and manage populations in the Clan Alpine HMA under existing practices. Under the Continuation of Current Management Alternative, existing programs would continue and there would be no effects on wild horse management.

Wetland and Riparian Habitat

The Proposed Action would have no adverse effect on riparian habitat. Wetland and riparian protection measures being implemented under current management would continue. Under the Continuation of Current Management there would be no effect on existing riparian habitat conditions.

Water Resources and Water Rights

The Proposed Action would have no adverse effect on water resources. Implementing the INRMP/RMPA would not affect groundwater resources. The primary surface water resources are in Dixie Valley, where there are numerous free-flowing wells and surface ponds. Water resource conditions could change as a result of the Nevada State Water Engineers Office mandate to plug and abandon certain wells within the Dixie Valley Training Area; however, this change would not be a consequence of implementing the Proposed Action of this INRMP/RMPA. Under the Continuation of Current Management Alternative, there would be no changes to existing water resource conditions. The Navy would continue to manage water resources in a manner consistent with state and federal laws and regulations. The DOE will continue to characterize groundwater flow and zones of contamination from the source cavity and perform risk assessments for contamination resulting from DOE activities at the Project Shoal Site.

Vegetation

The Proposed Action would have no adverse impacts on vegetation. The Proposed Action would encourage native plant species' growth and would revegetate disturbed areas at a level similar to that under the Continuation of Current Management Alternative. In addition, the proposed effort would foster cooperative efforts with the Navy and BLM in order to achieve these objectives. These measures would help establish or maintain desired native plant communities and reduce soil erosion. Noxious weed control strategies would be implemented and would have beneficial effects on native plant communities. The Continuation of Current Management Alternative would have no adverse impacts on vegetation. Management measures to control noxious weeds, to encourage native plant species' growth, and to revegetate disturbed areas would continue to be implemented. This continuation of ongoing management measures would have a beneficial effect on native plant communities.

Noxious Weeds

The Proposed Action would continue to implement measures to control noxious weeds within the Management Area. Treating undesirable vegetation and using native species for revegetation would benefit plant communities by minimizing the spread of noxious weeds. In addition, implementing the measures provided in the Proposed Action would provide a cooperative approach between the Navy and BLM to control invasive species. The Continuation of Current Management Alternative would still control noxious weeds, however, the treatment of noxious weeds may not occur in a coordinated and cooperative manner.

Wildlife

The Proposed Action would have no adverse impacts on wildlife resources. Current management measures designed to protect wildlife resources, where compatible with the military mission, would continue to be implemented. The Proposed Action would increase the amount of coordination among the Navy, BLM, US Fish and Wildlife Service (USFWS), and Nevada Department of Wildlife (NDOW). This could increase the effectiveness of wildlife resource management. The Continuation of Current Management Alternative would have no adverse impacts on wildlife resources. The management measures currently being implemented are designed to protect wildlife resources, where compatible with the military mission.

Sensitive Species

Sensitive species include species that the coordinating agencies for this INRMP/RMPA have identified as warranting management consideration. The Proposed Action would have no impact on federally listed species. The federally threatened

Bald Eagle has been observed in the Management Area. In addition, the golden eagle, which is protected under the Bald Eagle Protection Act, is known to forage within the Management Area. The proposed management measures would not adversely effect either eagle species or their foraging habitat since no major land-altering actions are proposed. Several species designated by the state as special concern occur within the Management Area. Natural resource management measures designed to encourage native habitats in areas compatible with the military mission would continue to be implemented. The Proposed Action also includes data collection on the presence or absence of sage grouse and its habitat, a state species of concern. Under the Proposed Action the Navy and BLM would formalize the coordination process with USFWS and NDOW to develop a tui chub conservation agreement for this small fish. The USFWS has indicated that the tui chub found in Dixie Valley may warrant federal listing, but currently has no federal status. Because the details of this agreement have not yet been developed, implementation of the plan has not been included as a strategy of this INRMP/RMPA. The Continuation of Current Management Alternative would have no impact on federally listed threatened or endangered species. Natural resource management measures designed to encourage native habitats in areas compatible with the military mission would continue to be implemented. Consequently, sensitive species should realize beneficial effects from the strategies implemented under the Continuation of Current Management Alternative.

Soil and Air Resources

The Proposed Action would have no adverse effects on soils or air quality. The Navy and BLM would continue to implement Best Management Practices to minimize soil erosion. Management measures related to other resources would not result in soil contamination, nor are they anticipated to increase the rates of soil erosion. In the Dixie Valley Training Area, limiting OHV use to existing roads and trails could result in a small net decrease in soil erosion. No change in area-wide PM_{10} emissions is anticipated. The planning area is in an unclassified area for the federal ambient air quality standards; therefore, no Clean Air Act conformity determination is required. The soil and air resources management measures are identical under the Proposed Action and the Continuation of Current Management Alternative.

Fire Management

The Proposed Action would have no adverse effects on fire hazards. Under the Proposed Action the BLM would integrate most of the Management Area into the Fire Management Final Plan Amendment (BLM 1998). This would not significantly change the objectives of current fire management practices but could increase coordination among agencies. The Continuation of Current Management Alternative would have no adverse effect on fire hazards. Fire management would continue under the objectives described under the Proposed Action.

Lands

The Proposed Action would have no adverse effect on public access or lands actions. Rights-of-way on closed withdrawn lands would be accessed through coordination with the Navy, and open withdrawn lands would remain open to public uses. Coordination between BLM and Navy would be improved. The possible transfer of Navy owned property at Dixie Meadows (760 acres) and Sand Springs (86 acres) to the BLM would be investigated as part of the Proposed Action. The Continuation of Current Management Alternative would have no effect on rights-of-way or public access. Transfer of Navy-owned properties to the BLM may not be realized.

Recreation

The Proposed Action would have both beneficial and adverse impacts on recreation. Proposed management strategies would maintain, enhance, or promote recreational opportunities within the planning area, including maintaining open public access for recreational activities, maintaining a bighorn sheep hunt, ensuring that the Pony Express

Trail remains protected, and modifying public opportunities for recreation at Horse Creek. OHV use would continue to be allowed on open withdrawn lands, but this use would be limited to existing roads and trails in the Dixie Valley Training Area. Additionally, there would be public access to some previously closed Navy-owned property. The Continuation of Current Management Alternative would have no adverse effect on recreation.

Visual Resources

Neither the Proposed Action or the Continuation of Current Management Alternative would have any effects on visual resources. No new structures or land-altering actions are proposed.

Minerals and Energy

The Proposed Action would place a protective withdrawal of 6,168 acres of significant BLM recreational and cultural sites and would have minor effects on mineral resources. Some areas now open to mineral entry, such as the Grimes Point/Hidden Cave Archaeological Area, the Sand Mountain Recreation Area, and the Cold Springs Historical Area, would be withdrawn from mineral entry. The Navy would investigate the purchase of patented claims on closed lands and patented claims on open lands that may have restricted access due to military activities. Any purchase is subject to Congressional approval. The Continuation of Current Management Alternative would not place a protective mineral withdrawal on the Grimes Point/Hidden Cave Archaeological Area, the Sand Mountain Recreation Area, or the Cold Springs Historical Area. Like the Proposed Action, the Continuation of Current Management Alternative would investigate the purchase of existing valid claims on closed lands and valid claims on open lands that cannot be reached safely.

Cultural Resources

The Proposed Action would provide for the consistent management, the increased protection of,, and the date sharing of cultural resources within the Management Area. The proposed joint cultural resource management plan and other measures would benefit in the protection, preservation, and interpretation of cultural resources as well as native American consultation efforts. Limiting OHV use to existing roads and trails in the Dixie Valley Training Area and implementing a protective mineral withdrawal at the Other Lands sites would have a beneficial effect on cultural resources. The Continuation of Current Management Alternative would have no adverse effect on cultural resources. The Continuation of Current Management Alternative would not include the protective mineral withdrawal at the Grimes Point/Hidden Cave Archaeological Area, the Sand Mountain Recreation Area, and the Cold Springs Historical Area, as under the Proposed Action. Lack of coordination between the Navy and BLM could result in repetitive or contrary actions.

Socioeconomics

The Proposed Action would have no adverse socioeconomic effects. Implementing the goals, objectives, and strategies of this plan would not result in changes to the socioeconomic conditions in the area. The Continuation of Current Management Alternative would have no effect on socioeconomics.

Environmental Justice

The populations and issues associated with environmental justice would not be affected by implementation of the Proposed Action. The Continuation of Current Management Alternative would have no effect on environmental justice populations or issues. Cumulative Impacts

Neither the Proposed Action or the Continuation of Current Management Alternative would have any cumulative impacts.

PUBLIC INVOLVEMENT

This document has been prepared with input from and coordination with interested agencies, organizations, and individuals within the region. Several federal, state, and local agencies with special expertise or administrative responsibilities pertaining to the proposed geographical areas involved have

participated as coordinating agencies, including the USFWS, the Bureau of Indian Affairs, Bureau of Reclamation, the DOE, the Fallon Paiute-Shoshone Tribe, the Walker River Paiute Tribe, the NDOW, Nevada Division of State Lands, Nevada Division of Water Resources, and Churchill County.

The public was provided with an opportunity to comment on the scope of the INRMP/RMPA at meetings held on June 12, 2000, in Fallon, Nevada, and on June 15, 2000, in Reno, Nevada. Public scoping provided background information and solicited comments. A public meeting was held in Fallon on June 6, 2001. The public was given 45 days to comment on the proposed plan. Four comment letters were received on the INRMP/RMPA.

1. INTRODUCTION / PURPOSE AND NEED

SECTION 1
INTRODUCTION/PURPOSE AND NEED

1.1 DOCUMENT OVERVIEW

1.1.1 Joint Integrated Natural Resource Management Plan and Resource Management Plan

This document is designed to guide natural resource management on lands in Churchill County, Nevada, administered by the US Navy at Naval Air Station (NAS) Fallon and by the Bureau of Land Management (BLM). This document serves as an Integrated Natural Resource Management Plan (INRMP) for the US Navy at NAS Fallon and also as an amendment to the Lahontan Resource Management Plan (RMPA) for the BLM Carson City Field Office.

Upon passage of the Military Lands Withdrawal Act of 1999, Congress directed that the Secretary of the Interior, in consultation with the Secretary of the Navy, prepare a management plan for withdrawn lands at NAS Fallon. The Carson City Field Office of BLM and NAS Fallon agreed that one plan to meet both agencies' requirements should be prepared. Those requirements include the Federal Land Policy and Management Act of 1976 (FLPMA) and the Sikes Act Improvement Act of 1997 (Sikes Act) In addition this approach is cost effective, provides consistent management across differing jurisdictions, avoids unnecessary redundancy, optimizes the use of scarce resources, and promotes cooperation and partnering. The result of this cooperative effort is the combination document INRMP/RMPA.

1.1.2 National Environmental Policy Act Compliance

The Navy and the BLM require National Environmental Policy Act (NEPA) analysis on INRMPs and RMPAs in order to assess the potential environmental impacts of implementing natural resource management measures. To streamline the compliance process and to provide comprehensive planning, this document integrates the requirements of an environmental assessment (EA) with the INRMP/RMPA. An EIS was prepared for the Lahontan RMP in 1986. Only changes to that plan will be analyzed in this EA. This approach is consistent with BLM land use planning documents and Navy guidance.

1.2 MANAGEMENT AREA

The geographic areas included in this INRMP/RMPA are collectively termed the Management Area. The BLM Carson City Field Office manages approximately 5.7 million acres of public lands. The Management Area includes those areas that require changes to the BLM Resource Management Plan. The US Navy at NAS Fallon administers approximately 240,717 acres of withdrawn and

acquired land associated with NAS Fallon and the Fallon Range Training Complex (FRTC).

The Management Area is divided into four geographic/management areas: NAS Fallon Main Station, FRTC, Dixie Valley Training Area, and Other Lands. These geographic/management areas can contain several isolated parcels, as shown on Figure 1-1. Lands administered by NAS Fallon are acquired lands purchased by the Navy, are withdrawn lands closed to public access (closed withdrawn), or are withdrawn lands open to public access (open withdrawn). These land status designations are based on the military activities in each area and the need to ensure public safety (Figure 1-2). The location of each geographic/management area and associated land status designations is described below.

1.2.1 NAS Fallon Main Station

The NAS Fallon Main Station is six miles southeast of the city of Fallon and 70 miles east of Reno. The Main Station lies within the central portion of the Carson Desert in an area commonly referred to as the Lahontan Valley and is surrounded by federal lands (BLM and Bureau of Reclamation [BOR]) and private lands.

The NAS Fallon Main Station is similar to a small city occupying 7,872 acres. It is comprised of an airfield (airport) with control towers, radar, etc; industrial facilities for maintenance of aircraft and support equipment; business facilities for everyday operations; retail and recreation facilities; housing facilities for the military personnel and their families; utility support facilities (water, sewer, etc.). Surrounding this infrastructure are agricultural field and vacant desert lands that serve as noise and safety buffers. There are approximately 2800 civilian and military personnel and 70 aircraft permanently at NAS Fallon. When training is being conducted these numbers can increase by up to an additional 2000 personnel and 90 aircraft. Additional information on the history of NAS Fallon is located in Section 3.2.1.1 *Cultural Resources*.

1.2.2 FRTC

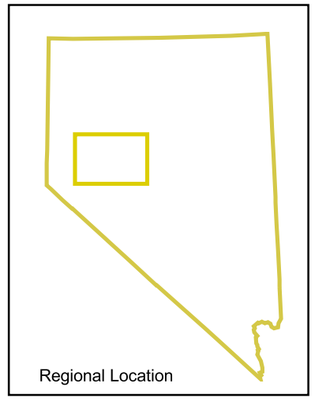
The training ranges provide target areas for air-to-ground ordnance delivery training and live weapons firing and provide limited areas for integrated air and ground training. The FRTC includes four geographically separate training ranges (B-16, B-17, B-19, and B-20) (Figure 1-1).

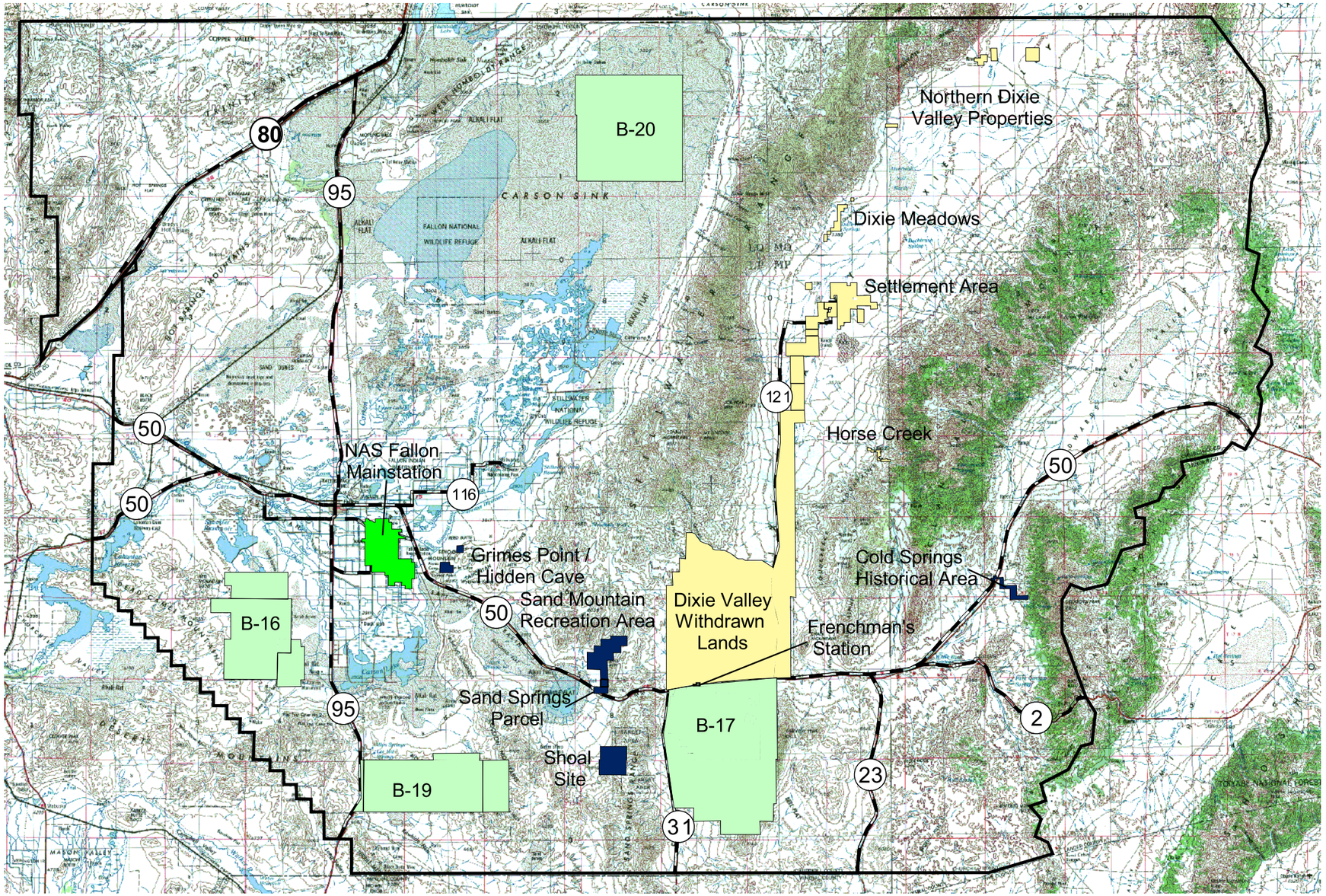
B-16 Training Range. B-16 is approximately nine miles southwest of NAS Fallon Main Station. It is the closest of the four training ranges to the main station. The BLM and BOR administer the lands around B-16. Land status designations within B-16 include both closed withdrawn and open withdrawn lands. Open lands are open to the public for multiple use, and closed lands are closed to all except authorized military personnel as defined in the EIS for the Withdrawal of Public Lands for Range Safety and Training Purposes, 1998.

B-17 Training Range. The B-17 range is in central Fairview Valley, approximately 35 miles southeast of NAS Fallon Main Station and is the most heavily used training range within the FRTC. The range is primarily surrounded by public lands. With the exception of a small parcel of Navy acquired land purchased by the Navy (Frenchman's Station, south of US Highway 50), all of the land within B-17 is designated as closed withdrawn.

B-19 Training Range. The B-19 range is west of the Blow Sand Mountains and 16 miles south of NAS Fallon Main Station. Highway 95 borders the western boundary, and the Walker River Indian Reservation borders the southern boundary. Additionally, B-19 is used for small arms and sea, air, and land training. B-19 consists of both closed withdrawn and open withdrawn lands.

B-20 Training 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. B-20 has the largest impact area and is the most remote and the least developed of all the FRTC training ranges. Land status





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The Management Area for the INRMP/RMPA has been divided into 4 Geographic/Management Areas.

Legend

- NAS Fallon Mainstation
- Fallon Range Training Complex
- Dixie Valley Training Areas
- Other Lands
- Major Roads
- Churchill County

INRMP/RMPA Management Area

Tetra Tech, Inc.

Figure 1-1

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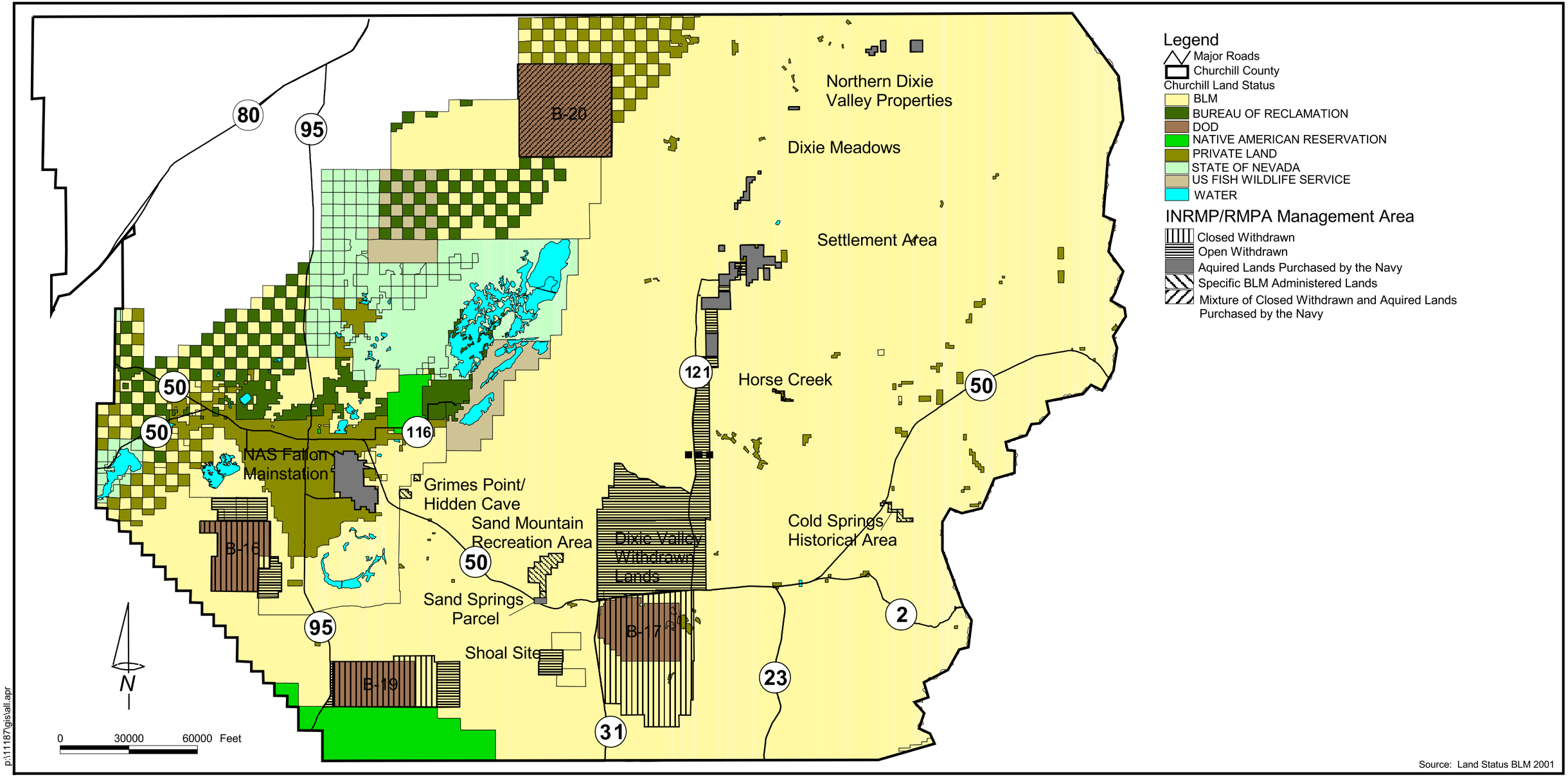

Land Status designations underlying INRMP/RMPA Management Area are pre-withdrawal Act of 1999.

Land Status Designations

(General depiction, refer to the BLM master Title Plats for specific information)

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designations in B-20 include both closed withdrawn and acquired lands purchased by the Navy.

1.2.3 Dixie Valley Training Area

The Dixie Valley Training Area is north of US Highway 50, approximately 35 miles east of NAS Fallon Main Station. The Dixie Valley Training Area is a mixture of acquired lands purchased by the Navy and withdrawn public lands and is composed of six areas: Northern Dixie Valley Properties, Settlement Area, Dixie Meadows, Withdrawn Lands North of US Highway 50, Frenchman's Station North of US Highway 50, and Horse Creek.

The Northern Dixie Valley Properties consist of four individual plots east of range B-20. This area consists entirely of acquired lands purchased by the Navy.

The Settlement Area consists of former ranches and farms purchased by the Navy to mitigate potential noise impacts. These parcels are interspersed with recently withdrawn public lands and consist of approximately 8,481 acres. The lands are used for limited ground training and close air support.

The Dixie Meadows is approximately 760 acres and includes the Dixie Valley Marsh, cold and hot springs, and two ponds. This entire area is acquired lands purchased by the Navy and no training is performed there

Withdrawn Lands North of US Highway 50 constitute the majority of lands in the Dixie Valley Training Area. These lands were withdrawn under the Military Lands Withdrawal Act of 1999 and consist of approximately 68,437 acres. This area connects B-17 with the Dixie Valley settlement area.

Frenchman's Station is a 54-acre parcel that straddles US Highway 50; however, only the portion north of US Highway 50 is considered part of the Dixie Valley Training Area. The land is acquired land purchased by the Navy.

The Horse Creek landholdings consist of 272 acres of acquired lands purchased by the Navy surrounding Horse Creek on the western side of the Clan Alpine Mountains and is a ground training location.

1.2.4 Other Lands

The geographic/management area Other Lands consists of two parcels administered by NAS Fallon and three additional BLM areas that have been identified for inclusion in this INRMP/RMPA (Figure 1-1). The BLM-administered parcels are Grimes Point/Hidden Cave Archaeological Area, Sand Mountain Recreation Area, and Cold Springs Historical Area. The two Navy-administered parcels are the Shoal Site and the Sand Springs Parcel. Due to their proximity, the Sand Springs Parcel has been included in the Sand Mountain Recreation Area for the purposes of discussion in this document.

Grimes Point/Hidden Cave Archaeological Area. This area encompasses approximately 1,160 acres and is recognized as one of the most significant cultural resource complexes, including caves, petroglyphs, archaeological sites, in the Great Basin. Hidden Cave, a guided interpretive trail is within the complex. It is approximately two miles east of NAS Fallon Main Station, along US Highway 50.

Sand Mountain Recreation Area & Sand Springs Parcel. Over 30,000 visitors come to Sand Mountain annually for recreation on the three-mile long, one-mile wide dune. Sand Mountain itself is over 500 feet high and is the largest single sand dune in the Great Basin. The Sand Mountain Recreation Area encompasses approximately 4,808 acres and is approximately six miles west of Range B-17. This area includes the Sand Springs Pony Express Station. Access to the Sand Mountain Recreation Area is from US Highway 50 across an 86-acre strip of US Navy land known as the Sand Springs parcel.

Cold Springs Historical Area. Adjacent to US Highway 50, approximately 48 miles east of the city of Fallon, are the ruins of an overland stage station and of a station constructed in 1861 to support the first

transcontinental telegraph. These areas encompass approximately 200 acres.

Shoal Site. The Shoal Site is a 2,560-acre parcel south of US Highway 50 and west of B-17. The Shoal Site is public land withdrawn by the Department of Energy (DOE). The Military Lands Withdrawal Act of 1999 authorized a secondary withdrawal by the Navy for military use on the surface of a portion of the DOE site. DOE still has responsibility for the past subsurface activities.

1.3 PURPOSE OF THE INRMP/RMPA

The purpose of the INRMP/RMPA is to identify natural resource management issues within the management area, to define management responsibilities, and to guide management practices for these issues. The Navy must review and possibly update the INRMP every five years to ensure it is still current. This INRMP/RMPA supports the military mission, protects the ecological condition, and provides for appropriate public uses of Navy-owned and withdrawn lands.

1.4 NEED FOR THE INRMP/RMPA

The need for this INRMP/RMPA is as follows:

- The Military Lands Withdrawal Act of 1999 states that "during the period of the withdrawal of lands under this subtitle, the Secretary of the Interior shall manage the lands withdrawn by section 3011 pursuant to the Federal Land Policy and Management Act . . . " and that the "Secretary of the Interior, after consultation with the Secretary of the military department concerned, shall develop a plan for the management of each area withdrawn by section 3011 during the period of withdrawal under this subtitle."
- Section 3014 (c) of the Military Lands Withdrawal Act of 1999 stipulates that the Secretary of Interior, in consultation with the Secretary of the Navy, is required to prepare a management plan for withdrawn lands at NAS Fallon. The INRMP/RMPA will amend the BLM's Lahontan RMP and EIS to account for the military training and use of lands withdrawn by NAS Fallon.
- An INRMP is needed to fulfill requirements of the Sikes Act Improvement Act and DoD and naval instructions for natural resource management. These directions require that military facilities implement INRMPs.
- An INRMP is needed to support the military mission, sustain military readiness, provide flexibility to meet mission changes with no net loss to training, and to integrate other resource-specific management plans and data studies.
- An INRMP is needed to document the application of ecosystem management as part of NAS Fallon's natural resource program. It is Navy policy to incorporate ecosystem management as the basis for planning and managing Navy facilities. This approach takes a long-term view of human activities, including military training needs, human uses, and biological resources as part of the same environment.

