



Fallon Range Training Complex Modernization

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Executive Summary

WWW.FRTCMODERNIZATION.COM | NOVEMBER 2018

Table of Contents

Introduction	1
National Environmental Policy Act	1
Fallon Range Training Complex	2
Location	2
Training	2
Bombing Ranges and Training Area	2
Purpose and Need	4
Ninety Days to Combat Study	4
Training Space Needs	4
Proposed Action and Alternatives	6
No Action Alternative	6
Alternative 1	6
Alternative 2	7
Alternative 3 – Preferred Alternative	8
Community Involvement	9
Resource Areas & Summary of Potential Environmental Impacts	10
Methodology	10
Geological Resources	12
Land Use	13
Mining & Mineral Resources	14
Livestock Grazing	15
Transportation	16
Airspace	17
Noise	18
Air Quality	19
Water Resources	20
Biological Resources	21
Cultural Resources	22
Recreation	23
Socioeconomics	24
Public Health & Safety & Protection of Children	25
Environmental Justice	26
Cumulative Impacts	27
Management Practices, Monitoring, & Mitigation Measures	28
Next Steps	28

Introduction

The Fallon Range Training Complex (FRTC) is the United States (U.S.) Navy's premier aviation training range, supporting aviation and ground training, including live-fire training. The Navy trains 100 percent of deploying naval aviation and naval special warfare units at the FRTC. The training conducted here is critical for defending and securing the United States and its interests abroad.



The Navy's ability to counter evolving current and future threats worldwide depends on the effectiveness of existing aviation training requirements. The FRTC is currently operating with significant gaps in aviation weapons training and ground mobility training capability. The current size of the bombing (Bravo [B]) ranges and the Dixie Valley Training Area (DVTA) severely restricts the extent to which the Navy can use its various weapons systems to train, which has resulted in aircrews and special operations forces being unable to train in sufficiently realistic conditions. Thus, the Navy must reconfigure the FRTC to ensure the safety and success of service men and service women in combat.

Modernization of the bombing ranges and the DVTA would provide training capabilities that are more realistic and needed

to meet changing aviation and ground training requirements, while maintaining the safety of local communities.

The Navy's proposal to modernize the FRTC includes:

- ◆ Renewal of the current public land withdrawal
- ◆ Land range expansion through additional withdrawal of federal land and acquisition of non-federal land
- ◆ Airspace expansion and modifications
- ◆ Upgrades to range infrastructure

To assess the potential environmental impacts of the proposed modernization of the FRTC, the Navy has prepared a Draft Environmental Impact Statement (EIS), in accordance with the National Environmental Policy Act (NEPA).

National Environmental Policy Act

NEPA is a U.S. law that requires federal agencies to identify and analyze potential impacts on the environment before making a decision on a proposed action. The Council on Environmental Quality (CEQ) implementing regulations for NEPA (40 Code of Federal Regulations [CFR] part 1500) provides guidance for considering alternatives to a federally proposed action. This guidance requires rigorous exploration and objective evaluation of reasonable alternatives. Only those alternatives that meet the purpose of and need for the proposal, and are determined by the Navy to be reasonable, require detailed analysis (See 40 CFR section 1502.14). The law also encourages and facilitates community involvement in decisions that may affect the quality of the environment.

The Navy is the lead agency for the EIS (pursuant to 40 CFR section 1501.5), and has prepared the Draft EIS in accordance with NEPA, as implemented by the CEQ and Navy regulations.

Cooperating agencies for this EIS (pursuant to 40 CFR section 1501.6 and section 1508.5) include:

- ◆ Bureau of Land Management (BLM)
- ◆ Federal Aviation Administration (FAA)
- ◆ U.S. Fish and Wildlife Service
- ◆ Nevada Department of Wildlife
- ◆ Nevada Department of Agriculture
- ◆ Nevada Department of Transportation
- ◆ Nevada Division of Minerals
- ◆ Nevada Governor's Office of Energy
- ◆ Churchill County, Nevada
- ◆ Eureka County, Nevada
- ◆ Lander County, Nevada
- ◆ Mineral County, Nevada
- ◆ Nye County, Nevada
- ◆ Pershing County, Nevada

The Navy is also working closely with 13 federally recognized Native American Tribes and one Tribal Council to prepare the Draft EIS.

Fallon Range Training Complex

The Navy's mission is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. U.S. naval forces must be ready to respond to a wide range of situations, from contingency-type operations to large-scale conflicts, and missions related to homeland security, humanitarian assistance, and disaster relief. This requires personnel to be

Training

The FRTC is the only location where an entire carrier air wing, consisting of more than 60 aircraft and associated support crews, can work together and train. Every Navy carrier air wing trains at the FRTC prior to deployment. Personnel who complete tactical courses at the FRTC are known throughout the Navy as experts in the latest and most effective tactics.



The Navy uses simulators to provide early skill repetition and enhance teamwork through classroom learning and computer training; however, there is no substitute for live training in a realistic environment. To reduce the potential for substantial loss of life among U.S. service men and service women in combat, the Navy must train like they will be required to fight. This is achieved by continuously analyzing what occurred during past conflicts and making the changes necessary to improve future warfighting tactics.

fully trained and prepared to perform these various and demanding military operations at a moment's notice. The FRTC has served as a vital and irreplaceable asset for training naval aviation forces for more than 75 years. The ranges and the DVTA are supported logistically by Naval Air Station (NAS) Fallon. They are used to train deploying air and ground units in a realistic environment and prepare them for overseas operations.

Location

Located in northern Nevada approximately 65 miles east of the city of Reno, Nevada, the FRTC is made up of 12,256 square nautical miles of airspace and approximately 232,000 acres of Navy-managed land. Land areas include target areas for both live and inert ordnance release, radio and camera instrumentation and training systems, and electronic warfare training systems.

The FRTC spans multiple county jurisdictions, from Elko County in the east to Washoe County in the west. Land-based ranges (B-16, B-17, B-19, B-20, and the DVTA [Figure 1]) are located primarily in Churchill County.

Bombing Ranges and the Dixie Valley Training Area

The FRTC includes the DVTA and four bombing ranges. The bombing ranges, B-16, B-17, B-19, and B-20, are used for air-to-ground munitions delivery, close air support, tactical ground mobility, and live-fire training.

Military readiness activities conducted at the Fallon Range Training Complex include:

- ◆ Air warfare
- ◆ Strike warfare
- ◆ Electronic warfare
- ◆ Naval special warfare
- ◆ Joint forces training
- ◆ Expeditionary warfare
- ◆ Tactics and weapons courses, such as TOPGUN, TOPDOME, etc.