An expanded description of the applicable federal laws and compliance requirements has been provided in Appendix A.

1.5 NAS FALLON MILITARY MISSION AND RELATIONSHIP TO NATURAL RESOURCES

1.5.1 NAS Fallon Mission

The overall military mission of NAS Fallon is presented inside the front cover of this document. Specific mission requirements vary within the Navy-administered lands. Table 1-1 briefly describes the individual military mission of each area within the Management Area.

The training mission of the Navy at Fallon includes advanced training for all Navy aviators whose mission is to attack enemy targets ashore or to engage enemy aircraft in air-to-air warfare. Approximately 38,000 sorties are flow out of NAS

Table 1-1
Navy Purchased/Withdrawn Land Use and Acreages

AREA	LAND CATEGORY			MILITARY MISSION
	Navy Purchased	Withdrawn Open	Withdrawn Closed	
NAS Fallon Main Station	4,334		3,927	Aircraft runway, maintenance and support facilities, personnel housing and support facilities, and administration facilities
B-16			27,253	Integrated air-to-ground training, practice/inert ordnance, and ground training
B-17			52,830	Integrated air-to-ground training, practice/inert and live ordnance, ground training, close air support, and visual cueing
B-19			29,276	Integrated air-to-ground training, practice/inert and live ordnance, ground training, close air support, visual cueing, and a small arms range
B-20	19,430		21,577	Integrated air-to-ground training, practice/inert and live ordnance, ground training, close air support, and visual cueing
Dixie Valley Training Area	10,953	68,437		Integrated air and ground training, electronic warfare (EW) /visual cueing, and combat search and rescue training
Frenchman's Station	54			Part of B-17 and part of Dixie Valley Training Area
Shoal Site		2,560		Integrated air and ground training, visual cueing, and combat search and rescue training
Sand Springs	86			No military training
TOTAL	**34,857**	**70,997**	**134,863**	
GRAND TOTAL	**240,717**			

Fallon annually and approximately 850 tons of ordnance are dropped on the ranges annually. In addition to conducting aviator training, they develop tactics and procedures that are used to employ weapons or other aircraft systems to counter threats. The Navy at Fallon also provides real world support for military activities. In support of aircrew training integrated air and ground training occurs such as combat search and rescue and close air support. Combat search and rescue consists of integrated training with ground personnel, helicopters 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 combat search and rescue is conducted. Close air support operations train pilots to assist ground units by firing on enemy ground or air units. Ground units learn how to mark targets for aircraft and how to neutralize enemy positions, including radar site, surface-to-air missile sites, and early warning devices.

Separate NEPA documents have been prepared to address specific mission training requirements. These documents include the Final EIS, Withdrawal of Public Lands for Range Safety and Training Purposes, Naval Air Station Fallon, Nevada (US Navy 1998b), and the Final EIS, Proposed Fallon Range Training Complex Requirements Naval Air Station Fallon, Nevada (US Navy and BLM 2000).

1.5.2 Relationship Between the Military Mission and Natural Resources

Effects of the Military Mission on Natural Resources

The Navy recognizes that healthy and viable natural resources aid in supporting the military mission. Effective land management provides for the safety of the public and military personnel and protects valuable natural resources.

NAS Fallon Main Station: NAS Fallon was developed to support national security and to do so in a safe environment; therefore, specific natural resource management actions must be compatible with the military mission and must not jeopardize operational health and safety. At the airfield, requirements include controlling dust, minimizing the potential for foreign object damage (FOD), minimizing bird-aircraft strike hazards (BASH), and providing fire control in the event of an accident. Maintaining the irrigated farmland in the agricultural lease program is the current method used to meet these objectives. In addition to direct operational safety concerns, natural resources at NAS Fallon provide a buffer from encroachment of incompatible land uses. This is becoming more critical as the region's population expands.

Fallon Range Training Complex: The natural resources within the FRTC are affected to varying degrees by the military mission. In areas designated as impact areas or closed to the public, the natural resources are affected by training activities, such as integrated air and ground training. Many of the areas limit the amount of human traffic in order to provide for public safety. BLM previously managed open withdrawn areas and continues to manage the surrounding public lands for multiple use. **Congress has directed that this INRMP provide for multiple uses where possible so long as there is no net loss to military mission capabilities and operations.**

Effects of Natural Resource Management on Military Mission

While the military mission is paramount, natural resource management may constrain the mission when resource issues are identified. The INRMP/RMPA seeks to identify and consider land use and operational requirements to facilitate planning prior to mission implementation, to ensure no net loss of the military mission.

Future Military Mission Impacts on Natural Resources

It is reasonably foreseeable that new missions could be assigned to NAS Fallon in the future as technology, aircraft, and training needs change. This could result in the expansion of facilities and in revisions to operations.

1.6 BLM Carson City Field Office Mission

The BLM mission also is found inside the front cover of this document. BLM is committed to manage, protect, and improve lands in a manner to serve the needs of the American people for all time. 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. Resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air and scenic resources, and scientific and cultural values. BLM recognizes that not all uses are compatible, and the intent of this plan is to resolve and manage potential land use conflicts.

1.7 BLM Planning Process

This plan amendment process was conducted jointly with the BLM Carson City Field Office and NAS Fallon and includes the nine basic steps common to all public land planning efforts.

1.7.1 Issue Identification

Planning issues were found to be resource management problems or land use conflicts. They were identified through the public scoping process initiated with a notice published in the Federal

Register on May 26, 2000. Notices of public open houses and an invitation for public comment were published in local newspapers and sent to known interested parties, government entities, and the Nevada State Clearinghouse. This was followed by two BLM/Navy joint public open houses held in Fallon and Reno in June 2000.

The planning issues identified for analysis are as follows:

- Recreation (e.g., off-highway vehicles [OHV]);
- Public access;
- Livestock grazing;
- Water resources/riparian habitat;
- Wildlife/sensitive species;
- Noxious weeds;
- Cultural resources; and
- Fire management.

1.7.2 Planning Criteria Analysis

An analysis of planning criteria concluded that existing criteria to guide the planning process were appropriate and need not be changed. The criteria included using best existing data to the extent possible, identifying opportunities to resolve problems, documenting the analysis of alternatives in plain language and discussing minor issues briefly, and selecting the preferred alternative based on the combination that best meets demands for public lands, while minimizing disruption of the human environment.

1.7.3 Inventory Data and Information Collection

Resource data necessary to complete the analysis was compiled from existing inventories, reports, and environmental documents.

1.7.4 Analysis of the Management Situation

Inventory data and resources information were analyzed, the results of which form the basis of the affected environment in this document.

1.7.5 Alternative Formulation

Based on the issues, criteria, and analysis conducted, two alternatives were developed. The Proposed Action Alternative is to implement the INRMP/RMPA. The Proposed RMPA/INRMP was developed jointly by the BLM and Navy in response to public comments and to meet the objectives of FLPMA, the Sikes Act, and the Military Lands Withdrawal Act of 1999. In addition continuation of the present management practices implemented by BLM and Navy separately was also analyzed as the Continuation of Current Management Alternative .

1.7.6 Estimation of Effects

The analysis of the physical, biological, social, and economic effects of implementing each of the alternatives is included in this document.

1.7.7 Preferred Alternative/Proposed Plan Amendment Selection

Based on the analysis of effects and the joint BLM/Navy planning process, the preferred alternative/proposed plan amendment was selected.

1.7.8 Select the Plan

Based on an evaluation of public comments on this proposal, a final plan amendment will be selected and implemented.

1.7.9 Monitoring and Evaluation

Land management under the plan amendment would be monitored periodically and evaluated to determine the effectiveness of the decisions. The objective is to determine if implementing management prescriptions is achieving the desired results. Information obtained through the evaluation process would be used to adjust management of public and military lands in the planning area.

1.8 PUBLIC INVOLVEMENT

In Accordance with the SAIA, FLPMA and NEPA, this document has been prepared with input from and coordination with interested agencies, organizations, and individuals within the region. Several federal, state, and local agencies with special expertise or administrative responsibilities pertaining to the proposed geographical areas involved have participated as coordinating agencies, including the US Fish and Wildlife Service (USFWS), the Bureau of Indian Affairs (BIA), Bureau of Reclamation (BOR), Department of Energy (DOE), the Fallon Paiute-Shoshone Tribe, the Walker River Paiute Tribe, the Nevada Division of Wildlife (NDOW), Nevada Division of State Lands, Nevada Division of Water Resources, and Churchill County.

The public was provided with an opportunity to comment on the scope of the INRMP/RMPA at meetings held on June 12, 2000, in Fallon, Nevada, and on June 15, 2000, in Reno, Nevada. Public scoping provided background information and solicited comments (see Appendix B for the distribution list). Five letters were received. A distribution list is provided in Appendix B. Protest procedures have been included in Appendix E. A second public meeting was held in Fallon on June 6, 2001. The public was given 45 days to comment on the proposed plan. Four comment letters were received on the INRMP/RMPA.

2. PROPOSED ACTION AND CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE

SECTION 2
PROPOSED ACTION AND CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE

2.1 ECOSYSTEM MANAGEMENT APPROACH

This INRMP/RMPA is developed on ecosystem principles to natural resource management. As defined by DoD INSTR 4715.3, the goal of ecosystem management is to "ensure that military lands support present and future training and testing requirements while preserving, improving, and enhancing ecosystem integrity" (DoD 1996). Ecosystem Management can be defined as an ecological approach to natural resource management that assures productive, healthy ecosystems by blending social, economic, physical, and biological needs and values. In addition to supporting the military mission, an ecosystem approach will ensure the public lands are managed to serve the needs of the American people for all times, as mandated by the BLM.

Ecosystem management generally functions at an ecologically defined scale (e.g. watershed or basin). However, the Military Lands Withdrawal Act of 1999 and BLM resource amendment requirements limit the scope of this plan to the designated management area as discussed in Section 1.2.

This INRMP/RMPA proposes to use adaptive management as an ecosystem management tool. Adaptive management is the "process of implementing policy decisions as scientifically driven management experiments that test predictions and assumptions in management plans and that use the resulting information to improve plans" (Noss and Cooperider 1994). Put simply, under adaptive management, management measures are adjusted in response to new information about resource conditions. Used correctly, it gives resource managers the flexibility to respond quickly and effectively to changing conditions. Navy and BLM professionals would monitor natural resources and if significant deviation from acceptable conditions were to occur management practices would be adjusted.

2.2 GOALS AND OBJECTIVES OF THE NATURAL RESOURCE MANAGEMENT PROGRAM

The overall goal of the INRMP/RMPA is to provide a means for BLM to manage the natural resources on the newly withdrawn lands in accordance with the Military Lands Withdrawal Act of 1999 and to provide a means for the Navy to meet Sikes Act requirements and to sustain military readiness on lands administered by NAS Fallon. The INRMP/RMPA also helps define the cooperative and independent roles and responsibilities of NAS Fallon and BLM Carson

City in managing the natural resources on withdrawn lands within the Management Area. NAS Fallon and BLM environmental personnel have identified the following general objectives to achieve these goals:

- Ensure no net loss in the capability of the land and natural resources at NAS Fallon to support its current and future military mission;
- Ensure compliance with applicable laws and regulations as they pertain to natural and cultural resources;
- Maintain and enhance the level of biodiversity within the constraints of the military mission;
- Outlease lands that are suitable and available for agricultural production and grazing;
- Implement adaptive management techniques to provide flexible and responsive management strategies based on scientific data gathered from monitoring programs, literature, and resource experts;
- Provide for public access wherever possible in areas not exposed to military hazards;
- Protect the quality of wildlife habitat where feasible; and ensure that existing multiple use grazing decisions and habitat management plans continue to be implemented;
- Maintain sufficient, professionally trained natural resources personnel to implement, manage, and monitor the management strategies of the INRMP.

These general objectives are supported by several resource-specific management measures for obtaining the desired outcomes, which are described below in Section 2.4 Proposed Action.

2.3 NAVY-RELATED FUNDING PRIORITIES

The Navy is required to assign an assessment level for Navy actions (management projects) within the natural resource management plan. Each management measure is listed in Table C-1 of Appendix A. Those management measures which have specific management projects associated with them are noted by a number in the second column. Table C-3 lists all specifically identified management projects with their associated assessment level.

2.4 PROPOSED ACTION

The Proposed Action would implement the proposed management measures, as described in Section 2.5, while continuing to implement existing management measures as appropriate. The existing management measures fall into two categories: BLM management measures and Navy management measures. Existing BLM management measures have been addressed in the Lahontan Resource Management Plan and EIS (1986). Existing Navy management measures are included in Section 3, Existing Environment. A table listing all of the management measures to be implemented under the Proposed Action is included as Table C-1 of Appendix C.

The Proposed Action will focus on sustaining military readiness and promoting ecological stewardship and biodiversity for those lands administered by the BLM and US Navy for use by NAS Fallon. This action would meet the Navy's underlying need to train military personnel in a realistic setting that is in compliance with environmental regulations and policies, including FLMPA, the Sikes Act, and the Military Lands Withdrawal Act of 1999. The Proposed Action covers the same five-year planning period as the INRMP/RMPA.

The Nevada State Water Engineers Office has mandated capping and plugging wells within the Dixie Valley area. The US Navy and BLM coordinating with the USFWS and NDOW and Churchill County to develop a tui chub conservation agreement for the Dixie Valley area to address this directive. The goal of this effort is to balance the needs of the State Water Engineer with those of the fish that depend on the water from the wells. This agreement would address conservation of this fish species if it is found to be genetically different from

other tui chub. However, it is in the preliminary stages of development, and consequently, it is too early in the process to speculate on the details of this plan or for analysis of environmental impacts.

2.5 PROPOSED MANAGEMENT MEASURES

Specific management measures are provided in this section. These management measures are expected to be implemented during the five-year term of the INRMP. Because the INRMP has been developed as an adaptive management program, modifications to the management elements that follow are anticipated and encouraged.

The following management measures are divided into individual geographic/management areas, except where the measure applies to all areas. Within each area, management measures are described by specific resource category.

2.5.1 Measures Common to All Areas

The following proposed management measures apply to the entire Management Area. Only those resource areas where actions are proposed are listed.

Noxious Weeds Management

- Navy and BLM would coordinate with appropriate agencies and would implement approved integrated pest management plans to control and remove undesirable vegetation.

Fire Management

- The BLM would integrate all Navy closed and open lands, except the Main Station, into the Fire Management Final Plan Amendment (BLM 1998). Currently fire management is handled by the NAS Fallon fire department. Due to the location and proximity to BLM lands, incorporation of Navy lands (not including the Main Station) into the Fire Management Final Plan Amendment is effective and efficient. The plan amendment assigns fire management categories to all public lands managed by the Carson City Field Office. The four categories are as follows:
  - Category A. Those areas where wildfire suppression is warranted, including threatened and endangered species habitat and the urban/wildland interface. Full suppression of wildfires will be the objective.
  - Category B. Those areas where wildfire suppression is not warranted, but where, if fires occur and escape, management options on how to suppress the fire are available. Escaped fires will be closely analyzed to protect life, then property, then natural resources, and suppression strategies that will most effectively meet these goals will be used.
  - Category C. Those areas where fire has a significant role in the environment and where wildfire should be used to accomplish resource management goals. Constraints exist but are generally localized (e.g., small towns, ranches, riparian sites), and will require buffer zones of full protection and fuels treatments; but as a whole, the areas are delineated for the beneficial effects of fire.
  - Category D. Those areas where wildfire should be allowed to burn in a mostly unrestricted fashion to achieve resource objectives. All fires receive a response and will be evaluated for potential threats or negative impacts. Fire suppression will be limited to protecting small sites with constraints (such as ranches, improvements, or riparian zones).
- All Navy withdrawn and owned lands would be assigned a category to match those of adjacent BLM lands, most likely Category D.
- BLM would assist the Navy in developing and implementing fire prevention measures pursuant to the Military Lands Withdrawal Act of 1999.

- Pursuant to the Navy and BLM mutual aid agreement, both agencies would conduct air and ground suppression activities where they are determined to be necessary and safe.
- The Navy and BLM would coordinate with the appropriate agencies (i.e., state of Nevada and Churchill County) for fire suppression activities.

Wildlife Management

- BLM and the Navy would jointly coordinate with Animal Plant Health Inspection Service (APHIS) for predator control, when needed.
- BLM and NDOW would coordinate to assess the potential for sage grouse habitat within the management area.

Recreation Management

- All organized recreation activities would be managed by BLM in consultation with Navy.

Cultural Resources

- BLM and the Navy would preserve, protect, and interpret significant cultural resources by preparing an agreement document between the Navy, BLM, and the Nevada State Historic Preservation Officer (SHPO), which defines how the Navy and BLM will implement the National Historic Preservation Act (NHPA).
- BLM and the Navy would coordinate with Native American tribes and individuals in accordance with BLM policy.
- BLM and the Navy would prepare treatment options for contextual studies.
- BLM and the Navy would perform research projects to aid contextual studies.
- BLM and the Navy would share cultural information.
- All proposed BLM and Navy activities would be subject to NHPA Section 106 review.

2.5.2 NAS Fallon Main Station

Wildlife

- The Navy would explore the potential to develop a hunting program, for game birds and deer, on lands away from military facilities and runways.

Recreation

- The Navy would assess improvements to the nature trail (for example, tree plantings) to benefit the public and natural resources.

2.5.3 FRTC

Livestock Grazing

- BLM would manage cattle grazing on the open withdrawn lands at B19 in a manner consistent with adjacent public lands.
- BLM would amend the existing permits for livestock grazing on lands closed to public access by the Military Lands Withdrawal Act of 1999. This amendment would consist of a livestock management decision to reduce animal unit months (AUMs) as a percentage of the allotment converted to closed status. The Navy would investigate the purchase of lost livestock AUM's contingent on Congress approving funds.

Wildlife Management

- The Navy, BLM, and NDOW would coordinate to provide a cooperative agreement to allow access to the six wildlife guzzlers located south of Fairview Peak.
- Per agreement with NDOW, the Navy would provide access for the annual bighorn sheep hunt on closed lands at B-17. Safety briefings and range access are key components of this agreement.

Minerals and Energy

- The Navy would assess the purchase of patented mining claims on closed lands, contingent on Congress approving funds.

2.5.4 Dixie Valley Training Area

Livestock Grazing Management

- On Navy owned and withdrawn lands, BLM would manage cattle grazing in a manner consistent with grazing practices on adjacent public lands and as per amended BLM allotment management plans (AMP).
- The existing BLM AMP's for the three allotments adjacent to Navy lands would be amended to include the management of the Navy lands.
- BLM would consult with the Navy before constructing or removing range improvements per amended allotment management plans.
- Navy would maintain fences and gates to prohibit grazing from Horse Creek.

Wetland and Riparian Management

- The Navy and BLM, in coordination with NDOW, would determine if additional management is required for the riparian area at Horse Creek.

Water Resources and Water Rights

- The Navy would coordinate with appropriate agencies to determine what specific ponds (if any) should be maintained in Dixie Valley. Specific management responsibilities would be defined through a cooperative agreement, and the appropriate agency would apply for the water rights.

Vegetation Management

- The Navy and BLM would delineate existing vegetation areas that depend on water from existing flowing wells (e.g., in Settlement Area), which support both military training and wildlife habitat.
- Management of delineated areas would require a new water right filing with the State of Nevada for a new beneficial use for wildlife. Management of these areas would include fencing.

Sensitive Species Management

- The Navy would coordinate with the appropriate agencies (e.g., BLM, USFWS, NDOW, and Churchill County) to develop a tui chub conservation agreement. In the interim, the Navy would continue to manage the ponds using existing management practices.

Lands

- The Navy would assess the feasibility of transferring the 760-acre Dixie Meadow to the BLM.
- Interim management of the Dixie Meadows would be to maintain existing natural aquatic and riparian conditions.

Recreation Management

- The Navy would maintain the current level of public access to the newly withdrawn lands as compatible with the military mission.
- The Navy would open its lands to public access to the extent compatible with the military mission.
- The Navy and BLM would assess improving existing recreation facilities at Horse Creek and establishing a trailhead to the Clan Alpine Wilderness Study Area (WSA).
- The Navy would change the existing "open" designation for OHV use to "limited to existing roads and trails" on Navy-owned and open withdrawn lands.

Minerals and Energy

- BLM would manage land for leaseable and saleable minerals in coordination with the Navy.

2.5.5 Other Lands

Livestock Grazing Management

- BLM would manage livestock grazing on the open withdrawn lands at the Shoal Site in a manner consistent with grazing practices on adjacent public lands.

Lands

- The Navy would assess the feasibility of transferring the jurisdiction of the 86-acre Sand Springsn parcel to BLM.

Minerals and Energy

- BLM would pursue withdrawal of locatable minerals from operation of the 1872 Mining Law at Grimes Point Archaeological Area, Sand Mountain Recreation Area, and the Cold Springs Historical Area.

Water Resources and Water Rights

- At the Shoal Site, institutional control of the deep subsurface will be maintained and long-term subsurface monitoring and surveillance is planned for at least 50 years by the DOE.

- The Navy and the BLM will not allow access to the subsurface by drilling or by any other means and/or removal of any subsurface material from the Shoal Site, without thorough evaluation and coordination with the DOE.

2.6 CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE (NO ACTION ALTERNATIVE)

The Continuation of Current Management Alternative serves as a benchmark against which proposed federal actions are evaluated and serves as the No Action Alternative. The continuation of current management consists of two components. The first component is the continuation of existing BLM management measures. These measures were addressed in the Lahontan Resource Management Plan. However, from a BLM perspective, the legal requirements of the Military Lands Withdrawal Act of 1999 limit implementation of the existing resource management plan because of the inherent changes from public lands to withdrawn lands used for military training. Therefore, only feasible portions of the existing RMP would be implemented under the Continuation of Current Management Alternative. The second component is the continuation of existing Navy management measures. Those Navy management measures that are applicable are included in Section 3 of this document.

In summary, the Continuation of Current Management Alternative would provide less management than under the Proposed Action. The Continuation of Current Management Alternative does not preclude implementing additional strategies, such as those presented as bulleted items under the Proposed Action. However, these additional actions would need to be undertaken as separate individual actions and therefore would not be integrated into the natural resource management plan; as a result, the actions are not considered in the environmental consequences analysis.

2.7 ALTERNATIVES CONSIDERED BUT ELIMINATED

In addition to the two alternatives discussed above, other alternatives were considered but eliminated because they were economically infeasible or ecologically unsound, because they violated policies, or because they were incompatible with military training requirements. To determine if alternatives were reasonable, screening criteria were developed based on internal BLM and Navy scoping. To determine if alternatives are reasonable, the following selection criteria were used:

- The alternative must sustain military readiness and cannot result in a net loss to mission capabilities and operations;
- The alternative must comply with BLM, Navy, and DOD policies, as well as applicable laws;
- The alternative should not limit public use, except for lands that support activities

hazardous to public safety (e.g., military training ranges);

- The alternative should not increase operational or maintenance costs in contradiction of Navy budget reduction goals; and
- The alternative must not degrade existing resources.

Moreover, sufficient data must be available to support management actions.

The following alternatives were considered but were eliminated:

Develop Individual Plans for the Navy and BLM. This alternative could result in inconsistent management across jurisdictional boundaries and be inefficient in time and resources.

3. EXISTING ENVIRONMENT

SECTION 3
EXISTING ENVIRONMENT

The existing environment in this section is presented by the geographic/management areas defined in Section 1.1. Many of the environmental characteristics are similar for all four of the geographic/management areas (NAS Fallon Main Station, FRTC, Dixie Valley Training Area, and Other Lands). As a result, most of the existing environment is presented under the heading All Management Areas and encompasses the entire Management Area. Only environmental characteristics unique to an individual geographic/management area are presented separately.

There are two major components to the existing environment: existing conditions and existing natural resource management measures. Existing conditions are defined as the physical characteristics of the ecosystems within the Management Area. Existing management measures describe the current management actions and direction being implemented by NAS Fallon to manage natural resources. A list of the existing management plans for NAS Fallon has been included as Appendix G. Existing management measures being implemented by BLM have been presented and analyzed in the Lahontan Resource Management Plan and EIS and existing amendments. The existing natural resource management measures described in this section constitute the Continuation of Current Management Alternative, as defined in Section 2.6. In addition, there are several Memorandums of Understanding (MOUs)/Cooperative Agreements guiding natural resource management. A list of these documents and their status has been included as Appendix E.

Section 3 focuses on those resources potentially affected by the management actions described in Section 2 and on topics about which the public has expressed concern. Those resources include livestock grazing, wild horse management, water resources and water rights, wetland and riparian habitats, vegetation, noxious weeds, wildlife, sensitive species, soil and air resources, fire management, lands, recreation management, visual resources, mineral and energy resources, cultural resources, socioeconomics, and Environmental Justice.

3.1 ALL MANAGEMENT AREAS

The following is a description of the existing conditions and management measures common to all four of the geographic/management areas.

3.1.1 Existing Conditions

3.1.1.1 Livestock Grazing

BLM manages grazing on public lands under the authority of the Taylor Grazing Act of 1934, FLPMA, and the Public Rangelands Improvement

Act of 1978. Under this management, ranchers can obtain permits for an allotment of public land on which a specified number of livestock can graze. The number of permitted livestock on a particular allotment is determined by how much forage, measured in Animal-Unit-Months (AUMs), that land will produce. An AUM is defined as the amount (780 pounds) of air-dry forage calculated to meet one animal unit's (AU) requirement for one month. An AU is defined as forage consumption on the basis of one standard mature 1,000-pound cow, either dry or with calf up to 6 months old; all other classes and kinds of animals can be related to this standard, e.g. a bull equals 1.25 AU, a yearling steer equals 0.6 AU.

The BLM has range allotment management plans designed to stabilize or improve the ecological condition of the allotments. These plans include proper management of livestock grazing and such improvements as fences and water developments.

There are 30 grazing allotments, ranging from approximately 7,600 acres to 305,000 acres and totaling 80,000 AUMs of grazing preference covered under the Lahontan Resource Management Plan and EIS (BLM 1983). Existing grazing allotments overlap the Management Area in a few places, including the Dixie Valley Training Area and various open withdrawn areas (Figure 3-1). It is the policy of the US Navy to promote agricultural outleases to the maximum extent compatible with the military mission and ecological constraints. There are 1,255 acres of irrigated fields and crops such as alfalfa, sudangrass, rye, corn, and barley are grown. In the summer there are also up to 800 head of cattle grazing on the lease parcels. A Soil and Water Conservation Plan has been written for each agricultural lease parcel. Funds from the agricultural lease program are used to complete soil and water conservation projects, wildlife habitat enhancements, and outdoor recreation projects.

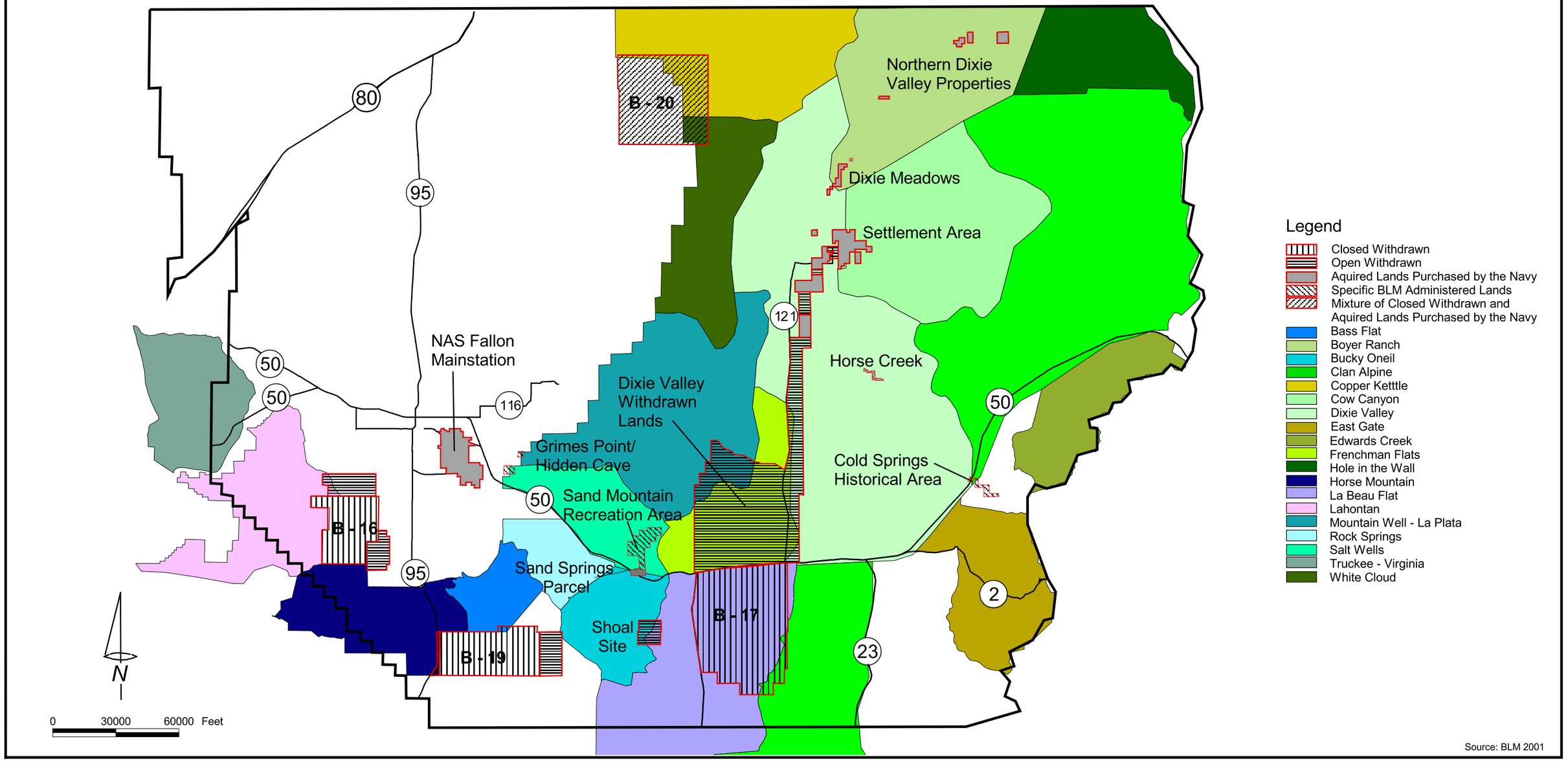
3.1.1.2 Wild Horse Management

Under the Wild Free-Roaming Horses and Burros Act (PL 92-195), signed December 15, 1971, and amended in 1976 by FLPMA (PL 94-579), and the Public Rangelands Improvement Act of 1978 (PL 95-514), the Secretary of the Interior is authorized and directed to protect and manage wild free-roaming horses and burros as components of public lands. The BLM field offices establish management objectives for herd management areas (HMAs), which include maintaining and enhancing habitat to provide forage for a specified number of horses. There are HMAs in the vicinity of the Management Area, the Clan Alpine HMA overlaps a small portion of the Management Area (see Section 3.2.3.1) and the Desatoya HMA overlaps much of the Cold Springs Historical Area (see Section 3.2.4.1) (Figure 3-2).

The Lahontan Rangeland Program Summary of 1985 (BLM 1985) set management objectives for each of the wild horse HMAs. The management objectives include maintaining and enhancing habitat to provide forage for a specified number of horses. The summary also calls for a periodic census 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 to determine 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 rounding up on individual wild horses and on the population as a whole.

3.1.1.3 Water Resources and Water Rights

For the discussion of surface water and groundwater conditions, the Management Area is subdivided into hydrologic units, which are geographic areas defined by hydrologic boundaries. Watersheds are the basic hydrologic units for surface water conditions, and groundwater basins are the basic hydrologic units for groundwater. Watersheds are defined by the geographic region in which surface runoff would eventually drain to a selected waterbody, such as a stream or lake. Within the Management Area, groundwater basins generally are independent



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Grazing Allotments

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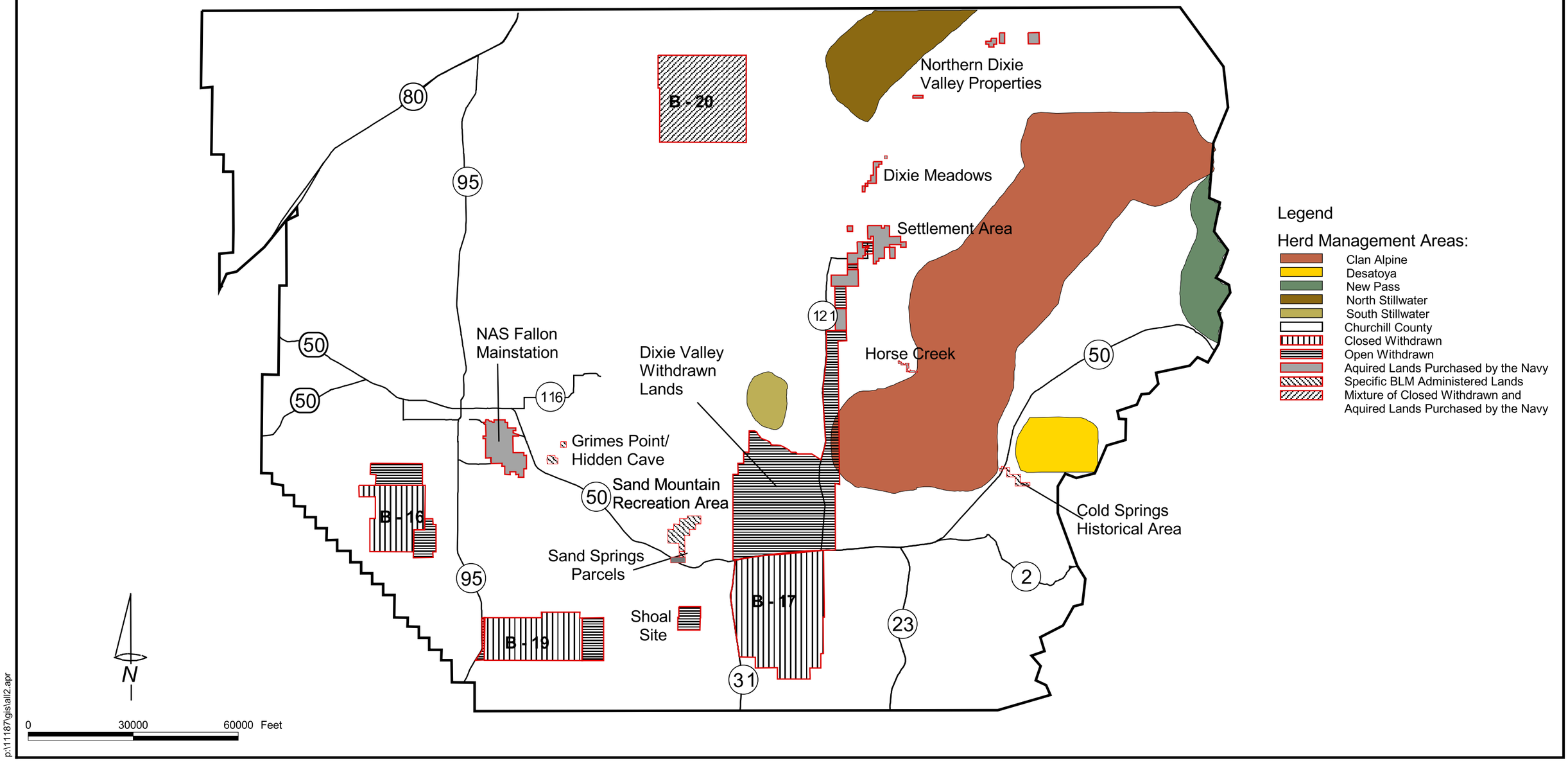

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The INRMP/RMPA Management Area overlays Herd Management Areas where the natural resource management objectives of this document are unaffected.

Herd Management Areas

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alluvium-filled valleys bounded by mountain ranges. In some cases, groundwater from one basin might flow into another. Often, there is insufficient information to fully characterize this flow between basins.

The Management Area is in the central part of the Carson Desert subbasin, the terminus subbasin of the larger Carson River basin. This subbasin is commonly referred to as the Lahontan Valley basin. Runoff in the basin eventually reaches Carson Lake, the Stillwater Wildlife Management Area, or the Carson Sink (Figure 3-3).

The Management Area is mostly high desert interspersed with isolated mountain ranges. Precipitation ranges from approximately five to 20 inches per year, with the lower precipitation falling in the intervening valleys and flats and the higher precipitation falling on the mountain ranges. Evapotranspiration in the region is approximately 60 inches per year. Runoff occurs during major storms, with occasional high runoff from the mountain ranges to the valley flats below. Springs are in the bedrock outcrops, at or near geologic contacts and fault zones, and in areas with high water tables.

3.1.1.4 Wetland and Riparian Habitats

There are three areas of riparian habitat in the Management Area; these are discussed in sections 3.3.1 and 3.4.1. Scientific names for individual species have been included in Appendix D, Table D-1. Common species in the riparian areas of this region include shrub and tree species, such as willows and Fremont cottonwoods, grass species, such as creeping wildrye and alkali sacaton, and a variety of wetland species, including sedges, rushes, and cattails. Noxious weeds include saltcedar.

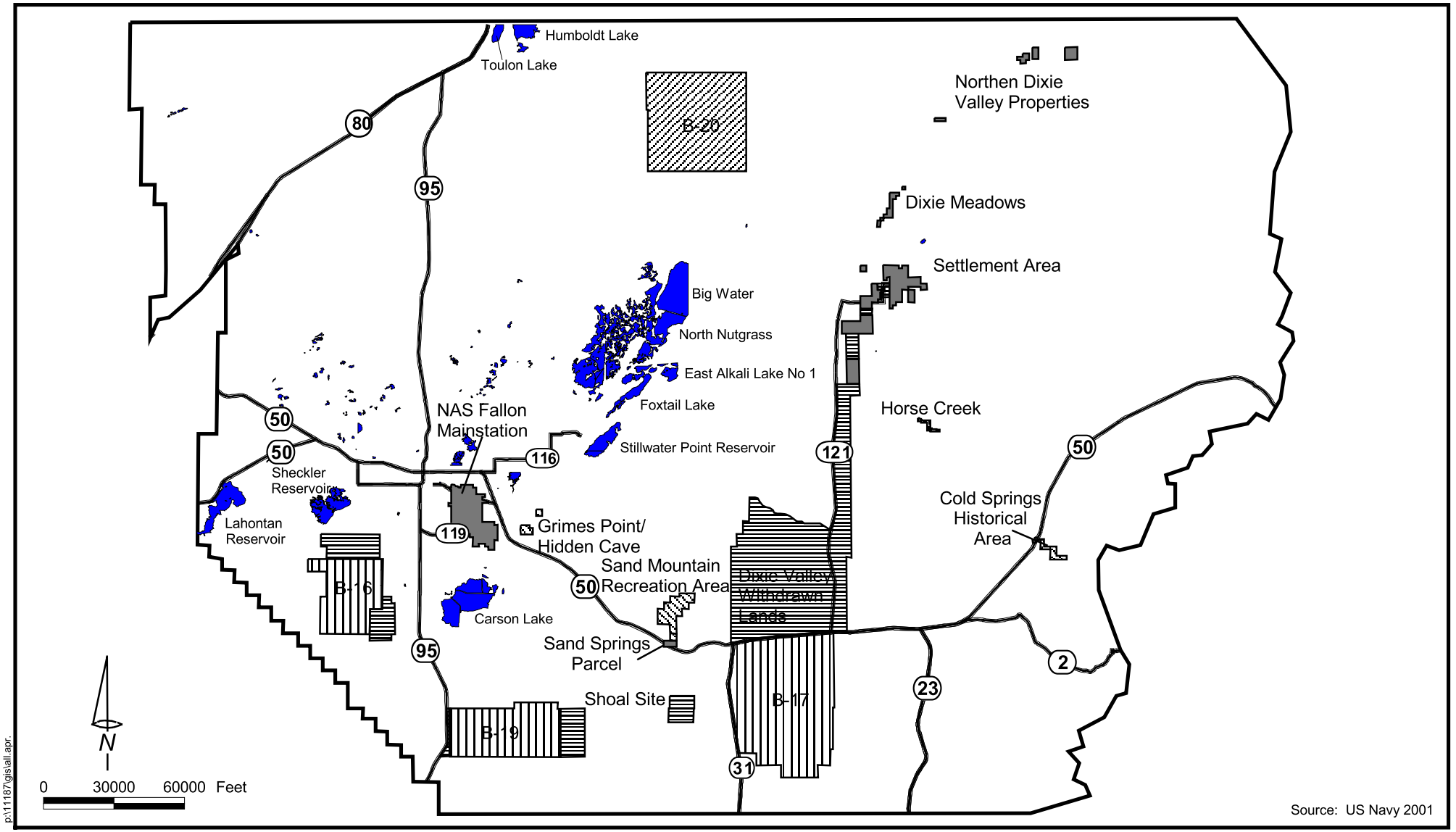
Wetland plant communities identified during the 1996/1997 ecological inventory are discussed in sections 3.2.1, 3.3.1, and 3.4.1 (US Navy 1997c). It should be noted that the 1996/1997 Ecological Inventory was conducted prior to the Withdrawal Act of 1999 and does not include those areas. There are no known jurisdictional wetlands located within the Management Area.

3.1.1.5 Vegetation

The vegetation communities in the Management Area are typical of those in the Great Basin region. The extremes of climate, elevation, and soil type combine to produce environments that strongly influence the plant species. Vegetation varies from salt-tolerant shrubs and grasses that inhabit the valley bottoms to pinyon-juniper in the higher mountain ranges. The vegetation can be categorized in a general way by elevation (BLM 1983). The climate, soils, and topography are similar across the Management Area; therefore, some of the biological conditions of affected lands are discussed in a regional context. Elevation, climate, soil properties, and disturbance are the major influences on vegetation community structure within the Management Area, which consists mainly of upland habitat and disturbed areas.

Upland Habitat

Thirty upland plant communities identified at NAS Fallon and the FRTC are representative of the habitat found throughout much of the Management Area. Half of these communities are distinct and well defined, based on associations of species or unique physiographic criteria (US Navy 1997c). The common plant species-defined communities include Wyoming big sagebrush/common rabbitbrush, black sagebrush, Bailey's greasewood-shadscale/galleta, Indian ricegrass, alkali mixed scrub, black greasewood/Indian ricegrass, and upland rabbitbrush. The physiographically defined communities contain sodic dunes, valley wash, mixed dune scrub, and badlands. In addition, many of the lands at the Main Station and on the training lands have been disturbed by human activities. Species composition in these areas is dominated by agricultural species and nonnative invasive species, such as Russian thistle, cheatgrass, halogeton, Russian knapweed, white-top, and other nonnative landscape species.



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Only major surface water features are shown.

Legend

- Specific BLM Administered Lands
- Closed Withdrawn Lands
- Open Withdrawn Lands
- Aquired Lands Purchased by the Navy
- Mixture of Closed Withdrawn and Aquired Lands Purchased by the Navy
- Roads
- Surface Water Features
- Churchill County Boundary

Surface Water Features

Tetra Tech, Inc

Figure 3-3

Disturbed Areas

Some of the land in the region has been disturbed by human activities, including road and utility corridors, ranch and agricultural areas, mines, and areas of military disturbance in the vicinity of the training ranges. Species composition in these areas can include agricultural species and nonnative invasive species, such as Russian thistle, cheatgrass, halogeton, Russian knapweed, and white-top. Natural disturbances, such as fire and flooding, also occur periodically on the training ranges.

3.1.1.6 Noxious Weeds

Noxious weeds can be found throughout the Management Area and dominate some previously disturbed areas. Nonnative invasive species are considered a limiting factor for the success of native plant communities. Problematic species include Russian thistle, cheatgrass, halogeton, Russian knapweed, hoary cress or white-top, perennial pepperweed or tall whitetop, puncture vine, yellow starthistle, and other nonnative landscape species (Science Applications International Corporation [SAIC] 2000; US Navy 1991).

3.1.1.7 Wildlife

There are a variety of wildlife resources in the Management Area, including invertebrates, fish, amphibians, reptiles, birds, and mammals. An ecological inventory was conducted prior to the 1999 land withdrawal at NAS Fallon and the FRTC in 1997 (US Navy 1997c). The species identified in this inventory are thought to be representative of species found in much of the Management Area. The following section is divided into taxa to include the major wildlife resources in the area. Due to their importance in regional recreation, game species also are included.

Amphibians and Reptiles

Eleven species of reptiles and two species of amphibians were observed in the qualitative herpetofaunal survey at NAS Fallon and the FRTC (not including lands withdrawn in 1999) (Table D-1). Another 12 reptile species and two amphibian species were incidentally observed while other surveys were being conducted. Amphibian and reptile species common in the proposed withdrawal areas include western fence lizard, side-blotched lizard, gopher snake, and Great Basin rattlesnake (US Navy 1997c).

Birds

Bird species in the Management Area include waterfowl, shorebirds, colony-nesting and other marsh birds, songbirds, and raptors. Quarterly avian surveys were conducted at all NAS Fallon lands between 1996 and 1997, except at B-20, where avian survey data was obtained from previous surveys (US Navy 1997c). At least one sample point was placed in each major habitat on NAS Fallon-administered lands, except where access was restricted. These sampling events characterized and compared abundance and diversity both between seasons and within seasons. During the avian surveys 126 bird species were observed. The highest bird diversities in all areas occurred during the spring and fall migration periods. Avian species' richness and abundance was relatively low in the arid training ranges (US Navy 1997c). The complete results of these surveys were presented in the 1997 Ecological Inventory Report and are too extensive to present here; however, some examples of observed bird species are presented below.

Wetland and shorebird species observed include cinnamon teal, American avocet, common snipe, American coot, black-crowned night heron, great egret, pie-billed grebe, ring-billed gull, sora, and white-faced ibis. Several upland bird species have been observed, including Bewick's wren, horned lark, house wren, ferruginous hawk, golden eagle, great horned owl, and merlin (US Navy 1997c).

Mammals

Several different species of large and small mammals, including bats, have been observed or trapped or are likely to exist in the Management Area.

Small mammals have been captured on all four training ranges and on NAS Fallon Main Station

itself. Eleven small mammal species have been trapped within the Main Station and on training ranges B-16, B-17, and B-19 (Table D-1). One additional species, the desert kangaroo rat, was trapped at B-20 during an earlier ecological study. Kangaroo rats were the most abundant small mammal species on the training ranges, whereas deer mice were most abundant on the more water-rich Main Station.

Several large species of mammals, including desert bighorn sheep, pronghorn antelope, mule deer, and wild horses, have been observed in the region. Mid-sized mammals, such as weasels, badgers, skunks, jackrabbits, bobcats, and kit foxes, have been observed or are likely to exist in the Management Area. Large predatory mammals, such as coyotes, bobcats, and mountain lions, have been observed in the Management Area (Rathbun 2001).

Bats

Bat surveys were conducted during 1996 and 1997 on all NAS Fallon lands except B-20, where there is no suitable bat roosting or foraging habitat. Bat species were identified only in the southeastern portion of B-17, where there are numerous mining structures. Bat species observed in the Lahontan or Dixie valleys and that could inhabit the Management Area include little brown myotis, pallid bat, small-footed myotis, Townsend's big-eared bat, and Yuma myotis (US Navy 1997c).

Game Species

Game species in the project area include birds and mammals. BLM and the Navy administer programs to promote habitat for game and nongame species, in cooperation with NDOW.

Many waterfowl game species can be found temporarily occupying the Dixie Valley Training Area. These include mallard, northern pintail, and Canada goose. Waterfowl also are found on the Main Station; the two largest concentrations of waterfowl in Nevada are at the Stillwater National Wildlife Refuge and Carson Lake, which are near the Main Station.

General wildlife (including big game) guzzlers have been installed in the Clan Alpine Range, Fairview Peak, Slate Mountain, and the Sand Springs Range. Mule deer is the most abundant big game species in the region and tends to be concentrated in adjacent mountain ranges, such as the Stillwater, Clan Alpine, and Desatoya mountain ranges, although deer are found in valleys around water sources (NDOW 1982). Bighorn sheep have been reintroduced in the Clan Alpine, Sand Springs, and the Fairview Peak/Slate and Stillwater mountain ranges. Other game mammals that may be hunted include the mountain lion and bobcat (US Navy 1997c).

3.1.1.8 Sensitive Species

Sensitive species include species that the coordinating agencies for this INRMP/RMPA have identified as warranting management consideration.

Federal Threatened, Endangered, and Protected Species

An Ecological Inventory Report was prepared in December 1997 to determine the presence of sensitive species at NAS Fallon. Three species designated as federally endangered or threatened under the Endangered Species Act are known to occur in the region: the bald eagle, cui-ui, and Lahontan cutthroat trout. Western Foundation of Vertebrate Zoology 1993). There is no habitat on the Management Area lands that would support the Lahontan cutthroat trout or cui-ui. The bald eagle has been observed in the Management Area. A bald eagle's nest has been observed at Lahontan Reservoir, eight miles west of B-16, since 1997. Bald eagles also have been observed transiting the management area at the Main Station, B-16, and in the Dixie Valley Training Area (Cottle 2001).

One federal candidate species, the Columbia spotted frog, and one proposed threatened species, the mountain plover, are known to occur in the region. Previous surveys found no evidence that the Columbia spotted frog occurs on the Management Area lands (Rathbun 1999, 1998; Western Foundation of Vertebrate Zoology 1993). The mountain plover could transit the Management Area

but is not known to use the Management Area for any purpose other than as a migration corridor.

The golden eagle, protected under the Bald Eagle Protection Act, is known to forage in the Management Area.

State Sensitive Species

Several species with Nevada special status designations could occur in the area. A complete list of these species and their respective designations is provided in Appendix B. Species listed in this appendix were included based on Nevada State Natural Heritage Program or Northern Nevada Native Plant Society (NNNPS) designations. Previous surveys and representatives of agencies have identified six species as occurring in the Management Area. These are the sand cholla, Townsend's big-eared bat, long-legged myotis, California myotis, small-footed myotis, and the Dixie Valley tui chub. The latter is a fish that is only known to occur in the Dixie Valley of Nevada. In addition, NDOW has identified the sage grouse as a species of concern potentially occurring in the area.

The sand cholla, a state protected species of cactus, has been recorded at three locations in the northwestern portion of training range B-16 and on training range B-19 (US Navy 1997c). The sand cholla is protected as a cactus under the Nevada Revised Statute (N.R.S.) 527.060-.120, which provides for the protection of Christmas trees, cacti and yucca. The recorded occurrences are within closed withdrawn lands, so access to these areas is not permitted.

The Townsend's big-eared bat is listed as a state species S3B (rare and local throughout its range or with very restricted range, or otherwise vulnerable to extinction, breeding status within the state, for breeding occurrences only). This species traditionally roosts in caves but could move into "buildings and mines, often in response to disturbance in natural caves" (US Navy 1997c). During the 1997 surveys individuals or signs of this species were observed at the Crazy K ranch, the meadow at Horse Creek, the mines at Fairview Peak, and the Mizpah mine (US Navy 1997c).

The long-legged myotis is a mid-sized myotis (a type of bat), which forages on small moths in riparian and watered areas, often near pinyon-juniper woodland or coniferous forests. This species is listed by the state as S4B (apparently secure, though frequently quite rare in parts of its range, especially at its periphery, breeding status within the state, for breeding occurrences only). They roost in rock crevices, trees, caves, mines, and occasionally buildings. During the 1997 surveys two individuals of this species were observed in a garage on Section 20 of the Dixie Valley settlement area (US Navy 1997c).

California myotis and small-footed myotis are similar species that can occupy the same habitat. Both of these species are listed by the state as S3B (rare and local throughout its range or with very restricted range, or otherwise vulnerable to extinction, breeding status within the state, for breeding occurrences only). During the 1997 surveys these species were observed hibernating in the mines on B-17 and foraging over the Dixie Meadows, the canals on the Fallon Main Station, and at Stinking Spring on B-19 (US Navy 1997c).

Tui chub were introduced to several of the man-made ponds in Dixie Valley. Anecdotal information indicates Mary Ellis, one of the seven original families to homestead in Dixie Valley, reported bringing the fish into a Dixie Valley pond from drying irrigation drains in Fallon. This species does not have any federal protected status, but concern for its status has been expressed. The state of Nevada has designated this species as an S1 species (critically imperiled due to extreme rarity, imminent threats, or biological factors). Studies conducted in 1991 documented tui chub in only one pond (Rissler et al. 1991). NDOW has since distributed tui chub to additional ponds in the Dixie Valley settlement area. All of the ponds where this species occurs in the Dixie Valley area are man-made and artificially maintained. Studies are being conducted to

determine if the tui chub is a distinct species (Hutchison 2001). The USFWS has indicated that there may be a need to federally list this species if they are found to be distinct. The Navy has worked cooperatively with USFWS and NDOW for 15 years to resolve the status of the tui chub in the Dixie Valley (Rathbun 2001).

Sage grouse is an important game species of local interest. The state of Nevada has listed this species as S4 (apparently secure, though frequently quite rare in parts of its range, especially at its periphery). Sage grouse seasonal habitats include lek (breeding/strutting grounds) on open or barren spots, nesting and early brood rearing in dwarf sagebrush, brood rearing on meadows or higher elevation sagebrush sites that are in close proximity to nesting habitat, and certain big sagebrush plant communities for winter cover and forage (Rathbun 2001). There are no known occurrences of sage grouse within the Management Area, but sage grouse populations occur nearby in the Clan Alpine and Stillwater mountain ranges (Rathbun 2001).

3.1.1.9 Soil and Air Resources

Soils

The Management Area is in the western portion of the Great Basin geomorphic province. Extensional faulting in this region has formed down-dropped valleys bounded by small, north-trending mountain ranges. The valleys tend to be internally draining closed basins with playas. Pleistocene lakes, including the ancient Lake Lahontan, which covered much of the northwestern Great Basin several times from 1.2 million to 10,000 years ago, inundated the basins of the area and deposited thick clay beds. Riverine deltas from the Truckee and Carson rivers also deposited sand, gravel, silt, and minor amounts of clay in the region.

Basaltic volcanism has occurred in isolated areas in the region during the past 20,000 years, resulting in hot springs and other geothermal features, as well as rich ore deposits from mineralization associated with hydrothermal activity. Much of Nevada is seismically active, with substantial movement occurring in the region of the Stillwater Range and the Clan Alpine Mountains in central Churchill County (Stewart 1980). Churchill County is in Zone 4, the highest zone level of seismic hazard. The last significant earthquakes in the region occurred at the foot of the Stillwater Range in the Dixie Valley in July and December 1954. These four earthquakes were of magnitudes ranging from 6.6 to 7.2. There are no faults under the Main Station (Cottle 2001).

Soils on the range have not been tested for contamination, but soil sampling at other long-term desert bombing ranges in California and Nevada found low to nondetectable levels of explosives residue in the soil (US Air Force 1996; US Marine Corps 1997). The soil types of these ranges are similar to the FRTC; however, cluster bombs, which were the primary contributor to explosive compound debris on the ranges tested by the Air Force are not used on NAS Fallon training ranges. Explosive materials are designed to be completely consumed upon detonation. The main residuals are from the shell casing, typically aluminum or steel.

Air Quality

Ambient Air Quality Standards

The federal government has established ambient air quality standards for criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), fine and inhalable particulate matter ($PM_{2.5}$ and PM_{10}), and lead particles. With the exception of the SO_2 standard, the Nevada Division of Environmental Protection (NDEP), Bureau of Air Quality has adopted the federal standards to regulate air pollution in the state. NDEP has adopted an SO_2 standard more stringent than the federal standards. NAS Fallon meets all National Ambient Air Quality Standards in accordance with Nevada Administrative Code, Chapter 445B.

The area of concern of this INRMP/RMPA/EA and its Proposed Action occur is unclassified and is not subject to conformity requirements.

3.1.1.10 Fire Management

Fire management for the Main Station and FRTC is provided by the Navy and through agreements with Churchill County and the BLM (SAIC 2000).

3.1.1.11 Recreation Management

Recreational activities in the area include hunting and trapping, camping, hiking, horseback riding, fishing, bird watching, operating OHVs, target shooting, pine nut gathering, wood cutting, mine and ghost town exploring, and rock, fossil, flora, and insect collecting. The Pony Express National Historic Trail corridor runs parallel to US Highway 50 within the FRTC. An annual trail ride along the Pony Express route takes place in June. The trail is part of the American Discovery Trail, a coast-to-coast hiking trail (US Navy 1998b).

Most recreation is on BLM-administered lands. Management objectives for recreation emphasize providing a wide range of recreational opportunities on public land.

Areas that are used by recreationists in the vicinity of the Management Area include the Sheckler Reservoir, Stillwater Range (including the Job Peak Wilderness Study Area), Sand Springs Range, Clan Alpine Range (including the Clan Alpine WSA), Horse Creek, Desatoya Range, Salt Cave, and the Wonder mining district. The Stillwater Range, including the La Plata 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 (US Navy 1998b).

No camping or OHV permits are required for casual use of the public land; if camping or OHV groups are organized for a large event, however, BLM requires a permit. Hunting is regulated by NDOW (US Navy 1997c). The BLM requires special recreation permits for organized competitive or commercial recreational activities (US Navy 1998b).

3.1.1.12 Visual Resources

The BLM Visual Resource Inventory Manual H-8410-1 provides a Visual Resource Management (VRM) methodology for evaluating the visual resources for BLM lands (BLM 1986). According to the VRM methodology, the scenic visual resources in an area are defined by three factors—scenic quality, viewer sensitivity, and viewer distance zones.

The first factor, scenic quality, provides a measure of the visual appeal of an area based on features such as topography, vegetation, water, adjacent scenery, scarcity, and human modifications. The second factor, viewer sensitivity, is a measure of public concern for scenic quality; viewer sensitivity is determined by such factors as the number and type of users, level of public interest, adjacent land uses, special areas, or other factors. The third factor in determining the scenic quality of an area is a delineation of viewer distance zones. The landscape is divided into three distance zones relative to the observation points or travel routes. The foreground-middleground zone, in which details of a landscape or Proposed Action can be seen, extends approximately three to five miles from a viewpoint. The background zone is the area that can be seen from a viewpoint where only form or outline of objects can be detected. The background zone extends approximately 15 miles from a viewpoint. The seldom seen zone includes those areas not visible from a viewpoint or that are beyond the background zone.

Based on these three factors, BLM 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.

The BLM Carson City Field Office has not assigned final VRM classes to the affected areas within its administration area. According to BLM policy, interim visual management objectives can be established for proposed projects. The potentially

affected areas within Dixie Valley are assumed to be class III designated lands.

Visual Character of the Management Area

The scenic features of the Management Area are characteristic of the Great Basin area of the western United States. Gold and brown hills extend 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, which 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 roads, utility lines, radar equipment, fences, and scattered residences (US Navy 1997a).

Visual sensitivity in the Management Area is related to major roads through the area and the Pony Express National Historic Trail because public access to most landscapes within the range area is limited. Landscapes within the foreground-middleground of US Highway 50, Highway 95, and the Pony Express National Historic Trail generally have higher viewer sensitivity. US Highway 50 is part of a National Parks Service proposed National Trails System called the American Discovery Trail.

3.1.1.13 Mineral and Energy Resources

Mineral Resources

The mineral industry within the Management Area is predominantly associated with exploring for, developing, and mining metals and industrial minerals. Major metals and minerals include gold, silver, copper, mercury, manganese, nickel, tungsten, antimony, barite, and turquoise. There are numerous small claims throughout the area. Some mineral areas are patented, which makes the land private property. Unpatented claims remain public and under multiple use management, as defined by BLM. Management objectives for mineral resources encourage mineral development while mitigating potential impact to the extent possible. There are no mineral districts at NAS Fallon Main Station or the B-20 training range. There are no unpatented mining claims on Navy withdrawn lands.

Energy Resources

The Carson Desert subbasin is filled with alluvium to a depth of between 8,000 and 20,000 feet (Cottle 2001). Along much of the mountains on the basin margin there is significant evidence of hydrothermal alteration. Three recent volcanic features are noticeable extending up through the alluvium: Upsal Hogback, Rattlesnake Hill, and the Soda Lake uplift. The presence of geothermal energy resources in the area has been known since the early 1900s. During the energy crisis of the 1970s, two geothermal plants were constructed in the valley to produce commercial electricity that could be sold into the grid. These plants at Soda Lake and Stillwater are still producing power.

3.1.1.14 Cultural Resources

Cultural resources include landscapes and places, archaeological sites and objects, and historical buildings and structures. Examples of cultural resources are, but not limited to the following: mountain tops, homesteads, medicinal plant gathering areas, lithic scatters, rock art, quarry sites, refuse deposits, foundations, houses, rock walls, tailings, waste rock, and other mining features, railroads, trails, and roads. A cultural resource generally must be more than 50 years old.

Cultural resource studies have been completed encompassing the region and the specific management areas (Bard et al. 1981; Bloomer et al. 1999; Elston 1982, 1986; Elston et al. 1992; Hanes and Ball 1982; Pendleton et al. 1982. NAS Fallon utilizes a research model that predicts the relative quantity and complexity of prehistoric resources based on landform and soil types for select areas (Zeanah et al. 1995). General overviews for the region have documented the chronology of historic activities (Bard et al. 1981; Carlson 1974; Bowers and Muesig 1982; Carlson 1974; Elliott 1987; Mordy

and McCaughy 1967; Pendelton et al. 1985; Townley 1998; Wieprecht 1980).

Cultural Resources within the Region

The record of human occupation in the region extends from approximately 9,500 BC to present, spans three major environmental periods, encompasses three major technological shifts and involves two cultural groups.

During the last 11,500 years three major climatic periods have appeared, the Early Holocene (9,500-5000 BC), the Middle Holocene (5000-2500BC), and the Late Holocene (2500 BC to present) (Elston 1982 and 1986, Adovasio 1986, Elston et al. 1995). The Early Holocene was marked by cooler temperatures and wetter conditions than today, however, this was a warming trend from the late Pleistocene which supported large pluvial lakes. The Middle Holocene was warmer and drier than current conditions culminating in the drying of the large pluvial lakes. The Late Holocene supports roughly current temperatures and precipitation.

Three major technological shifts have occurred during the last 11,500 years. The first two shifts are associated with Native Americans from 9500 BC to around 1900 AD. The third technological shift is associated with Euroamericans which historical documentation indicating they may have traveled through the area in the early nineteenth century.

Prehistoric Resources. The first technology was the spear and atlatl dart technology, a projectile tipped with a relatively heavy stone point that was made for thrusting and throwing. These weapons were made directly from bifaces and supported a large sized, multiple use/function stone tool technology. The second technology was bow and arrow technology, a projectile tipped arrow with a relatively light stone point designed to create a bleeding wound. These weapons were made from stones that were flaked, which supported a small sized, single use/function stone tool technology. The prehistory of the region (Milliken 2000, Elston 1982 and 1986, Adovasio 1986) are generally broken into seven periods, each defined by their diagnostic projectile point.

Western Clovis (9500-8500 BC). Western Clovis is the western North American variant of the Fluted Point Tradition marked by Clovis projectile points and twined basketry bags and rectangular mats. The environment was cooler than today and shallow lakes were present in the Lahontan Valley and sagebrush steppe in Dixie Valley. The inhabitants adapted to lacustrine resources; a key site for this period is the Harvey site northeast of Fernley.

Great Basin Stemmed (8500-5000 BC). The Great Basin Stemmed period, sometimes referred to as the "Western Pluvial Lakes Tradition," is marked by Great Basin Stemmed projectile points and Stage I basketry (Adovasio 1986a: 197) including twined rectangular mats and flexible bags. The tool assemblage associated with Great Basin Stemmed sites includes blades, large site struck flakes, bifacial knives, cresents, gravers, punches, choppers and steep angled scrapers. Milling stones are rare. The Spirit Cave mummy dates to 7465 BC ± 25 and includes moccasins made from three different skins and a possible loom made, diamond plaited matting. During this period, climate was much cooler than today but gradually became warmer. During this time human populations lived at lower elevations. The inhabitants continued to stay adapted to lacustrine resources using resources high on the food chain. Habitats used were the margins of smaller lakes, riverine contexts and high elevations; they were hunting large and small game and gathering lacustrine plants. Coprolite studies of the Spirit Cave mummy show found lacustrine resources were eaten.

Mixed Dart (5000-2500 BC). The Mixed Dart period is marked by Pinto and Northern Side Notched projectile points and Stage II basketry (Adovasio 1986a: 200) including coiled parching trays and containers. Milling stones are now present. The environment was warmer and the previous shallow lakes dried up. This period is not well known due to the paucity of sites. Key sites for this

time period include the Cocanour site and Leonard Rockshelter.

Gatecliff (2500-500 BC). The Gatecliff period is dominated by Gatecliff projectile points and Stage III basketry (Adovasio 1986a: 200) including Lovelock Wickerware and multi-rod coiling. The tool assemblage associated with Gatecliff period sites is bifacially constructed and includes bone awls, beads, net gauges, scapula saws, drills, punches, scrapers, choppers and small flake tools. Milling stones are now seen at base and winter camps. The environment was cooler and had increased winter precipitation and aeolian deposition increased. Human populations are assumed to increase and the inhabitants increased their length of stay at camps, foraging out to other resource zones. Population increase is believed to have spurred innovations in subsistence, technology and settlement patterns (Elston 1982). Key sites include Lovelock Cave which has seven radiocarbon dates from 2740-2030 BC and four dates from 1770-1220 BC. Hidden Cave has seven radiocarbon dates from 1850-1100 BC and a site in Stillwater Marsh has five radiocarbon dates between 1240-730 BC.

Elko (500 BC -AD 500). The Elko period is dominated by Elko projectile points and Stage IV basketry including Lovelock Wickerware and coiled containers. Land use is similar to the Gatecliff and the key sites are Lovelock Cave and the Humboldt Lake Bed site.

Rosegate (AD 500-1300 BC). The Rosegate period is marked by Rose Spring and Eastgate projectile points and Stage V basketry (Adovasio 1986a: 200). The tool assemblage is now constructed from flakes instead of bifaces as the projectile technology changes from atlatl and dart to bow and arrow. Milling stones now include mortars and hullers. The environment was roughly modern as the inhabitants continued to expand the range of habitats they exploited. Key sites include Lovelock Cave, the Humboldt Lake Bed site and Stillwater Marsh that has 12 radiocarbon dates between in the Rosegate period.

Desert (AD 1300-1850 BC). The Desert period is marked by Desert Side-Notched and Cottonwood projectile points and Stage V basketry (Adovasio 1986a: 200). The environment continues to roughly modern. The inhabitants continued to make smaller and shallower houses and eat fish, small game, waterfowl and seeds. Key sites include the Dune Springs site.

Historical Resources. Euroamerican technology is industrial in nature, which included guns, horse and mechanized-powered equipment, substantial buildings and structures and large-scale land manipulation and resource extraction. For Nevada, chronology extends from the early nineteenth century to roughly the 1950s. Historic resource activities commonly associated with the industrial technology in Nevada include the following: transportation and communication, settlement, reclamation, ranching and farming, mining, and military.

Churchill County. In 1861 Churchill County was one of the nine original counties to be created to form the Nevada Territory. Several early transportation and communication corridors extended through the county. Mining was a major industry along with small scale farming and ranching prior to the Newlands Project. The County has had three prior locations for the seat of government, influenced by the dominant economy at the time. Fallon became the county seat in 1903, concomitant with the Newlands Project. Agriculture and the Naval Air Station are the dominant activities in the area today.

Transportation and Communication. Three significant routes, the Pony Express Route, the Overland Stage and Mail Line, and the Fort Churchill to Sand Springs Toll Road, extend through the region. Additionally, stations for either the Pony Express or the wagon carriers were established along the routes. Three of the stations are included in the management areas, the Rock Creek, the Cold Springs, and the Sand Springs stations located alongside Highway 50. Immediately following the

Pony Express and the Overland Stage was the Pacific Telegraph Line. This company strung its lines along much of the same corridor as its two predecessors. Later, transportation corridors linked the ranches and farms through a series of roads and trails. Other roads soon developed, including the Wadsworth-Columbus Freight Route. These early road alignments are still in use today.

Mining. After the Comstock boom in 1859, prospectors scoured throughout the state for new mineral resources. The location and the type of minerals varied throughout the state and Churchill County during the late nineteenth and early twentieth centuries. Numerous mining districts and mines were established, some more prominent than others. Discoveries of gold, cobalt, and nickel were near Bolivia, silver in LaPlata, silver, gold, and copper in the Wonder and Fairview districts, and gold and silver at Canderlaria (1864). Salt and later borax was extracted from Salt Wells and Dixie Marsh. Some claims of gold, silver, and copper were also established in the area surrounding the Carson Sink, however, they were short-lived. In the early twentieth century mining was revitalized with the extraction of non-metallic sources (barite, diatomaceous earth, and turquoise. Again the regular boom-and-bust cycle associated with mining continued in the region. Several mining districts, including Fariview, Holy Cross, LaPlata, and Wonder, and Dixie Marsh are within the management areas.

Ranching and Farming. Early agricultural development was in direct correlation with mineral exploration. Agricultural pursuits in the valleys relied heavily on supplying the nearby mining communities of Bolivia, Fairview, Rawhide, and Wonder. The production of foodstuffs prospered as long as mining continued. Despite the decline of mining, communities developed into towns, agricultural pursuits continued on a much smaller scale despite the decline of mining. One great boom for agriculture was the Newlands Project and with its inception, thousands of acres now received water around the Fallon area (see Newlands Project).

The planning area can still be characterized by a small number of widely-spread ranches and enormous grazing areas, due to the lack of water in many of the valleys. Successful ranches are still present today occupying the most valuable lands in the valleys, and around the Carson Sink area, including Fallon. The unsuccessful ranches and farms were abandoned and most of these are on lands administered by the BLM. The lands associated with the Carson Sink and Rawhide Flats are marginal lands for farming or livestock grazing and are administered by the BLM and the Navy.

Newlands Project (Truckee-Carson Project). The Fallon area was home to small-scale farms at the turn of the century, due in part to the lack of a consistent water source. In 1902 the National Reclamation Act was authorized. The Newlands Project, the first under the Act, was authorized in 1903 and construction began the same year.

Water is diverted from the Truckee River to the 32.5 mile Truckee Canal at Derby Diversion Dam. Land along the canal receives some of the water, but most is discharged directly into the Carson River through the penstock of the Lahontan Powerplant or through a chute into the Lahontan Reservoir for storage. Water released from Lahontan Reservoir is diverted into the T and V canals at the Carson River Diversion Dam and two minor diversion dams downstream and flows to the largest area of project lands in the vicinity of Fallon. Many of these larger canals are detailed in the documentation for the National Register of Historic Places (Wieprecht 1980). Other features of the Project are 69 miles of main canals, 312 miles of laterals and 345 miles of open drains. Full irrigation service is provided to almost 1,000 farms totaling more than 73,000 acres.

Naval Air Station, Fallon. See detailed description under the "Cultural Resources within the Management Areas" section.

Traditional Cultural Properties. Three tribal groups either have land or utilize resources within the planning area. The three tribes are the Fallon

Paiute-Shoshone, the Walker River Paiute, and the Yomba Paiute. During previous consultation and discussions with the tribes, sensitive areas having religious or cultural importance have been previously identified in the planning area. Resource types include mountain peaks, springs, plant resources, and pinyon stands. Numerous other religious or sacred sites are present, but these areas have not been identified to the land managing agencies.

Management Documents. Numerous individual surveys have been conducted in the management areas in compliance with Section 106 of the National Historic Preservation Act (NHPA). The most recent comprehensive survey of the training ranges was conducted in 1993 and 1994 in support of a predictive model of prehistoric sites in the Carson Desert. As part of this project, five percent for each of the training ranges was inventoried (Zeanah et al. 1995). For the BLM-administered lands on a few surveys have been conducted, however, despite the low frequency of these projects, several significant prehistoric and historic resources have been identified.

In 1993 a cultural resources management plan (CRMP) was prepared for NAS Fallon and the FRTC. Besides the cultural resources overview of the area, this establishes survey, recordation, evaluation, and historic preservation procedures for managing cultural resources on NAS Fallon (US Navy 1993). A programmatic memorandum of agreement among the Department of Defense, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers, dated July 7, 1986, provides for the demolition of all temporary structures on NAS Fallon (US Navy 1993).

A programmatic agreement (PA) among the NAS Fallon, the Nevada State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding the identification, evaluation, and treatment of historic properties on lands managed by the NAS Fallon was signed by all three agencies in June 1996. This PA specifies that procedures outlined in the CRMP will be followed, except as negotiated otherwise by all parties of the PA. The PA also describes specific undertakings by the Navy that are excluded from the NHPA Section 106 review.

Conversely, the CCFO works through their State Protocol Agreement between the BLM and the Nevada SHPO. This Protocol defines how the Nevada SHPO and the Nevada BLM will interact and cooperate under the BLM National Programmatic Agreement for implementing the NHPA. This Protocol applies to when the BLM is the lead agency with more than one federal agency is involved. Other agreements may be developed to define project specific procedures or manage specific undertakings. The PA also describes specific undertakings by the Navy that are excluded from the NHPA Section 106 review.

As noted above, cultural resource management of the respective management areas is handled independently by the NAS Fallon and the CCFO. The two management documents, the NAS Fallon PA and the BLM Protocol describe the manner in which each agency will conduct cultural resource studies. However, even though similar in goals and proactive management, the two documents differ in the type of projects exempt from Section 106 activities, reporting format, and review by the ACHP. In those cases where both agencies are involved, one agency is deemed the lead and the other a coordinating agency. Consultation with the Nevada SHPO is handled by the lead agency. Agency consultation also involves discussions tribal organizations, interested parties, and possibly other federal agencies. In certain cases, the Advisory Council on Historic Preservation (ACHP) may also be consulted.

Specific plans for the BLM administration areas have been prepared. The *Grimes Point Management Plan* (BLM 1976) recommended several tasks for the area. These recommendations include: trash removal; area fences and closed to vehicles;

Petroglyph Trail construction and installation of interpretive signs; excavation of Hidden Cave; interpretation and tour program of Hidden cave; and construction of Hidden Cave interpretative trail and installation of signs. All recommendations have been implemented. Due to the success of interpretative activities at Grimes Point, a subsequent *Recreation-Cultural Project Plan: Grimes Point Archaeological Area* was developed (BLM 1989). The recent plan called for greater protection of the cultural resources while providing increased interpretation.

One of the goals of the *Sand Mountain Recreation Management Plan* (1978) was to develop an historical area to provide protection and interpretation for the Sand Springs Pony Express Station. Both tasks, fencing for protection and a pathway with interpretive signing were completed.

In 1993 an *Action and Implementation Plan* was prepared as an update to the *1978 Sand Mountain Recreation Management Plan*. Proposed actions were to improve the interpretation and protection of the site and to conduct stabilization of the walls. Again, both tasks were completed with the walls stabilized under the 1997 ISTEA grant.

In 1976 the *Cold Springs Historic Area Recreation Management Plan*. The purpose of the plan is to provide methods for protecting, stabilizing the ruins, and interpreting the history of the historic resources. In addition, archaeological excavations were conducted based on the recommendation in the *Plan*. Fencing was constructed around the two stone structures (western side) along the highway and has reduced vandalism. Under the same ISTEA grant for the Sand Springs site, the three structures were stabilized.

On the eastern side of the highway, the BLM constructed a parking area and a kiosk to provide historical information about the Pony Express. From the kiosk, a 1.5-mile foot trail leads east to the Cold Springs Pony Express Station. This station was stabilized in the late 1970s, and a number of interpretive signs educate visitors about the history of the area and hardships endured by station keeper.

3.1.1.15 Socioeconomics

This section describes the regional social and economic conditions. Specific social and economic factors addressed include population, employment, and the economy.

The socioeconomic ROI is confined to Churchill County. The principal community within this region, whose social and economic conditions could be affected by the proposed project, is the city of Fallon. The Walker River Paiute tribe in southern Churchill County, northern Mineral County, and eastern Lyon County and the Fallon Paiute-Shoshone tribe of the Fallon Reservation and Colony near Fallon are also within the ROI.

Population

The population within the ROI is presented in Table 3-1, and population forecasts are provided in Table 3-2. Between 1990 and 1999, the population of Churchill County grew by approximately 7,000, an increase of roughly 40 percent. The town of Fallon grew by almost 2,000 in that same period. Growth is expected to continue in the next century, and Churchill County's population is expected to increase by 10,000 by 2010.

Employment

Table 3-3 presents the most current employment figures for the industries in Churchill County, where the services and government sectors had the highest employment in 1998. Most government employment is attributable to NAS Fallon, which has been a mainstay of the county's economy since the late 1940s. NAS Fallon directly accounts for about 30 percent of the county's total employment, including approximately 1,000 military positions, 600 civil service positions, and 750 contractors. Retail is the next largest employer. Agriculture represents a minor component of the county's employment.

Table 3-1
ROI Population Estimates

County / Municipality	1990	1995	Percent Change 1990-1995	1999	Percent Change 1995 – 1999	2002	Percent Change 1999-2002
Churchill County	18,025	21,640	20%	25,310[1]	16%	28,064[2]	11%
City of Fallon	6,438	7,590	17%	8,280[1]	10%	9,836[2]	19%

Sources: Nevada State Demographer's Office 1998a, 1998b, and 2000a.
[1]Estimate
[2]Projection

Table 3-2
Churchill County
Population Forecasts 2000-2010

Year	Population Estimates
2000	26,250
2005	30,662
2010	36,047

Source: Nevada State Demographer's Office 2000b

Table 3-3
Churchill County
1998 Employment by Industry Type

Industry	Churchill County
Farm	654
Agricultural services, forestry, fishing, other	197
Mining	51
Construction	774
Manufacturing	772
Transportation and public utilities	306
Wholesale trade	280
Retail trade	2,077
Finance, insurance, and real estate	721
Services	3,668
Government	3,165
Total	**12,665**

Source: Bureau of Economic Analysis 2000.

3.1.1.16 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-income Populations. The purpose of the order is to avoid disproportionate adverse environmental, human health, or economic impacts from federal policies and actions on minority and low-income populations. The executive order requires that any significant adverse impacts of a federal project or alternatives on minority and low-income populations be reported and, where appropriate, that mitigation measures be prescribed. Pursuant to Executive Order 12898, 3 CFR 859 (1995), reprinted in 42 USCA §4321 note at 475-79 (West 1994), and Executive Order 13045, 3 CFR 198 (1998), reprinted in 42 USCA §4321 note at 40-42 (West Supp. 1998), environmental justice and health and safety risks to children also are addressed in this EA.

Current background information on minority groups is provided in Table 3-4. Population estimates for 1998 indicate that whites make up most of the population of Churchill County. Table 3-4 shows that the largest racial minority within the counties and municipalities in the ROI is Native American. Approximately 6.7 percent of the Churchill County population considers itself of Hispanic origin (The category of Hispanic Origin can overlap with other categories, so the totals in Table 3-4 add up to more than 100 percent).

Table 3-4
Churchill County
Population Racial Characteristics

Race	1998 (% total)
White	21,699 (90.3%)
Black	337 (1.4%)
Native American	1,301 (5.4%)
Asian or Pacific Islander	682 (2.8%)
Hispanic Origin	1,609 (6.7%)
Total	**24,020**

Sources: Nevada Department of Administration 2000a, b.

The Fallon Paiute-Shoshone Tribe occupies the Fallon Reservation and Colony near the city of Fallon. The colony consists of 60 acres two miles northeast of Fallon, and the reservation consists of over 8,000 acres 12 miles northeast of Fallon. The Walker River Paiute Reservation is in southwestern Churchill County, just south of B-19.

Executive Order 13045 seeks to protect children from disproportionately incurring environmental health risks or safety risks that might arise as a result of federal policies, programs, activities, and standards. Environmental health risks and safety risks to children are those that are attributable to substances that a child is likely to come in contact with or ingest.

Table 3-5 presents the age distribution within Churchill County. Most of the population within the county falls within the age group between 18 and 64 (labor force age group), and about one third of the residents of the county, approximately 7,200, are children (within the zero to 17 age group).

Relatively large concentrations of children are most likely to be at schools within the ROI. All eight of the Churchill County School District's public educational facilities are in Fallon, including one preschool, five elementary schools, one junior high school, and one high school (US Department of Education 2001). A privately operated elementary school also is in Fallon.

Table 3-5
Churchill County
Population Age Distribution

Age	Churchill County (% total)
0 to 17	7,264 (31%)
18 to 64	13,357 (57%)
65 and over	2,784 (12%)
Total	23,405

Sources: US Census Bureau 2000.

3.1.2 Existing Navy Management Measures Common to All Areas

3.1.2.1 Water Resources and Water Rights Management

- The Navy manages water resources in a manner that is consistent with state and federal laws and regulations, including the Nevada Water Law, Title 48 (Chapters 533 and 534), the Truckee-Carson-Pyramid Lake Water Settlement Act (Public Law 101-618), and other federal laws and regulations.

3.1.2.2 Wetland and Riparian Habitat Management

- The Navy manages its lands to protect or enhance wetlands and riparian areas under Section 404 of the Clean Water Act.

3.1.2.3 Vegetation Management

- The Navy manages vegetation to benefit the environment and to generate long-term cost savings from weed control, landscaping, and agricultural outlease.
- The Navy's goal is to maintain native plant communities and species diversity per the President's April 26, 1994 Memorandum on Environmentally Beneficial Landscaping.

3.1.2.4 Noxious Weed Control

- The Navy and BLM manage lands for the control and removal of noxious weeds per their Integrated Pest Management Plans, which are in accordance with Invasive Species Executive Order 13112 of February 3, 1999, and the Noxious Weed Act of 1974, 7 USC 7801.
- Prior to surface-disturbing activities, the Navy and BLM will continue to evaluate the potential for noxious weed colonization.
- After natural or significant human disturbance, the Navy will revegetate the area with native plants, where feasible.

3.1.2.5 Wildlife Management

- The Navy manages for the protection and enhancement of wildlife and habitat where possible, per Navy regulation and policy and the Sikes Act, the Fish and Wildlife Conservation Act, 16 USC 2901, the Endangered Species Act, the Migratory Bird Treaty Act (Public Law 65-186), the Neotropical Migratory Bird Treaty Act, and the Bald Eagle Protection Act. This includes analysis of impacts from ground disturbing activities.
- BASH is managed under the NAS Fallon BASH Plan.

3.1.2.6 Pest Management

- The Navy manages a control program for weeds and pests, per the NAS Fallon Integrated Pest Management Plan, as directed by the DOD Pest Management Program DODINST 4150.7 and the Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136.

3.1.2.7 Soil Management

- The Navy manages its lands to prevent or reduce soil erosion, per Navy regulations, Section 402 of the Clean Water Act, and the Soil Conservation Act.
- The Navy will continue to implement best management practices to minimize soil erosion.

3.1.2.8 Fire Management

- The Navy has a fire department for structural fire prevention and suppression on the Main Station and mutual aid agreements with BLM and Churchill County for use when necessary.
- The Navy will continue to control the buildup of flammable vegetation on the Navy controlled lands, where possible.

3.1.2.9 Lands

- The Navy manages lands for military training in accordance with Navy regulations and policy, including OPNAVINST 5090.1B CH-2 and NAVFAC P-73 Vol II, Real Estate Operations.
- The Navy and BLM would continue to coordinate processing nonmilitary land action applications (e.g., rights-of-way). BLM would be the lead agency for preparing NEPA compliance documents. The action would be assessed for impacts to military mission and environmental conditions.

3.1.2.10 Recreation Management

- The Navy manages recreation where compatible with the military mission in accordance with the Outdoor Recreation - Federal/State Programs Act, 16 USC 3B, the Sikes Act, and Navy regulations and policy.
- The Navy will endeavor to implement no action which would interfere with public use or adversely affect the historic nature of the Pony Express Trail on open withdrawn lands.

3.1.2.11 Visual Resource Management

- The Navy complies with BLM requirements in areas under BLM jurisdiction.

3.1.2.12 Mineral and Energy Resource Management

- BLM manages minerals; the Navy applies for permits for gravel extraction where required.

3.1.2.13 Cultural Resource Management

- The Navy manages cultural resources in accordance with the NHPA, Native American Graves Protection and Repatriation Act, and other applicable federal and state laws and regulations.
- If possible, avoid significant cultural properties. Where cultural resources cannot be avoided, take appropriate measures to mitigate project effects.
- Navy coordinates with Native American tribes and individuals in accordance with Navy policy.

3.2 SPECIFIC GEOGRAPHIC/MANAGEMENT AREAS

In addition to those conditions and management measures described above, each individual geographic/management area contains unique environmental conditions requiring area specific management. Section 3.2 describes the unique features and management measures for NAS Fallon Main Station, FRTC, Dixie Valley Training Area, and Other Lands. The specific management measures described below are supplemental to the existing management measures being implemented for all management areas.

3.2.1 NAS Fallon Main Station

This section describes the existing condition of and management measures specific to the NAS Fallon Main Station lands. Resources and management measures that apply to the entire Management Area are described in Section 3.1.

3.2.1.1 Existing Conditions

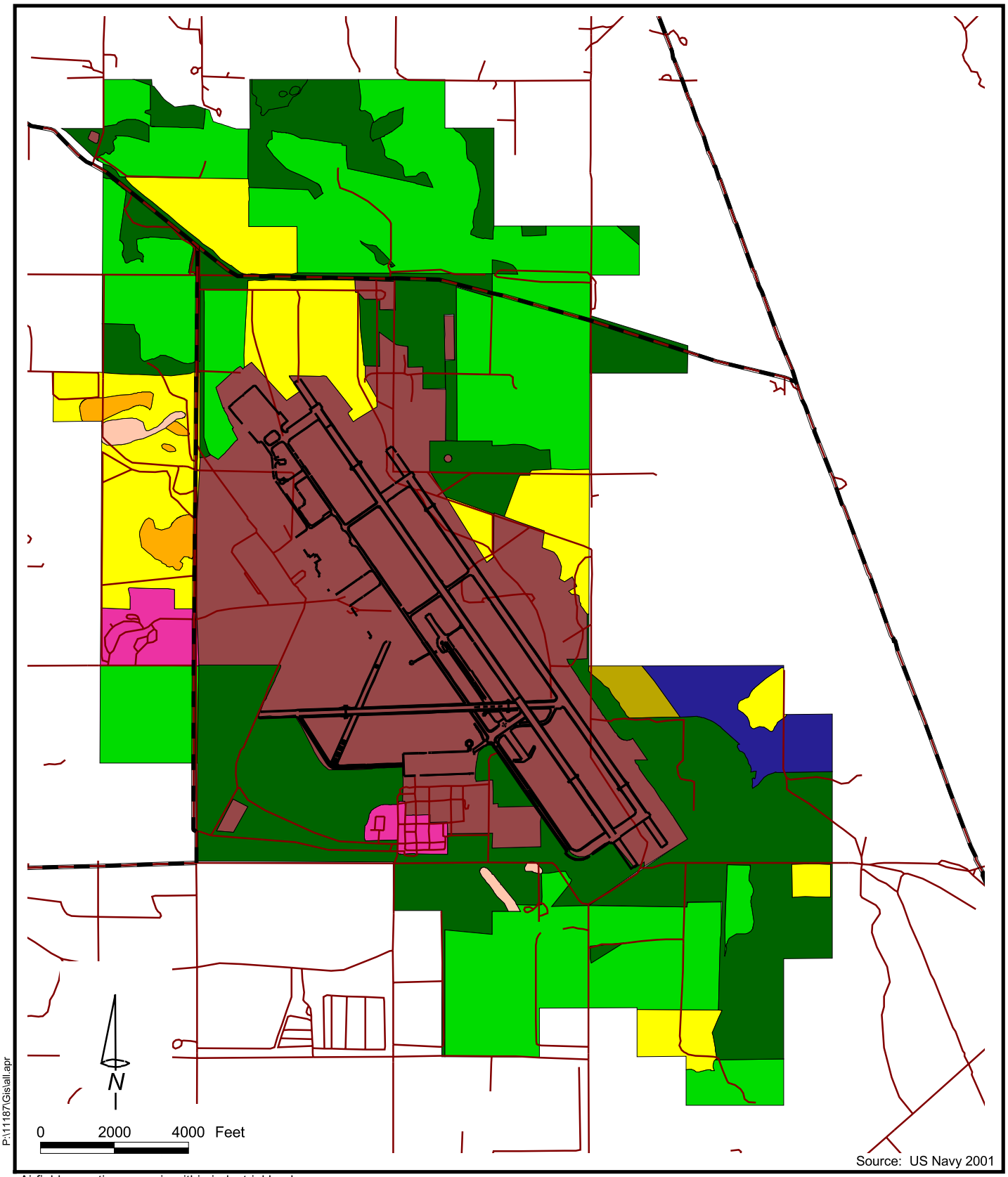
Livestock Grazing and Agricultural Outlease

On the Main Station there are 3,500 acres divided into 11 agricultural lease parcels. Some of the parcels have livestock grazing, and some of the parcels have irrigated farmland where the lessees grow alfalfa, corn, ryegrass, wheat, or sudangrass. Figure 3-4 identifies the various land uses and habitats located on NAS Fallon Main Station. The Military Construction Authorization Act of 1983, Public Law 97-321, mandates the revenue generated from agricultural and grazing lease agreements may be retained by the Secretary of the Navy and used to finance land management programs at any Naval installation. At NAS Fallon there are 3,500 acres that must be retained for buffer or safety zones and are leased out for agricultural and/or grazing lands. This area is divided into 11 parcels that are leased out to local ranchers. There are 1,255 acres of irrigated fields and crops such as alfalfa, sudangrass, rye, corn, and barley are grown. In the summer there are also up to 800 head of cattle grazing on the lease parcels. A Soil and Water Conservation Plan has been written for each agricultural lease parcel. Funds from the agricultural lease program are used to complete soil and water conservation projects, wildlife habitat enhancements, and outdoor recreation projects.

Water Resources and Water Rights

The Main Station is in the central part of the Carson Desert subbasin. The primary water features on the Main Station are irrigation and drainage canals. The Newlands Irrigation Project delivers water via TCID irrigation canals to the Main Station's 2,934 water-righted acres. There are three wells that supply potable water for the main station. The State permit is for a public water system and the wells can pump a maximum of 2 million gallons a day or 2,237 acre-feet annually.

Drainage canals on the Main Station intercept the shallow water table and carry water throughout the year. This water is of poor quality and contains agricultural return flows from on- and off-station uses, treated sewage effluent from NAS Fallon and the city of Fallon, and local runoff. Stormwater and wastewater are regulated under a National Pollution Discharge Elimination System permit issued by the Nevada Division of Environmental Protection



Airfield operations area is within industrial lands.

Legend

Runway
Major Roads
Transportation

Land Use and Habitats

- Irrigated Agriculture
- Disturbed
- Industrial
- Iodinebush Wetland (Moist Saline Flat)
- Salt Plan
- Residential
- Sodic Dunes
- Sodic Sands
- Sodic Terrace

NAS Fallon Mainstation Land Use and Habitats

Tetra Tech, Inc

Figure 3-4

(NDEP). Monitoring for both stormwater and wastewater results are provided to NDEP in accordance with this permit. NAS Fallon maintains compliance with all permit limits.

Ground water flow in the southern two-thirds of Main Station is upward into the shallow aquifer and in the northern part is downward through the shallow aquifer. The Main Station was mapped for flood hazards by the Federal Emergency Management Agency, which noted that only two areas on the eastern side of the station were subject to 100-year flooding. Groundwater contamination has occurred at the Main Station. This contamination is monitored and confined within the Main Station boundaries. The installation recognizes that adverse impacts to natural resources addressed in this INRMP may result from the release of hazardous substances, pollutants and contaminants into the environment. The Department of the Navy Installation Restoration Program (IRP) is responsible for identifying CERCLA releases, considering risks and assessing impacts to human health and the environment (including impacts to endangered species, migratory birds, and biotic communities), as well as developing and selecting response actions when it is likely that a release could result in an unacceptable risk to human health and the environment.

Much of the surface hydrology on the Main Station is controlled by engineered diversions for agriculture. In 1904 the US Reclamation Service (now BOR) diverted Truckee River water southward through the 32-mile long Truckee Canal to the Lahontan Reservoir on the Carson River to support development of the Newlands Reclamation Project in the Carson Desert. The Newlands Reclamation Project irrigation and drainage system is operated by the Truckee-Carson Irrigation District (TCID), which irrigates about 55,000 acres of land in the Carson Desert. The Newlands Reclamation Project directs return-flow and shallow groundwater seepage to the Carson River and wetlands at the Stillwater National Wildlife Refuge and Carson Lake. Surface water features are shown in Figure 3-3.

Riparian and Wetland Habitat

Engineered ditches on the Main Station are dominated by cattails and a variety of grasses along the banks. There are no known jurisdictional wetlands located on the Main Station.

Wildlife

Quail, doves, turkeys, pheasant, and deer are present on the NAS Fallon Main Station.

Soil Resources

Some Main Station lands are subject to water and wind erosion associated with the numerous canals flowing through the area, with gullies surrounding agricultural drains and with wind.

Mineral and Energy Resources

Energy Resources. In 1991 the Navy began geothermal exploratory drilling on the Main Station and completed exploratory wells in 1993. In these wells a promising formation was encountered in a fractured basalt. This reservoir has sufficient porosity and temperature to be a viable source of geothermal energy for electrical power production. Water qualities encountered were good, and no significant hydrogen sulfide was encountered. This field is being investigated for commercial development.

Cultural Resources

Naval Air Station Fallon. The Civilian Aviation Administration and the Army Air Corps began construction at Fallon in 1942 (Mikesell 1998). The Navy elected to take over construction in 1943 and designated the Station a Naval Auxiliary Air Station to the larger field at Alameda, California. The only remaining structure with the potential for significance from the World War II era is building 95, the aircraft beacon, which is currently unevaluated. In 1946, the Station entered into a caretaker status with the Bureau of Indian Affairs for five years, during which it was mostly dismantled. In 1951, the Station was reestablished as a Naval Auxiliary Landing Field and upgraded back to Naval Auxiliary Air Station in 1953. The Station continued its mission to train and support

Navy pilots for jet aircraft. In 1972, the Station was upgraded to Naval Air Station status. Each upgrade period resulted in a wave of new construction and demolition of old buildings.

In 1956 the 858th Aircraft Control and Warning Squadron (Air Force) was assigned to the base to operate mobile radar units. In 1959, construction began and was completed in 1961 on the 800 Complex or the Fallon Air Force Station, that was set up for the pre-NORAD SAGE (Semi-Automatic Ground Environment) system for the Air Defense Command. The 800 Complex housed the BUIC (Back-up Interceptor Control) which searched the skies for enemy planes and missiles invading our airspace and could then retaliate. The 800 Complex consists of a near-miss nuclear proof control building and bunker, a powerhouse, guard shack, radar tower with a 135-foot radar array and a set of fuel tanks. The 800 Complex was determined eligible for the National Register of Historic Places, the 800 Complex and consists of five buildings and two-diesel fuel tanks in an enclosure. The significance of the Complex is that it was initially constructed as part of the Air Defense Command, part of the air defense system developed during the Cold War.

A majority of the Main Station has been surveyed, both for prehistoric and historical archaeological sites and for World War II and Cold War era buildings. Seventeen prehistoric sites have been recorded, ranging from lithic scatters, groundstone sites, a burial, and a historic component. Six of the seventeen sites have been determined eligible for the National Register of Historic Places (NRHP). Seven historic sites have been recorded including Redman's Station, house platforms, refuse deposits, agricultural fields, and a canal feature. Four of the sites have been determined eligible for the NRHP.

3.2.1.2 Existing Navy Management Measures

Livestock Grazing Management

- The Navy manages 11 agricultural leases on 3,500 acres under its Agricultural Outlease Plan of 2000, as directed in Chap 19 of NAVFAC P-73 Vol II. A Soil and Water Conservation Plan was written for each lease, and the lessee is required to complete conservation projects.

Water Resources and Water Rights Management

- The Navy maintains water rights in accordance with state and federal law to meet aircraft safety requirements, as identified in the Agricultural Outlease Plan.

Wetland and Riparian Habitat Management

- The Navy would continue to maintain the pond along the nature trail and adjacent habitat.

- The Navy would continue to manage habitat along irrigation drainages around the agricultural parcels.

Vegetation Management

- The Navy manages vegetation on the Main Station for low water use landscaping, xeriscape, and agriculture, per the Agricultural Outlease Management Plan and the NAS Fallon Landscape Plan, consistent with the FOD reduction program and aircraft safety.

Fire Management

- The NAS Fallon Fire Department determines appropriate times and methods for prescribed burning of weeds and irrigation ditches.

3.2.2 FRTC

This section describes the existing conditions of and existing management measures specific to FRTC lands, including training ranges B-16, B-17, B-19, and B-20. Resources and management measures that apply to the entire Management Area are described in Section 3.1.

3.2.2.1 Existing Conditions

Water Resources and Water Rights

The training ranges have not been mapped for flood hazards. Periodic flooding is expected to occur along the washes in these areas, and drainage into dry lakebeds occasionally creates standing water.

B-16 Training Range. B-16 is in the southwestern Carson Desert subbasin. Several major ephemeral stream channels converge to the northwest of B-16 and cross the training range as they flow toward Carson Lake. The area contains additional alluvial fans, valley bottomlands, alkali flats, sand dunes, and segments of three main irrigation canals. This area contains no perennial springs or streams. However, there is one well located just outside the fence. The water table beneath the bottomlands is believed to be shallow.

B-17 Training Range. B-17 is in the northern portion of the Fairview Valley subbasin, a subbasin of the Dixie Valley basin. Fairview Valley is separated from the Dixie Valley by a low topographic divide that extends to the northwest from near the northeast corner of B-17. There are no perennial waterbodies at B-17; however, water has been recorded as ponding within the range boundary during wet years. There is one well on B-17, two storage tanks and six guzzlers on the withdrawn lands. The Navy has purchased Frenchman station, just north of B-17 along Highway 50, which included water rights.

B-19 Training Range. B-19 straddles the Blow Sand Mountains, which form the topographic divide between Rawhide Flats and the Carson Sink. The northeastern tip of B-19 is in the Carson Desert subbasin, with most of the training range within the Rawhide Flats subbasin. There are two developed springs, one well and one storage tank at B-19. Additionally, water has been recorded as ponding within the range boundary during wet years.

B-20 Training Range. B-20 is in the northeastern portion of the Carson Desert subbasin. The Carson Sink is a terminal groundwater basin, meaning that the groundwater has no outlet to another basin. There are no perennial waterbodies at B-20. During wet years, water can pond on B-20. There is one well approximately 1.3 miles northwest of B-20 that delivers 1.46 million gallons per annum. The water is used for dust abatement and compaction of fills of roads and targets.

Wetland and Riparian Habitats

There is one area of wetland and riparian habitat found within the FRTC. Stinking Springs is a natural pond found on the northwestern corner of B-19; it encompasses less than an acre.

Vegetation

B-16, B-17, and B-19 Training Ranges. Ecological field investigations conducted between the summers of 1996 and 1997 at NAS Fallon Main Station and training ranges B-16, B-17, and B-19 identified 458 vascular plant species (US Navy 1997c). These species included 20 different upland habitats and eight wetland plant communities on NAS Fallon Main Station and training ranges B-16, B-17, and B-19. The B-16 training range had 87 species, the B-17 training range had 179 species, and the B-19 training range had 89 species.

B-20 Training Range. B-20 was not included in this Natural Resources Conservation Service (NRCS) range condition assessment; however, an NRCS 1986 study found range conditions near Lone Rock to be poor to fair. The rest of B-20 is classified as playa that is not evaluated for range conditions (NRCS 1986).

Soil Resources

Soils at the B-16, B-17, and B-19 training ranges vary from well-drained and coarsely textured on the slopes to poorly drained and finely textured in the basins and low lake terraces (US Navy 1997c, 1991a). Most of the soils within B-20 are classified as playa, a typical soil of the Carson Sink (NRCS 1986). The soil consists primarily of clayey surface material but varies in particle size from sand to clay. Natural drainage is very poor and internal drainage is very slow; therefore, ponding is common (US

Navy 1997b). Most of the soils on the training ranges are subject to wind erosion when disturbed.

Lands

A gas pipeline right-of-way runs through withdrawn lands east of B-19.

Recreation Management

Organized OHV events are held twice each year in areas to the west and east of B-19 and near B-16 and B-17.

Visual Resources

The Navy retains maximum flexibility to modify the landscape of the training areas, which are therefore not subject to the BLM VRM methodology; however the visual character of the training ranges is described here.

B-16 Range. For the B-16 training range, the scenic qualities consist of a relatively flat area with sparse vegetation. The landform includes the relatively flat valley basin surrounded by the nearby ranges. Scenic qualities of these lands are overshadowed by the nearby Dead Camel Mountains that visually dominate the area. Existing military compounds, runways, and targets are on the range, but viewer sensitivity is low due to the distance from Highway 95.

B-17 Range. For the B-17 training range, the scenic qualities consist of a relatively flat area with sparse vegetation. The landform includes the relatively flat valley basin surrounded by the nearby mountain ranges (US Navy 1998b). There are compounds, runways, and targets on the range. Viewer sensitivity is dominated by long distance views from US Highway 50, particularly the view descending from Sand Spring Pass toward B-17. Structures on the range are not easily distinguishable from the highway except for fencing and signage that parallels US Highway 50.

B-19 Range. At the B-19 training range, the scenic qualities consist of the relatively flat landform with surrounding hills (US Navy 1998b). There are compounds, runways, and targets on the range. Viewer sensitivity is relatively low, except for lands adjacent to Highway 95 with foreground views of the range.

B-20 Range. B-20 is on a playa, which tends to have little topographic relief and is monochromatic, predominantly brown. The eastern side of the playa is bounded by the Stillwater Mountains, which rise more than 3,000 feet above the valley floor. The West Humboldt Mountain Range bounds the northern and western sides of the playa (US Navy 1998a). B-20 has little vegetation or topographic relief with the exception of Lone Rock, a cone-shaped feature rising approximately 160 feet above the surrounding playa and visible for a distance of up to 15 miles. There are compounds, runways, and targets on B-20, but viewer sensitivity is low because of the distance from major roads and the sparse population.

Mineral and Energy Resources

Mineral Districts

Portions of seven mining districts or recognized mining areas are included within the boundaries of the B-16, B-17, and B-19 training ranges. There are no unpatented and several patented mining claims within the boundary of B-17.

B-16 Training Range. The Camp Gregory mining area of the Holy District lies at the northwestern corner of B-16.

B-17 Training Range. The eastern half of B-17 overlaps the Fairview/South Fairview Mining District. B-17 is considered to have moderate to high potential for small- to medium-sized silver and gold deposits, based on known deposits in the Fairview Mining District (SAIC 1991).

B-19 Training Range. B-19 overlaps the Cinnabar Hill Mining District, which contains hydrothermal ore deposits, including mercury, associated with the highly fractured volcanic rocks exposed across much of B-19. Based on known resources, B-19 is

considered to have high potential for additional discoveries of precious metals deposits, so it is considered to have better than average mineral resource potential (SAIC and DRI 1991).

B-20 Training Range. A mineral resource evaluation of B-20 in 1986 found that there are no economically valuable deposits of mineral commodities on that range (US Navy 1998a).

Energy Resources

B-16 Training Range. Thermal gradients in the northern half of this range are higher than normal. B-16 is considered to have marginal geothermal potential but also is considered an area warranting further investigation.

B-17 Training Range. Thermal gradients in the area of B-17 are low; there are no thermal wells or springs in the area, and no hydrothermal alteration or mineralization of the type generally associated with hot springs was noted in the area. Based on these findings, the geothermal potential of B-17 is considered to be low.

B-19 Training Range. B-19 is speculated to have better than average geothermal potential; thermal gradients in the range are above average for the basin and range, and it is possible that geothermal fluids associated with the adjacent Lee Hot Springs extend into the subsurface of the area. What little is known of the geology of the area suggests that any possible subsurface extensions of the geothermal resources would be to the west or east of Lee Hot Springs. There is no known subsurface information in this area that would suggest that the area of the proposed withdrawal has anything other than a speculative geothermal potential (SAIC 1991).

B-20 Training Range. An 11,000-foot deep oil test well drilled at the northeast corner of the range encountered a water temperature of less than 300º Fahrenheit. The remote location of B-20 would preclude practical or profitable geothermal development by the Navy, and no additional geothermal studies have been conducted in that area (SAIC 1991).

Oil and Gas Resources

The oil and gas potential of the NAS Fallon training ranges is considered to be very low.

Cultural Resources

B-16 Training Range. B-16 has 27 recorded prehistoric sites, 11 lithic scatters, nine lithic scatters with groundstone, two small lithic scatters, two lithic sources, two groundstone scatters and one hammerstone scatter. Current research shows use of B-16 over the last 5000 years, hunting, gathering with some toolstone procurement and tool production. None of the sites have been determined eligible for the NRHP.

B-17 Training Range. B-17 has 19 recorded prehistoric sites, 14 lithic scatters, two lithic scatters with groundstone, two lithic scatters with groundstone and hearths and one multiple component site with a historic component. Diagnostic artifacts located on site generally date the sites to the last 4000 years, except for the isolated Clovis point (9500-8500BC) supposedly found south of the center tower. Site function ranges on B-17 from hunting and gathering to possible seasonal occupation. Four sites have been determined eligible for the NRHP.

Four historic sites have been recorded, a hearth, an adit, a campsite and a trash scatter. None of the sites have been determined eligible for the NRHP.

B-19 Training Range. B-19 has 48 recorded prehistoric sites, 33 lithic scatters, nine lithic scatters with groundstone, four cobble reduction scatters, one rock cairn and one multiple component site with a historic component. Diagnostic artifacts located on site date the sites to the last 11,000 years. Site function ranges on B-19 from hunting and gathering to possible seasonal occupation. Twelve sites have been determined eligible for the NRHP. Two historic sites have been recorded, the Cinnabar mine and a historic refuse deposit.

B-20 Training Range. No known cultural resources are within B-20.

3.2.2.2 Existing Navy Management Measures

Livestock Grazing Management

- The Bureau of Reclamation manages cattle grazing on the open lands at B-16.

Water Resources and Water Rights Management

- The Navy maintains existing wells at B-16, B-19, and B-20 in accordance with state and federal laws and regulations.

Wetland and Riparian Habitat Management

- The Navy would maintains the fencing for the protection of riparian habitat at Stinking Springs in the closed lands of B-19.

Vegetation Management

- The training ranges are managed to minimize exotic species colonization.

3.2.3 Dixie Valley Training Area

This section describes the existing conditions of and existing management measures specific to the Dixie Valley Training Area, including northern Dixie Valley properties, the settlement area, Dixie Meadows, withdrawn lands north of US Highway 50, Frenchman's Station north of US Highway 50, and Horse Creek. Resources and management measures that apply to the entire Management Area are described in Section 3.1.

3.2.3.1 Existing Conditions

Wild Horse Management

The Clan Alpine HMA is at the northeast corner of the withdrawn lands north of US Highway 50, within the Clan Alpine, Cow Canyon, and Dixie Valley grazing allotments (Figure 3-1 and 3-2). The HMA covers 314,986 acres of public and private land and can support a maximum of 979 horses (BLM 1992). The current horse population for the Clan Alpine HMA exceeds the appropriate management level. The Clan Alpine HMA Plan calls for providing an area to place unadoptable horses removed from HMAs, maintaining genetic diversity, and minimizing stress to released animals. Only a small section of the HMA overlaps the Navy-administered lands.

Water Resources and Water Rights

The Dixie Valley Training Area extends from the northern end of the Fairview Valley basin into the southern end of the Dixie Valley subbasin. Navy-administered lands in the northern Dixie Valley are about eight miles north of the Humboldt Salt Marsh, the playa lake where the surface drainages of Dixie Valley terminate. The lands are on the alluvial fan of Cottonwood Canyon, which discharges from the Stillwater Range, and lie near the junction of Shoshone Creek and Spring Creek, the principal ephemeral drainages at this end of the Dixie Valley. The USGS topographic map of the area shows several wells in the general area, at elevations of about 3,450 feet. This is about the same elevation as the toe of the alluvial fan of Cottonwood Canyon. There are eight storage tanks on the withdrawn lands north of US Highway 50. There is one well delivering 2.03 million gallons a year at the centroid.

The Dixie Valley is a closed basin that receives surface water from ephemeral streams to the north and south and subsurface water from all connected basins, including the Fairview Valley. There are approximately 130 wells in the Dixie Valley settlement area, some of which are free flowing. Of these 130 wells only 29 have permits associated with them. The State of Nevada has cancelled 4 of the 29 Navy water rights as of March 2001. A few of these wells supply water to man-made ponds. Free-flowing wells and overflow from ponds have created wet meadow areas. There are two ponds in Dixie Meadows and 14 ponds in the Dixie Valley settlement area. Some of the ponds contain nonnative fish, brought in by early settlers, and amphibian populations. In addition, some ponds have served as dipping ponds for fire fighters.

Wetland and Riparian Habitats

There are two areas of riparian vegetation in the Dixie Valley Training Area: Dixie Meadows and Horse Creek. Dixie Meadows contains approximately 40 acres of riparian area, including the Dixie Valley Marsh, a hot spring, and a cold spring. The area surrounding the springs provides habitat for a number of birds and other animals. Horse Creek flows through lands acquired lands purchased by the Navy. The creek originates on lands administered by the BLM within the Clan Alpine WSA, flows approximately two miles through Navy property, and goes underground on public lands administered by the BLM downstream. The creek is ephemeral through a stretch of Navy land. Vegetation found in this habitat is discussed in Section 3.1.1.

Natural and engineered wetlands are found in the Dixie Valley Training Area. Forested riparian wetlands dominated by willows and a diverse understory are found in Horse Creek and Dixie Meadows. Dixie Meadows also contains saltgrass meadow dominated by inland saltgrass, sedge-spikerush meadow dominated by sedges and spikerushes, bulrush marsh dominated by bulrushes, and iodinebush wetland dominated by iodinebush and quail bush. Alkali wetlands dominated by inland saltgrass and alkali bulrush are found at north Dixie Valley sites. Within the Dixie Valley settlement, there are approximately 94 artesian wells that supply water to a few man-made ponds dominated by cattails along the banks. Approximately 100 acres of wetland habitats have been artificially created and therefore are not considered jurisdictional by the US Army Corps of Engineers. Nonnative invasive plant species include saltcedar, Russian knapweed, and tall whitetop (Cottle 2001).

Wildlife

Fish. A survey completed in 1994 characterized brook trout populations in Horse Creek (US Navy 1997c). Fish species known to occur in the ponds in Dixie Valley include Asiatic carp, tui chub, largemouth bass, bluegill, green sunfish, and mosquito fish (Rissler et al. 1991).

Game Species. Pronghorn antelope, mule deer, bighorn sheep, chukars, quail, and mountain lions have been observed in the area.

Sensitive Species

Some of the ponds in the Dixie Valley Training Area are known to contain populations of the tui chub. A description of the status of this species and its populations within the Management Area was provided in Section 3.1.1.8.

Soil Resources

Dixie Valley is subject to both water and wind erosion. The Dixie Valley Wash has an accelerated erosion problem (US Navy 1997b), and high winds in Dixie Valley have resulted in a wind erosion problem in that area.

Lands

Two electric power transmission line rights-of-way cross the Dixie Valley Training Area. The Sierra Pacific electrical powerline crosses east to west across Dixie Valley withdrawn lands north of US Highway 50, and an Caithness Operations Company electrical powerline passes north to south across Dixie Valley in the Dixie Meadows area.

Recreation Management

The southern Clan Alpine Range and La Plata Mining District are adjacent to the Dixie Valley Training Area. Recreational sites are accessed primarily from area roads, including US Highway 50 and Dixie Valley Road (Nevada State Highway 121). 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. Dixie Valley is open to OHV use (US Navy 1998b).

Visual Resources

For the Dixie Valley Training 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.

Human impacts, such as cattle guards, fences, communication sites, a geothermal plant and associated power lines, tree lines, ponds, debris, and other abandoned structures and equipment, are visible in this area (US Navy 1998b). Viewer sensitivity is dominated by views from US Highway 50, particularly the view descending from Sand Spring Pass toward the Dixie Valley area.

Mineral and Energy Resources

Mineral Districts. There are a number of historic mines in the mountains adjacent to the Dixie Valley Training Areas which includes the western portion of the Wonder District and a small portion of the Chalk Mountain District north of US Highway 50 and east of B-17. The La Plata and Sand Springs districts are on the west side of the Dixie Valley Training Area (US Navy 1998b).

Energy Resources. The southern part of the Dixie Valley is considered to have the potential for geothermal development. Three deep exploration wells were drilled in this area in 1981 and 1982; no information on these wells is available and no further work has been done in the area. Caithness Operations Company has developed a major geothermal resource in the northern Dixie Valley, 30 miles to the north, but has no plans to do work in the southern part of the valley (SAIC 1991).

Cultural Resources

Dixie Valley has 44 recorded prehistoric sites, 32 lithic scatters, ten lithic scatters with groundstone, one lithic scatters with a feature and one hunting blind. Diagnostic artifacts located on site generally date the sites to the last 11,000 years. Site function in Dixie Valley is hunting and gathering. Thirteen sites have been determined eligible for the NRHP. Fifteen historic sites have been recorded, ten homesteads, four trash scatters, a house and well and two adits. Eligible sites for the NRHP include buildings at the Boyer Ranch, two adobes and two homesteads in the Settlements.

Horse Creek has recorded two historic sites, one hunting blind that has both historic and prehistoric artifacts and a historic trash scatter. Neither site is eligible for the NHRP.

3.2.3.2 Existing Navy Management Measures

There are no existing Navy management measures specific to these lands. Refer to the management measures common to all areas section for Dixie Valley Training area Management Measures.

3.2.4 Other Lands

This section describes the existing conditions of and existing management measures specific to other lands within the Management Area, including Grimes Point Archaeological Area, Sand Mountain Recreational area, and the Shoal Site. Resources and management measures that apply to the entire Management Area are described in Section 3.1.

3.2.4.1 Existing Conditions

Wild Horse Management

The Desatoya HMA overlaps the Cold Springs Historical Area east of US Highway 50 (Figure 3-2). Both the Desatoya HMA and the Cold Springs Historical Area are administered by BLM. As a result, both of these areas are managed under the existing Lahontan Resource Management Plan and EIS.

Water Resources and Water Rights

The Shoal Site is near the summit of the Sand Springs Range, which separates the Fairview Valley subbasin from the Carson Desert subbasin. The Shoal Site encompasses Gote Flat and extends northwest into the Carson Desert and east toward Fairview Valley. Precipitation can be as much as 15 inches per year. There are no permanent waterbodies, springs, or streams on this site, but a major ephemeral drainage crosses the eastern portion of the site toward Fairview Valley.

Nuclear defense research and weapons-test verification activities were conducted at the Project Shoal Site. These activities resulted in the release of radioactive materials. The DOE is committed to the goal of remediating contaminated sites in

accordance with requirements and coordination of other agencies.

The remedial strategy for the deep subsurface is to characterize groundwater flow and zones of contamination, to model the potential for contaminant migration from the source cavity, and perform risks assessments for contamination resulting from DOE activities at the Project Shoal Site Tritium migration will be the major focus, since tritium is the most mobile of the radioactive contaminants. Other radio nuclides will be evaluated, provided tritium migration indicates the need for their inclusion in the source evaluation. Subsurface contaminants in and around the nuclear test cavities will not be remediated since cost-effective groundwater strategies have not yet been demonstrated for effectively removing or stabilizing radioactive contaminants from groundwater at these depths and concentrations. Institutional control of the deep subsurface will be maintained and long-term subsurface monitoring and surveillance of the sites is planned for at least 50 years.

Recreation Management

Grimes Point Archaeological Area and Cold Springs Historical Sites. The Grimes Point Archaeological Area and the Cold Springs Historical Area are important recreational resources in the Management Area. Due to their importance as cultural resources, a detailed description is provided in the cultural resources section of this document.

Sand Mountain Recreation Area. The Sand Mountain Recreation Area, along US Highway 50, has over 30,000 visitors annually. Sand Mountain itself is over 500 feet high and is the largest single sand dune in the Great Basin. It is extremely popular with OHV enthusiasts, who bring their dune buggies, sand rails, and all-terrain vehicles to recreate on the three-mile long one-mile wide dune. Pit toilets and trash receptacles are provided, and a camping area is available at the base of the dune. Early in 2000, additional toilets were installed, along with an informational/interpretive kiosk and a new entrance sign. Vehicle use on approximately a third of the 4,808-acre recreation area is limited to designated roads in order to protect fragile desert vegetation and wildlife. Within this limited area the 40-acre Sand Springs Desert Study Area is closed to motor vehicles entirely. This closure protects one of the best preserved Pony Express stations in the country and also allows visitors to walk a self-guided environmental education trail. The Pony Express station is listed on the NRHP.

Shoal Site. The Shoal Site is a popular hunting and camping area.

Visual Resources

The Shoal Site is on a variable hillside landform characteristic of Nevada high desert topography. Viewer sensitivity is low because of the distance from US Highway 50.

Cultural Resources

Cold Springs Historical Area. Adjacent to US Highway 50 are ruins of an 1861 overland stage station and another station to support the first transcontinental telegraph. Across the highway from these two sites is the Cold Springs Pony Express Station. All three ruins are on the NRHP.

Grimes Point/Hidden Cave Archaeological Area. This archaeological area encompasses approximately 1,160 acres and is recognized as one of the most significant archaeological sites in the Great Basin. Grimes Point itself was a prime hunting locale for Native American hunter/gatherers 4,000 to 3,500 years ago when it was a peninsula jutting out into ancient Lake Lahontan. Over 5,000 petroglyphs are found in the immediate vicinity.

Within the archaeological area is Hidden Cave, a storage site for tools, food, and raw materials utilized 3,800 to 3,500 years ago. The cave has been partially excavated three times, most recently in 1979, and thousands of artifacts have been recovered. In 1971, the archaeological area was placed on the NRHP.

Sand Mountain Recreational Area. The remains of the Sand Springs Pony Express Station exist within this area. The station consists of stacked rock walls for individual rooms and corrals. Lithic scatters are present throughout the sand dune area.

Associated with the Lincoln Highway are portions (refuse deposit) of the Sand Springs Waystation. A lithic scatter is also in this parcel.

Shoal Site. No cultural resources have been recorded in this area.

3.2.4.2 Existing Navy Management Measures

There are no existing Navy management measures specific to these lands. Refer to the management measures common to all areas section for Other Lands Management Measures.

4. ENVIRONMENTAL CONSEQUENCES

SECTION 4
ENVIRONMENTAL CONSEQUENCES

4.1 ENVIRONMENTAL CONSEQUENCES

This section describes the environmental consequences that would likely occur from implementing the Proposed Action and from the Continuation of Existing Management Alternative (No Action). As described in Section 3, the physical environment of the Management Area is relatively uniform in condition. In addition, most of the management measures apply to all geographic/management areas within the Management Area. In order to efficiently address this uniformity, the environmental consequences are presented by resource. In instances where potential environmental consequences are unique to a particular geographic/management area, the area is identified in the text.

The Proposed Action Alternative and the Continuation of Existing Management Alternative are compared to the existing conditions in Section 3 to determine if direct or indirect impacts would result from implementing them. Management measures were also assessed to ensure no net loss in military training capability. Overall the only potential adverse impacts may occur with recreational (Section 4.1.12) and mineral/energy resources (Section 4.1.14.

4.1.1 Livestock and Rangeland

Proposed Action

The Proposed Action would have no adverse effect on livestock or rangeland. Grazing would continue to be managed by BLM under existing practices on open withdrawn lands and by the Navy on agricultural lands at NAS Fallon. The Navy will investigate the purchase of lost livestock AUMs, depending on Congress approving funds as stated as mitigation in the Withdrawal of Public Lands for Range Safety and Training Purposes EIS.

BLM management would provide consistent grazing management on Navy-owned lands, newly withdrawn lands, and adjacent land. This would reduce the incidence of unauthorized grazing. In the long-term, this may result in a stabilized ecological condition of these lands.

On the FTRC BLM would implement a change in grazing management as mandated by the Withdrawal Act of 1999. This would result in a reduction of AUMs for one rancher on one allotment by approximately 18 percent. This action is required of the Withdrawal Act of 1999 rather than a management decision of this INRMP/RMPA. As a result the change is not considered a consequence of implementing the INRMP/RMPA.

Continuation of Current Management Alternative

Under the Continuation of Current Management Alternative, existing management programs would continue. Unauthorized grazing on Navy-owned lands in the Dixie Valley could continue.

4.1.2 Wild Horses Management

Proposed Action

The Proposed Action would have no effect on wild horse management. There are no changes to existing management under the Proposed Action. BLM would continue to maintain and manage populations in the Clan Alpine HMA under existing practices to ensure the protection of the wild horse population.

Continuation of Current Management Alternative

Under the Continuation of Current Management Alternative, existing programs to manage wild horses and would continue, and there would be no effects on wild horse management.

4.1.3 Water Resources and Water Rights

Proposed Action

The Proposed Action would have no adverse effect on water resources. Implementing the INRMP/RMPA would not affect groundwater resources. The primary surface water resources are in Dixie Valley, where there are numerous free-flowing wells and surface ponds. Water resource conditions could change as a result of the Nevada State Water Engineers Office mandate to plug and abandon wells without permits within the Dixie Valley Training Area; however, this change would not be a consequence of implementing the Proposed Action of this INRMP/RMPA.

Continuation of Current Management Alternative

Under the Continuation of Current Management Alternative, there would be no changes to existing water resource conditions. The Navy would continue to manage water resources in a manner consistent with state and federal laws and regulations. As described under the Proposed Action, water resource conditions could change as a result of the Nevada State Water Engineers Office mandate to plug and abandon certain wells within the Dixie Valley Training Area; however, this change would not be a consequence of implementing the Continuation of Current Management Alternative of this INRMP/RMPA.

4.1.4 Wetland and Riparian Habitat

Proposed Action

The Proposed Action would have no adverse effect on riparian habitat. Wetland and riparian protection measures being implemented under current management would continue.

Continuation of Current Management Alternative

Under the Continuation of Current Management there would be no effect on existing riparian habitat conditions. Continuing current management strategies would include maintain an exclosure fencing around Stinking Spring at the B-16 training range and controlling noxious weeds.

4.1.5 Vegetation

Proposed Action

The Proposed Action would have no adverse impacts on vegetation. The Proposed Action would encourage native plant species' growth and would revegetate disturbed areas at a level similar to that under the Continuation of Current Management Alternative. In addition, the proposed effort would foster cooperative efforts with the Navy and BLM in order to achieve these objectives. These measures will help establish or maintain desired native plant communities and reduce soil erosion. Noxious weed control strategies would be implemented and would have beneficial effects on native plant communities.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse impacts on vegetation. Management measures to control noxious weeds, to encourage native plant species' growth, and to revegetate disturbed areas would continue to be implemented.

4.1.6 Noxious Weeds

Proposed Action

The Proposed Action would continue to implement measures to control noxious weeds within the Management Area. Treating undesirable vegetation and using native species for revegetation will benefit plant communities by minimizing the spread of noxious weeds. In addition, implementing the measures provided in the Proposed Action would provide a cooperative approach between the Navy and BLM to control invasive species.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would still control noxious weeds. Most of the strategies described in the Proposed Action are being employed in the Management Area under existing management plans and policies. As a result, many of the beneficial impacts described under the Proposed Action also would be realized under the Continuation of Current Management Alternative (however the treatment of noxious weeds might not occur in a coordinated and cooperative manner).

4.1.7 Wildlife

Proposed Action

The Proposed Action would have no adverse impacts on wildlife resources. Current management measures designed to protect wildlife resources, where compatible with the military mission, would continue to be implemented. The Proposed Action would increase the amount of coordination among the Navy, BLM, and NDOW. This could increase the effectiveness of wildlife resource management. The management measures described in the Proposed Action would continue to emphasize the military mission of NAS Fallon and would allow for multiple uses (including hunting), where such activities are compatible with the mission.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse impacts on wildlife resources. The management measures currently being implemented are designed to protect wildlife resources, where compatible with the military mission.

4.1.8 Sensitive Species

Proposed Action

No federally listed threatened or endangered species are known to use the habitats in the Management Area. Therefore, it is determined that there is no effect to Federally listed species from the proposed action. The golden eagle, which is protected under the Bald Eagle Protection Act, is known to forage within the management area. The proposed management measures would not adversely affect this species or its foraging habitat since no major land-altering actions are proposed. As good land management stewards, the Navy and BLM must consider actions that could lead to the federal listing of species. USFWS has indicated that both the tui chub found in Dixie Valley and the sage grouse are being considered for federal listing. Several species designated by the state as special concern occur within the management area. Natural resource management measures designed to encourage native habitats in areas compatible with the military mission would continue to be implemented when feasible. Consequently, sensitive species should realize beneficial effects from the strategies implemented under the Proposed Action. The Proposed Action also includes a strategy to collect data on the presence or absence of sage grouse and its habitat, a state species of concern. This strategy would assist natural resource managers at the Navy and BLM to adapt management strategies in

response to new scientific data. Under the Proposed Action the Navy and BLM would formalize the coordination process with USFWS and NDOW to develop a tui chub conservation agreement for the Dixie Valley Training Area. Because the details of this agreement have not yet been developed, implementation of the agreement and analysis of the potential impacts cannot be analyzed in this INRMP/RMPA, but could include exotic species control.

Continuation of Current Management Alternative

No federal threatened or endangered species are known to use the habitats in the Management Area. As a result, the Continuation of Current Management Alternative would have no impact on federally listed threatened or endangered species. Natural resource management measures designed to encourage native habitats in areas compatible with the military mission would continue to be implemented. Consequently, sensitive species should realize beneficial effects from the strategies implemented under the Continuation of Current Management Alternative.

4.1.9 Soil and Air Resources

Proposed Action

The Proposed Action would have no adverse effects on soils. The Navy and BLM will continue to implement best management practices to minimize soil erosion. The soil management measures are identical under the Proposed Action and the Continuation of Current Management Alternative. Management measures related to other resources would not result in soil contamination, nor are they anticipated to increase the rates of soil erosion. In the Dixie Valley Training Area, limiting OHV use to existing roads and trails could result in a small net decrease in soil erosion. The Proposed Action would have no adverse effect on air quality. No change in area-wide PM_{10} emissions is anticipated. Controlled burning as a fire control measure would continue to be a temporary source of air pollutant emissions; controlled burning is an ongoing practice that does not require permitting or notifying the state air quality department. The planning area is in an unclassified area for the federal ambient air quality standards; therefore, no Clean Air Act conformity determination is required.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would result in no changes to existing soil and air quality resources. Minor benefits from limiting OHV use to existing roads and trails in the Dixie Valley Training Area would not be realized.

4.1.10 Fire Management

Proposed Action

The Proposed Action would have no adverse effects on fire hazards. Under the Proposed Action the BLM would integrate most of the Management Area into the fire management final plan amendment (BLM 1998). This would not significantly change the objectives of current fire management practices but could increase coordination among agencies. The objectives of fire management are to reduce the potential of fires and the degree of fire damage by controlling buildup of fuel and suppressing wildfires where appropriate. Limiting OHV use to existing roads and trails in the Dixie Valley Management Area could slightly reduce fire potential.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse effect on fire hazards. Fire management would continue under the objectives described under the Proposed Action.

4.1.11 Lands

Proposed Action

The Proposed Action would have no adverse effect on public access. Rights-of-way on closed withdrawn lands would be accessed through coordination with the Navy, and open withdrawn lands would remain open to public uses. The

Proposed Action would investigate the transfer of Navy held property at Dixie Meadows and Sand Springs to the BLM.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no effect on rights-of-way or public access. Transfer of Navy-owned properties to the BLM may not be realized.

4.1.12 Recreation

Proposed Action

The Proposed Action would provide a net benefit to recreation. Proposed management strategies would maintain, enhance, or promote recreational opportunities within the planning area, including maintaining open public access for recreational activities, maintaining a bighorn sheep hunt, ensuring that the Pony Express Trail remains protected, and modifying public opportunities for recreation at Horse Creek. OHV use would continue to be allowed on open withdrawal lands, but this use would be limited to existing roads and trails in the Dixie Valley Training Area. Additionally, there would be public access to some previously closed Navy-owned property.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse effect on recreation.

4.1.13 Visual Resources

Proposed Action

The Proposed Action would have no adverse effect on visual resources. No new structures or land-altering actions are proposed.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse effect on visual resources.

4.1.14 Minerals and Energy

Proposed Action

The Proposed Action would have minor adverse effects on mineral resources; 6168 acres will be unavailable for mineral exploration. Some areas now open to mineral discovery, such as the Grimes Point/Hidden Cave Archaeological Area, the Sand Mountain Recreation Area, and the Cold Springs Historical Area, would be closed to mineral discovery. The Navy would investigate the purchase of existing valid claims on closed lands and valid claims on open lands that cannot be reached safely. Any purchase is subject to Congressional approval.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would not place a protective mineral withdrawal on the Grimes Point/Hidden Cave Archaeological Area, the Sand Mountain Recreation Area, or the Cold Springs Historical Area. Like the Proposed Action, the Continuation of Current Management Alternative would investigate the purchase of existing valid claims on closed lands and valid claims on open lands that cannot be reached safely.

4.1.15 Cultural Resources

Proposed Action

The proposed action would result in better cultural resources management. Strategies proposed to implement the Cultural Resources Goal would improve coordination and implementation of cultural resource management between the Navy and BLM in the planning area. Even though the proposed actions are not clearly delineated as to scope of breadth, regardless, these proposed action would be subject to NHPA Section 106 review. In

conjunction with the proposed joint cultural resource management plan, other strategies are inherent which would benefit in the protection, preservation and interpretation of cultural resources. Beyond Section 106 review, the two agencies would coordinate their efforts in proactive measures, including sharing of cultural resource information, conducting research projects and preparing contextual studies. Additionally, American Indian coordination efforts would be in accordance with a single policy and provide better governmental relations between the Tribes, the Navy and the BLM. Limiting OHV use to existing roads and trails and implementing a protective mineral withdrawal at the Grimes Point Archaeological Area and the Rock Creek/Cold Springs Historical sites would have a beneficial effect on cultural resources. Minimizing effects to the viewshed would have beneficial effects for the National Register and eligible sites in the planning area and beyond. Noxious weed removal could adversely impact the landscape vegetation values of eligible sites within the Dixie Valley Settlement.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no adverse effects on cultural resources. The Continuation of Current Management Alternative would not include the protective mineral withdrawal at the Grimes Point Archaeological Area and the Cold Springs Historical sites. As a result the beneficial impacts on cultural resources in these areas described under the proposed action would not be realized under the Continuation of Current Management Alternative. Lack of coordination between the Navy and BLM would result in repetitive or contrary actions.

4.1.16 Socioeconomics

Proposed Action

The Proposed Action would have no adverse socioeconomic effects. Implementing the goals, objectives, and strategies of this plan would not result in significant changes to the socioeconomic conditions in the area.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no effect on socioeconomics.

4.1.17 Environmental Justice

Proposed Action

The populations and issues associated with environmental justice would not be affected by implementation of the Proposed Action.

Continuation of Current Management Alternative

The Continuation of Current Management Alternative would have no effect on environmental justice populations or issues.

4.2 CUMULATIVE IMPACTS

CEQ regulations state that the cumulative impact analysis of an EA should include the anticipated impacts to the environment resulting from "the incremental impacts 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). This analysis considers the effects of the Proposed Action, as evaluated in detail above, when combined with the effects of other past, present, and future actions in the affected region. Major actions at NAS Fallon and the region considered in this analysis are summarized below.

- ***Renewal of B-20 Withdrawn Lands.*** Renewal of 21,576 acres of withdrawn land at B-20 was approved October 4, 1999.
- ***B-16 Airspace Designation and Disestablishment.*** The Navy changed flight

patterns around B-16 from northern ingress to southern ingress to reduce noise and safety concerns. This reduced restricted airspace around B-16 by about 112 square miles.

- ***Establishment of Mobile EW Radar Sites.*** The Navy could install additional EW sites in the valleys to the eastern and northern areas around the FRTC. No date of possible action has been established yet.
- ***B-20 Tactical Target Development.*** The Navy proposes to develop a tactical target at B-20 to simulate realistic training scenarios. Development would require earth moving and upgrading communication systems.
- ***Continued Multiple Use Activities on Federal Lands.*** Much of the land within the affected region is managed by BLM for multiple uses, including grazing, recreation, mineral and geothermal mining, OHV use, and wildlife. Popular recreational areas include Sand Mountain, Grimes Point, and Cold Springs. These actions are expected to continue and could consist of new developments to meet multiple use needs.
- ***Expansion of Stillwater National Wildlife Refuge.*** The USFWS is proposing to expand the Stillwater National Wildlife Refuge to within a mile of the B-20 training range.
- ***Fallon Range Training Complex Requirements, Final Environmental Impact Statement, Naval Air Station Fallon, Nevada, January 2000.*** This EIS documents all proposed new training for NAS Fallon and the FRTC through 2005, such as development of Tracking Instrumentation Subsystem site locations, development of electronic warfare sites, communication improvements, various weapons delivery, airspace modifications and development of training in Dixie Valley.
- ***B-17 and B-19 Target Development.*** The Navy developed additional targets at B-17 and B-19 to meet training requirements.
- ***Joint Tactical Combat Training System (JTCTS).*** JTCTS is the successor to the tactical aircrew combat training system currently used at NAS Fallon. JTCTS sites would be on lands administered by the Navy and BLM and are expected to be installed between 2005 and 2007.
- ***Remedial Activities at Project Shoal Site.*** The DOE is committed to the goal of remediating contaminated sites in accordance with federal and state requirements and coordination with other agencies.
- ***Water Rights in Dixie Valley.*** The State Water Engineer is in the process of canceling water rights for wells not being put to beneficial use in Dixie Valley. Churchill County has filed and is next in line for these water rights. The County proposes to use the water for domestic purposes in Fallon. No formal plans exist at this time for transport of the water to Fallon.

The specific impacts related to each of these actions have been or will be addressed in other project-specific NEPA documents. Implementing the INRMP/RMPA with these actions would not result in any additional impacts to environmental resources. The INRMP/RMPA does not propose any major land-altering actions; rather, it describes management strategies for managing the lands used by NAS Fallon. As such, it is unlikely that there would be a cumulative increase in restricted access to public lands or additional public safety concerns. The project would likely have a beneficial cumulative impact on recreation by helping to coordinate regional recreation management, along with wildlife and water resources management.

5. LIST OF PREPARERS

SECTION 5
LIST OF PREPARERS

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Individuals from the Bureau of Land Management, Carson City Field Office who were involved in the preparation and review of the INRMP/RMPA and Environmental Assessment are listed below:

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6. REFERENCES

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7. LIST OF ACRONYMS

SECTION 7
LIST OF ACRONYMS

Acronym	Full Phrase
AG	Agricultural fields surrounding the air operation
APHIS	Animal Plant Health Inspection Service
AU	Animal Unit
AUM	Animal Unit Month
BASH	Bird Air Strike Hazard
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNO	Chief of Naval Operations
CO	Carbon Monoxide
CRMP	Cultural Resources Management Plan
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DOD	Department of Defense
DODINST	Department of Defense Instruction Number
DOE	Department of Energy
DRI	Desert Research Institute
DV	Dixie Valley
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	US Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
ESA	Endangered Species Act

Acronym	Full Phrase
EW/TACTS	Electronic Warfare/Tactical Air Combat Training System
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FLPMA	Federal Land Policy and Management Act of 1976
FOD	Foreign Object Damage
FONSI	Finding of No Significant Impact
FRS	Fleet Replacement Squadron
FRTC	Fallon Range Training Complex
FY	Fiscal Year
HC	Horse Creek
H_2S	Hydrogen Sulfide
ha	Hectare
HMA	Herd Management Area
INRMP	Integrated Natural Resource Management Plan
ISTEA	Intermodal Surface Transportation Efficiency Act
JTCTS	Joint Tactical Combat Training System
L_{dn}	Day-Night Average Noise Level
m	Meter
MOU	Memorandum of Understanding
NA	Not Applicable
NAS	Naval Air Station
NAVFAC	Naval Facility
NAVFACINST	Naval Facilities Instruction
NDEP	Nevada Division of Environmental Protection
NDOW	Nevada Division of Wildlife
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NNNPS	Northern Nevada Native Plant Society
NO_2	Nitrogen Dioxide
NRCS	Natural Resources Conversation Service
NRHP	National Register of Historic Places
NSAWC	Naval Strike and Air Warfare Center
NWR	National Wildlife Refuge
O_3	Ozone
ODS	Ozone depleting substance
OHV	Off-highway vehicles
OMB	Office of Management and Budget
OPNAVINST	Naval Operations Instruction
PA	Programmatic Agreement
PCBs	Poly-chlorinated Biphenyls
PL	Public Law

Acronym	Full Phrase
PM_{10}	Inhalable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
RCRA	Resource Conservation and Recovery Act
RMPA	Resource Management Plan (Amended)
ROI	Region of influence
SAIC	Science Applications International Corporation
SEAL	Sea, Air, and Land
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Officer
SO_2	Sulfur Dioxide
SO_4	Sulfate Particles
SR	State Route
SS	Sand Springs
T&E	Threatened and Endangered
TCID	Tahoe-Carson Irrigation District
TCP	Traditional Cultural Property
TSCA	Toxic Substances Control Act
US	United States
USC	United States Code
USFWS	US Fish and Wildlife Service
USGS	United States Geological Survey
VRM	Visual Resource Management
WSA	Wilderness Study Area

APPENDICES

A. FEDERAL LAWS AND COMPLIANCE REQUIREMENTS

APPENDIX A
FEDERAL LAWS AND COMPLIANCE REQUIREMENTS

BLM-managed lands and Navy facilities are subject to numerous regulations affecting use and management the natural resources, including federal laws, Executive Orders, and Operational Navy Instructions. The most important federal laws that affect management of natural resources management in the area are summarized below.

A.1 FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976, PL 94-579, AS AMENDED (43 USC §§ 1701 - 1785)

The Federal Land Policy and Management Act (FLPMA) of 1976, imposes management and planning requirements on BLM. It requires the agency to manage its properties for multiple uses; to protect especially sensitive resources; to coordinate planning efforts with other federal agencies, state agencies, and Indian tribes; and to use an interdisciplinary approach to land management. Among other provisions, FLPMA also governs the withdrawal process for BLM-managed lands.

A.2 SIKES ACT AND NAVAL INSTRUCTIONS ON INRMPS

This section provides an overview of the Sikes Act and Navy instructions that require and guide the preparation of INRMPs. As discussed in Section 1.3, these laws and instructions are part of the need for this document.

A.2.1 Sikes Act, PL 86-797 (16 USC §§ 670 – 670f)

Under the Natural Resources Management Act of 1960, commonly known as the Sikes Act, Public Law (PL) 86-797, as amended by the Sikes Act Improvement Amendments of 1997, PL 105-85 (codified at 16 USC § 670 – 670f [1999]), the Secretary of Defense shall carry out a program for conserving and rehabilitating natural resources on military installations. To facilitate the program, the secretary of each military department shall prepare and implement an INRMP for each military installation in the United States under the secretary's jurisdiction. These plans must be consistent with the use of military installations to ensure the preparedness of the Armed Forces. The secretaries of the military departments shall carry out the program to provide for the following:

- Conservation and rehabilitation of natural resources on military installations;
- Sustainable multipurpose use of the resources, which include hunting, fishing, trapping, and nonconsumptive uses, subject to safety requirements and military security; and
- Public access to military installations to use natural resources.

The Sikes Act requires Navy facilities to manage their natural resources so as to provide multiple uses and public access, to the extent that the military mission is not jeopardized. The act provides a mechanism whereby the DOD, the Department of Interior, and the states cooperate to manage fish and wildlife on military installations.

Personnel charged with natural resource management are to be professionally trained in their fields of responsibility. Section 101 of the act authorizes planning programs for developing, maintaining, and coordinating natural resource programs on each military reservation. In compliance with 16 USC § 670a(b), to the extent appropriate and applicable, the INRMP provides for the following:

- Fish and wildlife management, land management, forest management, and fish and wildlife-oriented recreation;
- Fish and wildlife habitat enhancement or modifications;
- Wetlands protection and enhancement where necessary to support fish, wildlife, and plants;
- Integration of and consistency among the various activities conducted under the plan;
- Establishment of specific natural resource management goals and objectives and time frames for proposed actions;
- Sustainable public use of natural resources consistent with the needs of fish and wildlife resources;
- Public access to the management area that is necessary and appropriate for the use described above, subject to the requirements necessary to ensure safety and military security;
- Enforcement of applicable natural resource laws and regulations;
- No net loss in the capability of the air station to support the military mission; and
- Such other activities as the Secretary of the Navy determines appropriate.

A.2.2 NAVFAC P-73, Volume II

The Navy's Natural Resources Procedure Manual, referred to as NAVFAC P-73 Volume II, addresses all CNO natural resource program requirements, guidelines, and standards. NAVFAC P-73 Volume II states that the principles of multiple-use,

ecosystem, and adaptive management shall be implemented on Navy facilities that meet the natural resource stipulations outlined in Naval Operations Instruction 5090.1B (discussed below). The manual provides guidance to naval environmental personnel on the purpose of and need for INRMPs by outlining that the wise use of natural resources is essential to the continuation of the military mission. NAVFAC P-73 Volume II requires that the following tasks be undertaken to meet the natural resource program objectives:

- Prepare, implement, and maintain, as a current working document, an INRMP for all Navy lands that have suitable habitat for conserving and managing natural resources. Each plan must adequately facilitate mission planning and decision-making to ensure compatibility of natural resource management with local, state, and federal objectives and policies.
- Implement land management practices that reduce grounds maintenance costs, use environmentally and economically beneficial landscaping practices, conserve soil and water, improve real estate values, protect coastal zones, wetlands, and floodplains, abate nonpoint sources of water pollution, control noxious weeds, and prevent erosion.
- Inventory wetlands and manage Navy land to avoid the net loss of size, function, or value of wetlands.
- Identify and protect threatened and endangered species on Navy lands, emphasizing mission requirements and interagency cooperation during consultation, species recovery planning, and management activities.
- Outlease all lands that are suitable and available for agricultural uses, consistent with operational requirements and long-term ecosystem management goals.
- Reduce the potential for bird and other animal collisions with aircraft in the airfield environment.
- Manage fish, wildlife, and plant resources within ecological limits, maintain appropriate wildlife population levels, and support optimum use of consumptive and nonconsumptive fish and wildlife resources.

A.2.3 OPNAVINST 5090.1B, CH 2

The Navy's Environmental Protection and Natural Resources Manual, termed OPNAVINST 5090.1B, requires that each naval installation containing natural resources prepare a multiple-use natural resource management plan. OPNAVINST 5090.1B, Chapter 2, specifically states that the conservation of natural resources and the military mission need not and shall not be mutually exclusive. Naval commands shall accomplish the following when managing natural resources on Navy lands (US Navy 1994):

- Assign specific responsibility, provide centralized supervision, assign professionally trained personnel to the natural resources management

program, and provide natural resources personnel with the opportunity to participate in natural resource management job-training activities and professional meetings;

- Protect, conserve, and manage the watersheds, wetlands, natural landscapes, soils, forests, fish and wildlife, prime and unique farmland, and other natural resources as vital elements of an optimum natural resources program;
- Manage natural resources to provide outdoor recreation opportunities;
- Use and care for natural resources in the combination best serving the present and future needs of the United States;
- Provide for the optimum use of land and water areas and access thereto while maintaining ecological integrity; and
- Interact with the surrounding community to develop positive and productive community involvement, participation, and educational opportunities.

A.3 DEPARTMENT OF DEFENSE INSTRUCTION 4715.3

DOD Instruction 4715.3 implements policy, assigns responsibilities, and prescribes procedures for the integrated management of natural and cultural resources on property under military control. The instruction states that "all DOD conservation programs shall work to guarantee continued access to [DOD] land, air, and water resources for realistic military training and testing while ensuring that the natural and cultural resources entrusted to DOD care are sustained in a healthy condition for scientific research, education, and other compatible uses by future generations" (DOD 1996).

DOD Instruction 4715.3 also designates DOD executive agents to lead the military services in implementing key conservation issues, including preparing, maintaining, and monitoring INRMPs on all military installations. The instruction notes that conservation management is a dynamic process yet prescribes that a consistent conservation management approach include those systematic procedures that should be used by each DOD installation, as follows:

- Assess military mission;
- Prepare detailed inventory of resources;
- Analyze and assess risk to the resources;
- Prepare and implement management plans;
- Monitor and assess results;
- Conduct needs assessment survey;
- Reassess inventories;
- Reanalyze and reassess risk to resources; and

- Adjust program as necessary.

A.4 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969, PL 91-190 (42 USC §§ 4321 – 4370D)

Under NEPA, federal agencies must take into consideration the environmental consequences of proposed major actions. The spirit and intent of NEPA is to protect and enhance the environment through well-informed federal decisions based on sound science. NEPA is premised on the assumption that providing timely information to the decision-maker and the public concerning the potential environmental consequences of proposed actions will improve the quality of federal decisions. Thus, the NEPA process includes the systematic interdisciplinary evaluation of potential environmental consequences of implementing a proposed action. This document has incorporated the important components of an EA to fulfill NEPA's requirements.

B. DISTRIBUTION LIST

APPENDIX B
DISTRIBUTION LIST

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John	Livermore	
Scott	Lougheed	
Doris	House	
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Robert	Hunter	Bureau of Indian Affairs
Jack	Walkiewicz	Bureau of Mines
Roger	Lesueur	Bureau of Reclamation
		Carson City Library
Rex	Massey	Churchill County
Barbara	Matthews	Churchill County Library
Bjorn	Selinder	Churchill County Manager
Ken	Tedford	City of Fallon
Deloyd	Satterthwaite	Ellison Ranching Company
		Eureka County
		Fallon Paiute-Shoshone Tribe
		Gabbs Community Library
Bruce	Kent	Kent Land & Livestock

First Name	Last Name	Company
Steve	Lyon	Lahontan Valley News
Ray	Salisbury	Lander County Public Lands Commission
Ray H.	Williams, Iii	Lander County School Board
Dale	Ryan	National Pony Express Assn.
Ray	Alcorn	Navy League
Debbie	Smith	NAWCWPNS China Lake
Commanding Officer		Nellis Air Force Base
Owen	Bolstad	NLUS
Susan	Lynn	Public Resources Assoc.
		R.O. Livestock
Rose	Strickland	Sierra Club
		Smokey Joe's
Mike	McGinness	State of Nevada
Heather	Elliott	State of Nevada
Chris	Hampson	State of Nevada
Governor Kenny	Guinn	State of Nevada
Marcia	De Braga	State of Nevada
Lyman	McConnell	Truckee-Carson Irrigation District
John	Ensign	United States
James	Gibbons	United States
Harry	Reid	United States
		University of Nevada, Reno
James	Harvey	US Fish And Wildlife Service

C. MANAGEMENT RESPONSIBILITIES, PROJECTS, AND NAVY FUNDING PRIORITIES

APPENDIX C
MANAGEMENT RESPONSIBILITIES, PROJECTS, AND NAVY FUNDING PRIORITIES

This appendix summarizes the proposed and existing management measures, assigns management responsibility, categorizes funding priorities, and lists natural resource projects being proposed by the Navy. This information is provided in the following three tables::

- **Table C-1:** Provides the proposed and existing management measures covered in the plan and assigns management responsibility to the appropriate agency. The management measures include administrative, policy based, and project level actions. Management measures that have specific Navy projects associated with them are crossed referenced to specific projects described in Table C-3.

- **Table C-2:** The Navy is required to assign an assessment level for Navy actions within the natural resource management plan. These assessment levels, which will guide funding priorities, are defined in Table C-2. A Navy funding assessment level applies only to those measures, which are the responsibility of the Navy and require funding to implement. Navy's centrally managed funds will be the supplier of all funding for the implementation of management measures. Implementation of each management measure will be dependent upon available funding and staffing.

- **Table C-3:** The Navy has identified a number of specific management projects for implementation under the guidance of the INRMP/RMPA. These projects are listed in Table C-3 along with their funding priority and cross-referenced to the management measures in Table C-1.

Table C-1
Management Responsibility and Alternative Comparison

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
		COMMON TO ALL AREAS		
		Resource Management Category: *Water Resources and Water Rights Management*		
Navy		• The Navy manages water resources in a manner that is consistent with state and federal laws and regulations, including the Nevada Water Law, Title 48 (Chapters 533 and 534), the Truckee-Carson-Pyramid Lake Water Settlement Act (Public Law 101-618), and other federal laws and regulations.	X	X
		Resource Management Category: *Wetland And Riparian Habitat Management*		
Navy	1	• The Navy manages its lands to protect or enhance wetlands and riparian areas under Section 404 of the Clean Water Act.	X	X
		Resource Management Category: *Vegetation Management*		
Navy	2	• The Navy manages vegetation to benefit the environment and to generate long-term cost savings from weed control, landscaping, and agricultural outlease.	X	X
Navy	2, 3	• The Navy's goal is to maintain native plant communities and species diversity per the President's April 26, 1994 Memorandum on Environmentally Beneficial Landscaping.	X	X
		Resource Management Category: *Noxious Weed Control*		
Navy and BLM	2	• Navy and BLM would coordinate with appropriate agencies and would implement approved integrated pest management plans to control and remove undesirable vegetation.	X	
Navy	2, 4	• The Navy and BLM manage lands for the control and removal of noxious weeds per their Integrated Pest Management Plans, which are in accordance with Invasive Species Executive Order 13112 of February 3, 1999, and the Noxious Weed Act of 1974, 7 USC 7801.	X	X

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
Navy and BLM		• Prior to surface-disturbing activities, the Navy and BLM will continue to evaluate the potential for noxious weed colonization.	X	X
Navy		• After natural or significant human disturbance, the Navy will revegetate the area with native plants, where feasible.	X	X
		Resource Management Category: *Wildlife Management*		
Navy and BLM		• BLM and the Navy would jointly coordinate with Animal Plant Health Inspection Service (APHIS) for predator control.	X	
BLM		• BLM and NDOW would coordinate to assess the potential for sage grouse habitat within the management area.	X	
Navy	5	• The Navy manages for the protection and enhancement of wildlife and habitat where possible, per Navy regulation and policy and the Sikes Act, the Fish and Wildlife Conservation Act, 16 USC 2901, the Endangered Species Act, the Migratory Bird Treaty Act (Public Law 65-186), the Neotropical Migratory Bird Treaty Act, and the Bald Eagle Protection Act. This includes analysis of impacts from ground disturbing activities.	X	X
Navy		• BASH is managed under the NAS Fallon BASH Plan, the Migratory Bird Treaty Act (Public Law 65-186), and the Bald Eagle Protection Act.	X	X
		Resource Management Category: *Pest Management*		
Navy	2	• The Navy manages a control program for weeds and pests, per the NAS Fallon Integrated Pest Management Plan, as directed by the DOD Pest Management Program DODINST 4150.7 and the Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136.	X	X
		Resource Management Category: *Fire Management*		
BLM		• The BLM would integrate all Navy closed and open lands, except the Main Station, into the Fire Management Final Plan Amendment (BLM 1998). The plan amendment assigns fire management categories to all public lands managed by the Carson City Field Office.	X	

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
BLM		• All Navy withdrawn and owned lands would be assigned a category to match those of adjacent BLM lands, most likely Category D.	X	
Navy and BLM		• BLM would assist the Navy in developing and implementing fire prevention measures pursuant to the Military Lands Withdrawal Act of 1999.	X	
Navy and BLM		• Pursuant to the Navy and BLM mutual aid agreement, both agencies would conduct air and ground suppression activities where they are determined to be necessary and safe.	X	
Navy and BLM		• The Navy and BLM would coordinate with the appropriate agencies (i.e., state of Nevada and Churchill County) for fire suppression activities.	X	
Navy		• The Navy has a fire department for structural fire prevention and suppression on the Main Station and mutual aid agreements with BLM and Churchill County for use when necessary.	X	X
Navy	4	• The Navy will continue to control the buildup of flammable vegetation in the areas surrounding operations, where possible.	X	X
		Resource Management Category: *Lands*		
Navy and BLM		• The Navy and BLM would coordinate processing nonmilitary land action applications (e.g., rights-of-way). BLM would be the lead agency for preparing NEPA compliance documents. The action would be assessed for impacts to military mission and environmental conditions.	X	X
Navy		• The Navy manages lands for military training in accordance with Navy regulations and policy, including OPNAVINST 5090.1B CH-2 and NAVFAC P-73 Vol II, Real Estate Operations.	X	X
		Resource Management Category: *Recreation Management*		
BLM		• All organized recreation activities would be managed by BLM in consultation with Navy.	X	
Navy		• The Navy manages recreation where compatible with the military mission in accordance with the Outdoor Recreation - Federal/State Programs Act, 16 USC 3B, the Sikes Act, and Navy regulations and policy.	X	X
Navy	6	• The Navy would continue to ensure that the Pony Express National Historic Trail remains open to public access in the vicinity of its lands.	X	X

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
		Resource Management Category: *Visual Resource Management*		
Navy		• The Navy complies with BLM requirements in areas under BLM jurisdiction.	X	X
		Resource Management Category: *Mineral and Energy Resource Management*		
BLM		• BLM manages minerals; the Navy applies for permits for gravel extraction where required.	X	X
		Resource Management Category: *Cultural Resource Management*		
Navy and BLM	6	• BLM and the Navy would preserve, protect, and interpret significant cultural resources by preparing an agreement document between the Navy, BLM, and the Nevada State Historic Preservation Officer (SHPO), which defines how the Navy and BLM will implement the National Historic Preservation Act (NHPA).	X	
Navy and BLM	6	• If possible, avoid significant cultural properties. Where cultural resources cannot be avoided, take appropriate measures to mitigate project effects.	X	X
Navy and BLM		• BLM and the Navy would coordinate with Native American tribes and individuals in accordance with BLM policy.	X	
Navy and BLM		• BLM and the Navy would prepare treatment options for contextual studies.	X	
Navy and BLM		• BLM and the Navy would perform research projects to aid contextual studies.	X	
Navy and BLM		• BLM and the Navy would share cultural resource information.	X	
Navy and BLM		• All proposed BLM and Navy activities would be subject to NHPA Section 106 review.	X	
Navy		• Navy coordinates with Native American tribes and individuals in accordance with Navy policy.		X
Navy		• The Navy manages cultural resources in accordance with the NHPA, Native American Graves Protection and Repatriation Act, and other applicable federal and state laws and regulations.	X	X

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
		NAS FALLON MAIN STATION		
		Resource Management Category: *Livestock Grazing*		
Navy	4	• The Navy manages 11 agricultural leases on 3,500 acres under its Agricultural Outlease Plan of 2000, as directed in Chap 19 of NAVFAC P-73 Vol II. A Soil and Water Conservation Plan was written for each lease, and the lessee is required to complete conservation projects.	X	X
		Resource Management Category: *Water Resources and Water Rights Management*		
Navy		• The Navy would continue to maintain water rights in accordance with state and federal law to meet aircraft safety requirements, as identified in the Agricultural Outlease Plan.	X	X
		Resource Management Category: *Wetland And Riparian Habitat Management*		
Navy	3	• The Navy would continue to maintain the irrigation pond along the nature trail.	X	X
		Resource Management Category: *Vegetation Management*		
Navy		• The Navy manages vegetation on the Main Station for low water use landscaping, xeriscape, and agriculture, per the Agricultural Outlease Management Plan and the NAS Fallon Landscape Plan, consistent with the FOD reduction program and aircraft safety.	X	X
		Resource Management Category: *Wildlife Management*		
Navy		• Navy to explore the potential to develop a hunting program on lands away from military facilities and runways.	X	
		Resource Management Category: *Fire Management*		
Navy		• The NAS Fallon Fire Department will continue to determine appropriate times and methods for prescribed burning of weeds and irrigation ditches.	X	X
		Resource Management Category: *Recreation Management*		
Navy	3, 7	• The Navy would assess improvements to the nature trail (for example, tree plantings) to benefit the public and natural resources.	X	

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
		FALLON RANGE TRAINING COMPLEX		
		Resource Management Category: *Livestock Grazing*		
BLM		• BLM would manage livestock grazing on the open withdrawn lands at B19 in a manner consistent with adjacent public lands.	X	
BLM		• BLM would amend the existing permits for livestock grazing on lands closed to public access by the Military Lands Withdrawal Act of 1999. This amendment would consist of a livestock management decision to reduce animal unit months (AUMs) as a percentage of the allotment converted to closed status. The Navy would investigate the purchase of lost livestock AUM's contingent on Congress approving funds.	X	
BREC		• The Bureau of Reclamation would continue to manage livestock grazing on the open lands at B-16.	X	X
		Resource Management Category: *Water Resources and Water Rights Management*		
Navy		• The Navy would continue to maintain existing wells at B-16, B-19, and B-20 in accordance with state and federal laws and regulations.	X	X
		Resource Management Category: *Wetland And Riparian Habitat Management*		
Navy	5	• The Navy would continue to maintain the fencing for the protection of riparian habitat at Stinking Springs in the closed lands of B-19.	X	X
		Resource Management Category: *Vegetation Management*		
Navy		• The training ranges are managed to minimize exotic species colonization.	X	X
		Resource Management Category: *Wildlife Management*		
Navy and BLM		• The Navy, BLM, and NDOW would coordinate to provide a cooperative agreement to allow access to the six wildlife guzzlers located south of Fairview Peak.	X	
Navy		• Per agreement with NDOW, the Navy would provide access for the annual bighorn sheep hunt on closed lands at B-17.	X	

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
		Resource Management Category: *Mineral and Energy Resource Management*		
Navy		• The Navy would assess the purchase of patented existing mining claims on closed lands, contingent on Congressional approving funds.	X	
		DIXIE VALLEY TRAINING AREA		
		Resource Management Category: *Livestock Grazing*		
BLM		• On Navy owned and withdrawn lands, BLM would manage livestock grazing in a manner consistent with grazing practices on adjacent public lands and as per amended BLM allotment management plans (AMP).	X	
BLM		• The existing BLM AMP's for the three allotments adjacent to Navy lands would be amended to include the management of the Navy lands.	X	
Navy	1	• Navy would maintain fences and gates to prohibit grazing from Horse Creek.	X	
BLM		• BLM would consult with the Navy before constructing or removing range improvements per amended allotment management plans.	X	
		Resource Management Category: *Water Resources and Water Rights Management*		
Navy		• The Navy would coordinate with appropriate agencies to determine what specific ponds (if any) should be maintained in Dixie Valley. Specific management responsibilities would be defined through a cooperative agreement, and the appropriate agency would apply for the water rights.	X	
		Resource Management Category: *Wetland And Riparian Habitat Management*		
Navy and BLM		• The Navy and BLM, in coordination with NDOW, will determine if additional management is required for the riparian area at Horse Creek.	X	
		Resource Management Category: *Vegetation Management*		
Navy and BLM		• The Navy and BLM would delineate existing vegetation areas that depend on unrestricted well water flow (e.g., in Settlement Area), which support both military training and wildlife habitat.	X	

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
Navy and BLM		• Management of delineated areas would require a new water right filing with the State of Nevada for a new beneficial use for wildlife. Management of these areas would include fencing.	X	
		Resource Management Category: *Sensitive Species Management*		
Navy		• The Navy would coordinate with the appropriate agencies (e.g., BLM, USFWS, NDOW and Churchill County) to develop a tui chub conservation agreement. In the interim, the Navy would continue to manage the ponds using existing management practices.	X	
		Resource Management Category: *Lands*		
Navy and BLM		• The Navy would assess the feasibility of transferring the jurisdiction of the 760-acre Dixie Meadow to the BLM.	X	
Navy and BLM		• Interim management of the Dixie Meadows will be to maintain existing natural aquatic and riparian conditions	X	
		Resource Management Category: *Recreation Management*		
Navy		• The Navy would maintain the current level of public access to the newly withdrawn lands as compatible with the military mission.	X	
Navy	8	• The Navy would open its lands to public access to the extent compatible with the military mission.	X	
Navy and BLM		• The Navy and BLM would assess improving existing recreation facilities at Horse Creek and establishing a multiple trailhead to the Clan Alpine Wilderness Study Area (WSA).	X	
Navy		• The Navy would change the existing "open" designation for OHV use to "limited to existing roads and trails" on Navy-owned and open withdrawn lands.	X	
		Resource Management Category: *Mineral and Energy Resource Management*		
BLM		• BLM would manage land for leaseable and saleable minerals in cooperation with the Navy.	X	
		OTHER LANDS		
		Resource Management Category: *Livestock Grazing*		

Table C-1
Management Responsibility and Alternative Comparison *(continued)*

Management Responsibility	Associated Project (See Table C-3 for description)	Management Measures	Proposed Action Measure (Section 2)	Continuation of Current Management Alternative Measure (Section 3)
BLM		• BLM would manage livestock grazing on the open withdrawn lands at the Shoal Site in a manner consistent with grazing practices on adjacent public lands.	X	
		Resource Management Category: *Lands*		
Navy and BLM		• The Navy would assess the feasibility of transferring the jurisdiction of the 86-acre Sand Springs parcel to BLM.	X	
		Resource Management Category: *Mineral and Energy Resource Management*		
BLM		• BLM would pursue a withdrawal of locatable minerals from operation of the 1872 Mining Law at Grimes Point Archaeological Area, Sand Mountain Recreation Area, and the Cold Springs Historical Area.	X	
		Resource Management Category: *Water Resources and Water Rights*		
Navy and BLM		• At the Shoal Site, institutional control of the deep subsurface will be maintained and long-term subsurface monitoring and surveillance is planned for at least 50 years by the DOE.	X	
Navy and BLM		• BLM and the Navy will not allow access to the subsurface by drilling or any other means and/or removal of any subsurface material from the Shoal Site without thorough evaluation and coordination with the DOE.		

Table C-2
Definition of Navy-related Funding Priorities

Navy Assessment Level	Description of Requirement	Navy-related Funding Priority
Level 1	(Legal Requirement)—Requirements derived from existing laws, regulations, and Executive Orders (EO) that apply to Navy activities, installations, ships, aircraft, and operations. These Office of Management and Budget (OMB)/EPA Class 0, I, or II projects and ongoing efforts include responding to applicable federal, state, and local requirements (e.g., Resource Conservation Recovery Act [RCRA], Clean Water Act [CWA], Clean Air Act [CAA], Safe Drinking Water Act [SDWA], NEPA, Toxic Substances Control Act [TSCA]) and EOs, such as 12088 (federal agency compliance), 12843 (ODS conversion/replacement), 12856 (P2 and EPCRA) and 13101 (recycling). Level 1 includes overseas host nation laws and final governing standards. Level 1 also includes costs of ongoing compliance, such as staffing levels, training, travel, and program management (OMB/EPA Class 0).	High
Level 2	(Navy Policy)—Requirements are those derived from DOD or Navy policy. These projects and proposed efforts are not mandated by law or other federal, state, or local regulations or orders but reflect Navy and DOD policy decisions and initiatives (e.g., PCB elimination).	
Level 3	(Pending Regulation)—Requirements derived from pending federal, state, or local regulations under development (where publication is scheduled), using, if available, model state regulation and permit standards.	Medium
Level 4	(Future requirements)—Requirements derived from future potential federal, state, or local legislation. These requirements are speculative.	Low
Level 5	(Leadership Initiatives)—Requirements based on local proactive Navy initiatives not mandated by law, regulation, EO, or policy.	

Source: US Navy undated

Table C-3
Management Projects

Project Number	Project Description	Funding Priority	Proposed Action	No Action
1	Repair Fence Horse Creek	1	X	X
2	Invasive Weed Control Dixie Valley	1	X	X
3	Nature Trail Revegetation Main Station	5	X	X
4	Long Term Ag Leases Main Station	2	X	X
5	Wildlife Area Fencing	5	X	X
6	Protect Historic Sites in Dixie Valley	1	X	X
7	Windbreak Plantings Main Station	2	X	X
8	Dixie Valley Clean Up	1	X	X

D. SPECIES LISTS

APPENDIX D
SPECIES LISTS

Table D-1
Scientific Names

Common Name	Scientific Name
Plants	
alkali sacaton	*Sporobolus airoides*
cattails	*Typha* sp.
cheatgrass	*Bromus tectorum*
creeping wildrye	*Elymus triticoides*
Fremont cottonwoods	*Populus fremontii*
halogeton	*Halogeton glomeratus*
puncture vine	*Tribulus terrestris*
rushes	*Juncus* sp.
Russian knapweed	*Centaurea repens*
Russian thistle	*Salsola kali tenifolia*
saltcedar	*Tamarix ramosissima*
sand cholla	*Opuntia pulchella*
sedges	*Carex* sp.
tall whitetop	*Lepidium latifolium*
white-top	*Cardaria draba*
willows	*Salix* sp.
yellow starthistle	*Centaurea solstitialis*
Reptiles	
gopher snake	*Pituophis melanoleucus*
Great Basin rattlesnake	*Crotalus viridis*
side-blotched lizard	*Uta stansburiana*
western fence lizard	*Sceloperus occidentalis*

Table D-1
Scientific Names *(continued)*

Common Name	Scientific Name
Water-based Birds	
American avocet	*Recurvirostra americana*
American coot	*Fulica americana*
Bewick's wren	*Thryomanes bewickii*
black-crowned night heron	*Nycticorax nycticorax*
Canada goose	*Branta canadensis*
cinnamon teal	*Anas cyanoptera*
common snipe	*Capella gallinago*
great egret	*Casmerodius albus*
mallard	*Anas platyrhynchos*
northern pintail	*Anas acuta*
pie-billed grebe	*Podilymbus podiceps*
ring-billed gull	*Larus delawarensis*
sora	*Porzana carolina*
white-faced ibis	*Plegadis chihi*
Upland Birds	
bald eagle	*Haliaeetus leucocephalus*
California quail	*Callipepla californica*
chukars	*Alectoris chukar*
ferruginous hawk	*Buteo regalis*
golden eagle	*Aquila chrysaetos*
great horned owl	*Bubo virginianus*
horned lark	*Eremophila alpestris*
house wren	*Troglodytes aedon*
merlin	*Falco columbarius*
mountain plover	*Charadrius montanus*
sage grouse	*Centrocerus urophasianus*
Mammals	
bighorn sheep	*Ovis canadensis*
bobcat	*Lynx rufus*
California myotis	*Myotis californicus*
deer mice	*Peromyscus maniculatus*
desert kangaroo rat	*Dipodomys deserti*
kangaroo rats	*Dipodomys merriami*
little brown myotis	*Myotis lucifugus*
long-legged myotis	*Myotis volans*
mountain lion	*Felis concolor*
Mule deer	*Odocoileus hemionus*
pallid bat	*Antrozous pallidus*
Pronghorn antelope	*Antilocapra americana*
small footed myotis	*Myotis ciliolabrum*
Townsend's big-eared bat	*Plecotus townsendi*
Yuma myotis	*Myotis yumanensis*

Table D-1
Scientific Names *(continued)*

Common Name	Scientific Name
Fish	
Asiatic carp	*Cyprinus carpio*
bluegill	*Lepomis macrachirus*
brook trout	*Salvelinus fontinalis*
cui-ui	*Chasmistes cujus*
Dixie Valley tui chub	*Gila bicolor* ssp.
green sunfish	*Lepomis cyanellus*
Lahontan cutthroat trout	*Onchorynchus clarki henshawi*
largemouth bass	*Micropterus salmoidesi*
mosquito fish	*Gambusia affinis*
tui chub	*Gila bicolor* spp.
Amphibians	
boreal toad	*Bufo boreas boreas*
bullfrog	*Rana catesbiana*

Sources: US Navy 1997c and Rissler et al. 1991.

E. STATUS OF MEMORANDA OF UNDERSTANDING/ COOPERATIVE AGREEMENTS

APPENDIX E
STATUS OF MEMORANDA OF UNDERSTANDING/COOPERATIVE AGREEMENTS

VALID MEMORANDA OF UNDERSTANDING/COOPERATIVE AGREEMENTS

1. Memorandum of Understanding among Department of Defense, Department of Interior, and Department of Agriculture for cooperation and coordination of the use and management of lands and resources (1998).

   This MOU was prepared at the Washington DC level and provides umbrella coverage for all MOU's and agreements.

2. Letter of Agreement Among Naval Strike and Air Warfare Center and Naval Air Station Fallon and Bureau of Land Management, Nevada State Office for Interagency Airspace Coordination (2000).

   This Agreement sets forth local fire and non fire related airspace coordination procedures between Navy and BLM.

3. Memorandum of Understanding between Naval Strike and Air Warfare Center, and Naval Air Station Fallon and Nevada Division of Wildlife for coordinated management of Nelson Bighorn Sheep at Slate Mountain/Sand Springs Range (2000).

   This MOU set up access procedures for sheep management by NDOW and provides for limited sheep hunting within closed withdrawn lands at B-17.

4. Cooperative Agreement between Naval Strike and Air Warfare Center and Bureau of Land Management for Combat Search and Rescue Training on Public lands (1998).

   Agreement provides specific locations and stipulations relative to the use of public lands for Combat Search and Rescue training.

5. Cooperative Fire Protection Agreement between Naval Air Station Fallon, Nevada and Bureau of Land Management Carson City (1998).

This agreement is followed by a 1999 Operating Plan between Bureau of Land Management, Carson City Field Office and Naval Air Station Fallon. Both documents set procedure for wildfire and suppression.

AGREEMENTS THAT NEED TO BE UPDATED

1. Memorandum of Agreement Concerning Off-Range Military Ordnance.

   This agreement is between NAS Fallon, BLM, and the State of Nevada. It expired in March of 2000 and needs to be updated to reflect the changes due to the Military Lands Withdrawal Act of 1999.

2. Memorandum of Agreement Regarding he Use of Public Domain Land (1991).

   This agreement was between Naval Air Station Fallon and BLM Carson City. The agreement expired in 1996, but contains sections on reporting and coordination corrective action associated with hazardous material spills on public lands, and reporting debris removal associated with Navy aircraft mishaps on public lands. The sections on authorized and unauthorized uses of public lands as well as one time uses of public lands are outdated and now covered by BLM Instruction Memorandum 2001-030, Military Activities On and Over the Public Lands, November 8, 2000.

AGREEMENTS OR MOU THAT WERE IN PROGRESS OR WERE COMPLETED BUT ARE SUPERCEDED BY THE MANAGEMENT MEASURES WITHIN THE INRMP/RMPA

1. Cooperative Agreement for the Management of Dixie Valley between the Department of Navy and the Department of Interior Bureau of Land Management.

   This agreement would have provided for the BLM to management all livestock grazing in Dixie Valley. This is a management proposal in the INRMP/RMPA.

2. Memorandum of Agreement between Naval Air Station Fallon and Nevada Division of Wildlife and Bureau of Land Management (1995).

   This MOU provided cooperative management direction for the Navy owned lands at Horse Creek. Most of the management proposals have been implemented and any remaining action is covered in the INRMP/RMPA.

3. Memorandum of Agreement regarding Rights-of-way Reservations and Environmental Documentation (1993).

   This MOA expired in 1998 and is replaced by management proposed in the INRMP/RMPA.

F. RESOURCE MANAGEMENT PLAN AMENDMENT PROTEST PROCEDURES

APPENDIX F
RESOURCE MANAGEMENT PLAN AMENDMENT PROTEST PROCEDURES

F.1 WHO CAN FILE A PROTEST

This resource management plan amendment may be protested by anyone who has participated in the planning process and has an interest that is or may be adversely affected by approval of the plan amendment. (See 43 CFR 1610.5-2(a) (1).

F.2 HOW DO YOU FILE A PROTEST

A letter of protest to the BLM Director must be filed within 30 days of the BLM's published notice of availability (NOA) for the proposed Amendment/EA/ FONSI. The NOA may be published in the Federal Register and/or in a newspaper of local or regional distribution (see 43 CFR 1610.5-2[a] [1]).

Your protest letter must be sent to:

Director, Bureau of Land Management
Resource Planning Team (WO 480)
1849 C Street NW
Washington, DC 20035

In addition please send a copy of your protest to:

Field Office Manager
Bureau of Land Management
Carson City Field Office
5665 Morgan Mill Road
Carson City, NV 89701

F.3 WHAT SHOULD YOUR PROTEST LETTER CONTAIN

Letters of protest must fulfill the content requirements established in 43 CFR 1610.5-2(a) (2). The protest must be in writing and contain the following:

- The name, mailing address, phone number, and interest of the person filing the protest.
- A statement of the part or parts of the plan amendment and the issues being protested.
- A copy of all documents addressing the issue(s) that the protesting party submitted during the planning process or a statement of the date they were discussed for the record.
- A concise statement explaining why the protestor believes the Bureau of Land Management's Nevada State Director's decision is wrong.

F.4 WHEN MUST YOUR PROTEST BE FILED

Your protest letter regarding the **Lahontan Resource Management Plan Amendment** must be filed by **June 15, 2001.**

G. EXISTING MANAGEMENT PLANS

APPENDIX G
EXISTING MANAGEMENT PLANS

- Programmatic Agreement among NAS Fallon, Nevada, the Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the identification, evaluation and Treatment of Historic Properties on Lands Managed by NAS Fallon, June 1996.
- Range Air Installation Compatible Use Zone (RAICUZ), 1997
- Natural Resources Management Plan, Naval Air Station Fallon, 1991
- Cultural Resources Management Plan 1993
- Ecological Inventory of NAS Fallon and Environs 1997
- Agricultural Land Management Plan 2000
- Bird-Aircraft Strike Hazard (BASH) Management Plan 1999
- NAS Fallon Landscape Improvement Plan 2001
- Storm Water management Plan Dec 1993 (Under Revision)
- Draft Wetlands management Policy 2001
- NAS Fallon Integrated Pest Management Plan 2000

H. MILITARY LANDS WITHDRAWAL ACT OF 1999

SEC. 3001. SHORT TITLE.

This title may be cited as the 'Military Lands Withdrawal Act of 1999'.

Subtitle A--Withdrawals Generally

SEC. 3011. WITHDRAWALS.

(a) NAVAL AIR STATION FALLON RANGES, NEVADA-

(1) WITHDRAWAL AND RESERVATION- (A) Subject to valid existing rights and except as otherwise provided in this subtitle, the lands established at the B-16, B-17, B-19, and B-20 Ranges, as referred to in paragraph (2), and all other areas within the boundary of such lands as depicted on the map referred to in such paragraph which may become subject to the operation of the public land laws, are hereby withdrawn from all forms of appropriation under the public land laws, including the mining laws and the mineral leasing and geothermal leasing laws.

(B) The lands and interests in lands within the boundaries established at the Dixie Valley Training Area, as referred to in paragraph (2), are hereby withdrawn from all forms of appropriation under the public land laws, including the mining laws and geothermal leasing laws, but not the mineral leasing laws.

(C) The lands withdrawn by subparagraphs (A) and (B) are reserved for use by the Secretary of the Navy for--

(i) testing and training for aerial bombing, missile firing, and tactical maneuvering and air support; and

(ii) other defense-related purposes consistent with the purposes specified in this subparagraph.

(2) LAND DESCRIPTION- The public lands and interests in lands withdrawn and reserved by this subsection comprise approximately 204,953 acres of land in Churchill County, Nevada, as generally depicted as 'Proposed Withdrawal Land' and 'Existing Withdrawals' on the map entitled 'Naval Air Station Fallon Ranges--Proposed Withdrawal of Public Lands for Range Safety and Training Purposes', dated May 25, 1999, and filed in accordance with section 3012.

(3) RELATIONSHIP TO OTHER RESERVATIONS-

(A) B-16 RANGE- To the extent the withdrawal and reservation made by paragraph (1) for the B-16 Range withdraws lands currently withdrawn and reserved for use by the Bureau of Reclamation, the reservation made by that paragraph shall be the primary reservation for public safety management actions only, and the existing Bureau of Reclamation reservation shall be the primary reservation for all other management actions.

(B) SHOAL SITE- The Secretary of Energy shall remain responsible and liable for the subsurface estate and all its activities at the 'Shoal Site' withdrawn and reserved by Public Land Order Number 2771, as amended by Public Land Order Number 2834. The Secretary of the Navy shall be responsible for the management and use of the surface estate at the 'Shoal Site' pursuant to the withdrawal and reservation made by paragraph (1).

(4) WATER RIGHTS- Effective as of the date of the enactment of this Act, the Secretary of the Navy shall ensure that the Navy complies with the portion of the memorandum of understanding between the Department of the Navy and the United States Fish and Wildlife Service dated July 26, 1995, requiring the Navy to limit water rights to the maximum extent practicable, consistent with safety of operations, for Naval Air Station Fallon.

Nevada, currently not more than 4,402 acre-feet of water per year.

(b) NELLIS AIR FORCE RANGE, NEVADA-

(1) DEPARTMENT OF AIR FORCE- Subject to valid existing rights and except as otherwise provided in this subtitle, the public lands described in paragraph (4) are hereby withdrawn from all forms of appropriation under the public land laws, including the mining laws and the mineral leasing and geothermal leasing laws. Such lands are reserved for use by the Secretary of the Air Force--

(A) as an armament and high hazard testing area;

(B) for training for aerial gunnery, rocketry, electronic warfare, and tactical maneuvering and air support;

(C) for equipment and tactics development and testing; and

(D) for other defense-related purposes consistent with the purposes specified in this paragraph.

(2) DEPARTMENT OF ENERGY-

(A) REVOCATION- Public Land Order Number 1662, published in the Federal Register on June 26, 1958, is hereby revoked in its entirety.

(B) WITHDRAWAL- Subject to valid existing rights, all lands within the boundary of the area labeled 'Pahute Mesa' as generally depicted on the map referred to in paragraph (4) are hereby withdrawn from all forms of appropriation under the public land laws, including the mining laws and the mineral leasing and geothermal leasing laws.

(C) RESERVATION- The lands withdrawn under subparagraph (B) are reserved for use by the Secretary of Energy as an integral part of the Nevada Test Site. Other provisions of this subtitle do not apply to the land withdrawn and reserved under this paragraph, except as provided in section 3017.

(3) DEPARTMENT OF INTERIOR- Notwithstanding the Desert National Wildlife Refuge withdrawal and reservation made by Executive Order No. 7373, dated May 20, 1936, as amended by Public Land Order Number 4079, dated August 26, 1966, and Public Land Order Number 7070, dated August 4, 1994, the lands depicted as impact areas on the map referred to in paragraph (4) are, upon completion of the transfers authorized in paragraph (5)(F)(ii), transferred to the primary jurisdiction of the Secretary of the Air Force, who shall manage the lands in accordance with the memorandum of understanding referred to in paragraph (5)(E). The Secretary of the Interior shall retain secondary jurisdiction over the lands for wildlife conservation purposes.

(4) LAND DESCRIPTION- The public lands and interests in lands withdrawn and reserved by paragraphs (1) and (2) comprise approximately 2,919,890 acres of land in Clark, Lincoln, and Nye Counties, Nevada, as generally depicted on the map entitled 'Nevada Test and Training Range, Proposed Withdrawal Extension', dated April 22, 1999, and filed in accordance with section 3012.

(5) DESERT NATIONAL WILDLIFE REFUGE-

(A) MANAGEMENT- During the period of withdrawal and reservation of lands by this subtitle, the Secretary of the Interior shall exercise administrative jurisdiction over the Desert National Wildlife Refuge (except for the lands referred to in this subsection) through the United States Fish and Wildlife Service in accordance with the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.), this subtitle, and other laws applicable to the National Wildlife Refuge System.

(B) USE OF MINERAL MATERIALS- Notwithstanding any other provision of this subtitle or the Act of July 31, 1947 (commonly known as the Materials Act of 1947; 30 U.S.C. 601 et seq.), no mineral material resources may be obtained from the parts of the Desert National Wildlife Refuge that are not

'McGregor Range Withdrawal', dated June 3, 1999, and filed in accordance with section 3012.

Applies to all withdrawals

SEC. 3012. MAPS AND LEGAL DESCRIPTIONS.

(a) PUBLICATION AND FILING- As soon as practicable after the date of the enactment of this Act, the Secretary of the Interior shall--

BLM needs to do ASAP

(1) publish in the Federal Register a notice containing the legal description of the lands withdrawn and reserved by this subtitle; and

(2) file maps and the legal descriptions of the lands withdrawn and reserved by this subtitle with the Committee on Energy and Natural Resources of the Senate and the Committee on Resources of the House of Representatives.

(b) TECHNICAL CORRECTIONS- Such maps and legal descriptions shall have the same force and effect as if included in this subtitle, except that the Secretary of the Interior may correct clerical and typographical errors in such maps and legal descriptions.

(c) AVAILABILITY FOR PUBLIC INSPECTION- Copies of such maps and legal descriptions shall be available for public inspection in the offices of the Director and appropriate State Directors and field office managers of the Bureau of Land Management, the office of the commander, Naval Air Station Fallon, Nevada, the offices of the Director and appropriate Regional Directors of the United States Fish and Wildlife Service, the office of the commander, Nellis Air Force Base, Nevada, the office of the commander, Fort Bliss, Texas, the office of the commander, Fort Greely, Alaska, the office of the commander, Fort Wainwright, Alaska, and the Office of the Secretary of Defense.

(d) REIMBURSEMENT- The Secretary of Defense shall reimburse the Secretary of the Interior for any costs incurred by the Secretary of the Interior in implementing this section.

SEC. 3013. TERMINATION OF WITHDRAWALS IN MILITARY LANDS WITHDRAWAL ACT OF 1986.

Except as otherwise provided in this title, the withdrawals made by the Military Lands Withdrawal Act of 1986 (Public Law 99-606) shall terminate after November 6, 2001.

SEC. 3014. MANAGEMENT OF LANDS.

Insert

(a) MANAGEMENT BY SECRETARY OF INTERIOR-

(1) APPLICABLE LAW- During the period of the withdrawal of lands under this subtitle, the Secretary of the Interior shall manage the lands withdrawn by section 3011 pursuant to the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), other applicable law, and this subtitle. The Secretary shall manage the lands within the Desert National Wildlife Refuge in accordance with the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and other applicable law. No provision of this subtitle, except sections 3011(b)(5)(D), 3020, and 3021, shall apply to the management of the Desert National Wildlife Refuge.

(2) ACTIVITIES AUTHORIZED- To the extent consistent with applicable law and Executive orders, the lands withdrawn by section 3011 may be managed in a manner permitting--

(A) the continuation of grazing where permitted on the date of the enactment of this Act;

(B) the protection of wildlife and wildlife habitat;

(C) the control of predatory and other animals;

(D) recreation; and

(E) the prevention and appropriate suppression of brush and range fires resulting from nonmilitary activities.

(3) NONMILITARY USES-

(A) IN GENERAL- All nonmilitary use of the lands referred to in paragraph (2), other than the uses described in that paragraph, shall be subject to such conditions and restrictions as may be necessary to permit the military use of such lands for the purposes specified in or authorized pursuant to this subtitle.

(B) LEASES, EASEMENTS, AND RIGHTS-OF-WAY- The Secretary of the Interior may issue a lease, easement, right-of-way, or other authorization with respect to the nonmilitary use of lands referred to in paragraph (2) only with the concurrence of the Secretary of the military department concerned.

(b) CLOSURE TO PUBLIC-

(1) IN GENERAL- If the Secretary of the military department concerned determines that military operations, public safety, or national security require the closure to public use of any road, trail, or other portion of lands withdrawn by this subtitle, that Secretary may take such action as that Secretary determines necessary or desirable to effect and maintain such closure.

(2) LIMITATIONS- Any closure under paragraph (1) shall be limited to the minimum areas and periods which the Secretary of the military department concerned determines are required to carry out this subsection.

(3) NOTICE- Before and during any closure under this subsection, the Secretary of the military department concerned shall--

(A) keep appropriate warning notices posted; and

(B) take appropriate steps to notify the public concerning such closure.

(c) MANAGEMENT PLAN- The Secretary of the Interior, after consultation with the Secretary of the military department concerned, shall develop a plan for the management of each area withdrawn by section 3011 during the period of withdrawal under this subtitle. Each plan shall--

(1) be consistent with applicable law;

(2) be subject to the conditions and restrictions specified in subsection (a)(3);

(3) include such provisions as may be necessary for proper management and protection of the resources and values of such area; and

2 years to do plan

(4) be developed not later than two years after the date of the enactment of this Act.

(d) BRUSH AND RANGE FIRES-

(1) IN GENERAL- The Secretary of the military department concerned shall take necessary precautions to prevent and suppress brush and range fires occurring within and outside lands withdrawn by section 3011 as a result of military activities and may seek assistance from the Bureau of Land Management in the suppression of such fires.

(2) ASSISTANCE- Each memorandum of understanding required by subsection (e) shall--

(A) require the Bureau of Land Management to provide assistance in the suppression of fires under paragraph (1) upon the request of the Secretary of the military department concerned; and

(B) provide for a transfer of funds from the military department concerned to the Bureau of Land Management as compensation for any assistance so provided.

(e) MEMORANDUM OF UNDERSTANDING-

(1) REQUIREMENT- The Secretary of the Interior and the Secretary of the military department concerned shall, with respect to each lands withdrawn by section 3011, enter into a memorandum of understanding to implement the management plan for such lands under subsection (c).

(2) DURATION- The duration of any memorandum of understanding for lands withdrawn by section 3011 shall be the same as the period of the withdrawal of such lands under this subtitle.

(f) ADDITIONAL MILITARY USES-

(1) IN GENERAL- Lands withdrawn by section 3011 (except lands within the Desert National Wildlife Refuge) may be used for defense-related purposes other than those specified in the applicable provisions of such section.

(2) NOTICE- The Secretary of Defense shall promptly notify the Secretary of the Interior in the event that lands withdrawn by this subtitle will be used for defense-related purposes other than those specified in the applicable provisions of section 3011.

(3) CONTENTS OF NOTICE- A notice under paragraph (2) shall indicate the additional use or uses involved, the proposed duration of such use or uses, and the extent to which such use or uses will require that additional or more stringent conditions or restrictions be imposed on otherwise permitted nonmilitary uses of the lands concerned, or portions thereof.

SEC. 3015. DURATION OF WITHDRAWAL AND RESERVATION.

(a) GENERAL TERMINATION DATE- The withdrawal and reservation of lands by section 3011 shall terminate 25 years after November 6, 2001, except as otherwise provided in this subtitle and except for the withdrawals provided for under subsections (a) and (b) of section 3011 which shall terminate 20 years after November 6, 2001.

(b) COMMENCEMENT DATE FOR CERTAIN LANDS- As to the lands withdrawn for military purposes by section 3011, but not withdrawn for military purposes by section 1 of the Military Lands Withdrawal Act of 1986 (Public Law 99-606), the withdrawal of such lands shall become effective on the date of the enactment of this Act.

(c) OPENING DATE- On the date of the termination of the withdrawal and reservation of lands under this subtitle, such lands shall not be open to any form of appropriation under the public land laws, including the mineral laws and the mineral leasing and geothermal leasing laws, until the Secretary of the Interior publishes in the Federal Register an appropriate order stating the date upon which such lands shall be restored to the public domain and opened.

SEC. 3016. EXTENSION OF INITIAL WITHDRAWAL AND RESERVATION.

(a) IN GENERAL- Not later than three years before the termination date of the initial withdrawal and reservation of lands under this subtitle, the Secretary of the military department concerned shall notify Congress and the Secretary of the Interior concerning whether the military department will have a continuing military need after such termination date for all or any portion of such lands.

(b) DUTIES REGARDING CONTINUING MILITARY NEED-

(1) IN GENERAL- If the Secretary of the military department concerned determines that there will be a continuing military need for any lands withdrawn by this subtitle, the Secretary of the military department concerned shall–

(A) consult with the Secretary of the Interior concerning any adjustments to be made to the extent of, or to the allocation of management responsibility for, such lands; and

(B) file with the Secretary of the Interior, within one year after the notice required by subsection (a), an application for extension of the withdrawal and reservation of such lands.

(2) APPLICATION FOR EXTENSION- Notwithstanding any general procedure of the Department of the Interior for processing Federal land withdrawals, an application for extension under paragraph (1) shall be considered complete if the application includes the following:

(A) The information required by section 3 of the Engle Act (43 U.S.C. 157), except that no information shall be required concerning the use or development of mineral, timber, or grazing resources unless, and to the extent, the Secretary of the military department concerned proposes to use or develop such resources during the period of extension.

(B) A copy of the most recent report prepared in accordance with the Sikes Act (16 U.S.C. 670 et seq.)

(c) LEGISLATIVE PROPOSALS- The Secretary of the Interior and the Secretary of the military department concerned shall ensure that any legislative proposal for the extension of the withdrawal and reservation of lands under this subtitle is submitted to Congress not later than May 1 of the year preceding the year in which the withdrawal and reservation of such lands would otherwise terminate under this subtitle.

(d) NOTICE OF INTENT REGARDING RELINQUISHMENT- If during the period of the withdrawal and

reservation of lands under this subtitle, the Secretary of the military department concerned decides to relinquish all or any
of the lands withdrawn and reserved by section 3011, such Secretary shall transmit a notice of intent to relinquish such
lands to the Secretary of the Interior.

SEC. 3017. ONGOING DECONTAMINATION.

(a) PROGRAM- Throughout the duration of the withdrawal of lands under this subtitle, the Secretary of the military
department concerned shall, to the extent funds are available for such purpose, maintain a program of decontamination of
such lands consistent with applicable Federal and State law.

(b) REPORTS-

(1) REQUIREMENT- Not later than 45 days after the date on which the President transmits to Congress the President's proposed budget for any fiscal year beginning after the date of the enactment of this Act, the Secretary
of each military department shall transmit to the Committees on Appropriations, Armed Services, and Energy and
Natural Resources of the Senate and the Committees on Appropriations, Armed Services, and Resources of the
House of Representatives a description of the decontamination efforts undertaken on lands under this subtitle under the jurisdiction of such Secretary during the previous fiscal year and the decontamination activities proposed
to be undertaken on such lands during the next fiscal year.

(2) REPORT ELEMENTS- Each report shall specify the following:

(A) Amounts appropriated and obligated or expended for decontamination of such lands.

(B) The methods used to decontaminate such lands.

(C) The amounts and types of decontaminants removed from such lands.

(D) The estimated types and amounts of residual contamination on such lands.

(E) An estimate of the costs for full decontamination of such lands and the estimate of the time to complete such decontamination.

(c) DECONTAMINATION BEFORE RELINQUISHMENT-

(1) DUTIES BEFORE NOTICE OF INTENT TO RELINQUISH- Before transmitting a notice of intent to relinquish lands under section 3016(d), the Secretary of Defense, acting through the Secretary of the military department concerned, shall prepare a written determination concerning whether and to what extent such lands are contaminated with explosive, toxic, or other hazardous materials.

(2) DETERMINATION ACCOMPANIES NOTICE- A copy of any determination prepared with respect to lands under paragraph (1) shall be transmitted together with the notice of intent to relinquish such lands under section 3016(d).

(3) PUBLICATION OF NOTICE AND DETERMINATION- The Secretary of the Interior shall publish in the Federal Register a copy of any notice of intent to relinquish and determination concerning the contaminated state
of the lands that is transmitted under this subsection.

(d) ALTERNATIVES TO DECONTAMINATION BEFORE RELINQUISHMENT- If the Secretary of the Interior,
after consultation with the Secretary of the military department concerned, determines that decontamination of any land
which is the subject of a notice of intent to relinquish under section 3016(d) is not practicable or economically feasible,
or that such land cannot be decontaminated sufficiently to be opened to the operation of some or all of the public land
laws, or if Congress does not appropriate sufficient funds for the decontamination of such land, the Secretary of the
Interior shall not be required to accept such land for relinquishment.

(e) STATUS OF CONTAMINATED LANDS- If because of their contaminated state the Secretary of the Interior
declines to accept jurisdiction over lands withdrawn by this subtitle which have been proposed for relinquishment, or if at
the expiration of the withdrawal of such lands by this subtitle the Secretary of the Interior determines that some of such
lands are contaminated to an extent which prevents opening such lands to operation of the public land laws--

(1) the Secretary of the military department concerned shall take appropriate steps to warn the public of the contaminated state of such lands and any risks associated with entry onto such lands;

(2) after the expiration of the withdrawal of such lands under this subtitle, the Secretary of the military department
concerned shall undertake no activities on such lands except in connection with decontamination of such lands;
and

(3) the Secretary of the military department concerned shall submit to the Secretary of the Interior and Congress a
report on the status of such lands and all actions taken under this subsection.

(f) REVOCATION AUTHORITY-

(1) AUTHORITY- Notwithstanding any other provision of law, the Secretary of the Interior, upon deciding that it
is in the public interest to accept jurisdiction over lands proposed for relinquishment under section 3016(d), may
revoke the withdrawal and reservation of lands under this subtitle as it applies to such lands.

(2) ORDER- Should a decision be made to revoke the withdrawal and reservation of lands under paragraph (1),
the Secretary of the Interior shall publish in the Federal Register an appropriate order which shall--

(A) terminate the withdrawal and reservation of such lands under this subtitle;

(B) constitute official acceptance of full jurisdiction over such lands by the Secretary of the Interior; and

(C) state the date on which such lands will be opened to the operation of some or all of the public lands laws, including the mining laws.

SEC. 3018. DELEGATION.

(a) MILITARY DEPARTMENTS- The functions of the Secretary of Defense, or of the Secretary of a military department, under this subtitle may be delegated.

(b) DEPARTMENT OF INTERIOR- The functions of the Secretary of the Interior under this subtitle may be delegated,
except that an order described in section 3017(f)(2) may be approved and signed only by the Secretary of the Interior,
the Under Secretary of the Interior, or an Assistant Secretary of the Interior.

SEC. 3019. WATER RIGHTS.

Nothing in this subtitle shall be construed to establish a reservation to the United States with respect to any water or
water right on lands covered by section 3011. No provision of this subtitle shall be construed as authorizing the appropriation of water on lands covered by section 3011 by the United States after the date of the enactment of this
Act, except in accordance with the law of the State in which such lands are located. This section shall not be construed
to affect water rights acquired by the United States before the date of the enactment of this Act.

SEC. 3020. HUNTING, FISHING, AND TRAPPING.

All hunting, fishing, and trapping on lands withdrawn by this subtitle shall be conducted in accordance with the provisions
of section 2671 of title 10, United States Code, except that hunting, fishing, and trapping within the Desert National
Wildlife Refuge shall be conducted in accordance with the National Wildlife Refuge System Administration Act of 1966
(16 U.S.C. 668dd et seq.), the Recreation Use of Wildlife Areas Act of 1969 (16 U.S.C. 460k et seq.), and other laws
applicable to the National Wildlife Refuge System.

SEC. 3021. MINING AND MINERAL LEASING.

(a) DETERMINATION OF LANDS SUITABLE FOR OPENING-

(1) DETERMINATION- As soon as practicable after the date of the enactment of this Act and at least every five
years thereafter, the Secretary of the Interior shall determine, with the concurrence of the Secretary of the military
department concerned, which public and acquired lands covered by section 3011 the Secretary of the Interior considers suitable for opening to the operation of the Mining Law of 1872, the Mineral Lands Leasing Act of 1920, the Mineral Leasing Act for Acquired Lands of 1947, the Geothermal Steam Act of 1970, or any one or more of such Acts.

(2) EXCEPTIONS- The Secretary of the Interior may not make any determination otherwise required under paragraph (1) with respect to lands contained within the Desert National Wildlife Refuge in Nevada.

(3) NOTICE- The Secretary of the Interior shall publish a notice in the Federal Register listing the lands determined suitable for opening under this subsection and specifying the opening date for such lands.

(b) OPENING LANDS- On the date specified by the Secretary of the Interior in a notice published in the Federal Register under subsection (a), the land identified under that subsection as suitable for opening to the operation of one or
more of the laws specified in that subsection shall automatically be open to the operation of such laws without the
necessity for further action by the Secretary or Congress.

lands.

SEC. 3023. IMMUNITY OF UNITED STATES.

The United States and all departments or agencies thereof shall be held harmless and shall not be liable for any injuries or damages to persons or property suffered in the course of any mining or mineral or geothermal leasing activity conducted on lands covered by section 3011.

Subtitle B--Withdrawals in Arizona

SEC. 3031. BARRY M. GOLDWATER RANGE, ARIZONA.

(a) WITHDRAWAL AND RESERVATION-

(1) WITHDRAWAL- Subject to valid existing rights and except as otherwise provided in this title, all lands and interests in lands within the boundaries established at the Barry M. Goldwater Range, referred to in paragraph (3), are hereby withdrawn from all forms of appropriation under the general land laws, including the mining laws and the mineral leasing and geothermal leasing laws, and jurisdiction over such lands and interests in lands is hereby transferred to the Secretary of the Navy and the Secretary of the Air Force.

(2) RESERVATION- The lands withdrawn by paragraph (1) for the Barry M. Goldwater Range--East are reserved for use by the Secretary of the Air Force, and for the Barry M. Goldwater Range--West are reserved for use by the Secretary of the Navy, for--

(A) an armament and high-hazard testing area;

(B) training for aerial gunnery, rocketry, electronic warfare, and tactical maneuvering and air support;

(C) equipment and tactics development and testing; and

(D) other defense-related purposes consistent with the purposes specified in this paragraph.

(3) LAND DESCRIPTION- The public lands and interests in lands withdrawn and reserved by this subsection comprise approximately 1,650,200 acres of land in Maricopa, Pima, and Yuma Counties, Arizona, as generally depicted on the map entitled 'Barry M. Goldwater Range Land Withdrawal', dated June 17, 1999, and filed in accordance with section 3033.

(4) TERMINATION OF CURRENT WITHDRAWAL- Except as otherwise provided in section 3032, as to the lands withdrawn by section 1(c) of the Military Lands Withdrawal Act of 1986 (Public Law 99-606), but not withdrawn for military purposes by this section, the withdrawal of such lands under that Act shall not terminate until after November 6, 2001, or until the relinquishment by the Secretary of the Air Force of such lands is accepted by the Secretary of the Interior. The withdrawal under that Act with respect to the Cabeza Prieta National Wildlife Refuge shall terminate on the date of the enactment of this Act.

(5) CHANGES IN USE- The Secretary of the Navy and the Secretary of the Air Force shall consult with the Secretary of the Interior before using the lands withdrawn and reserved by this section for any purpose other than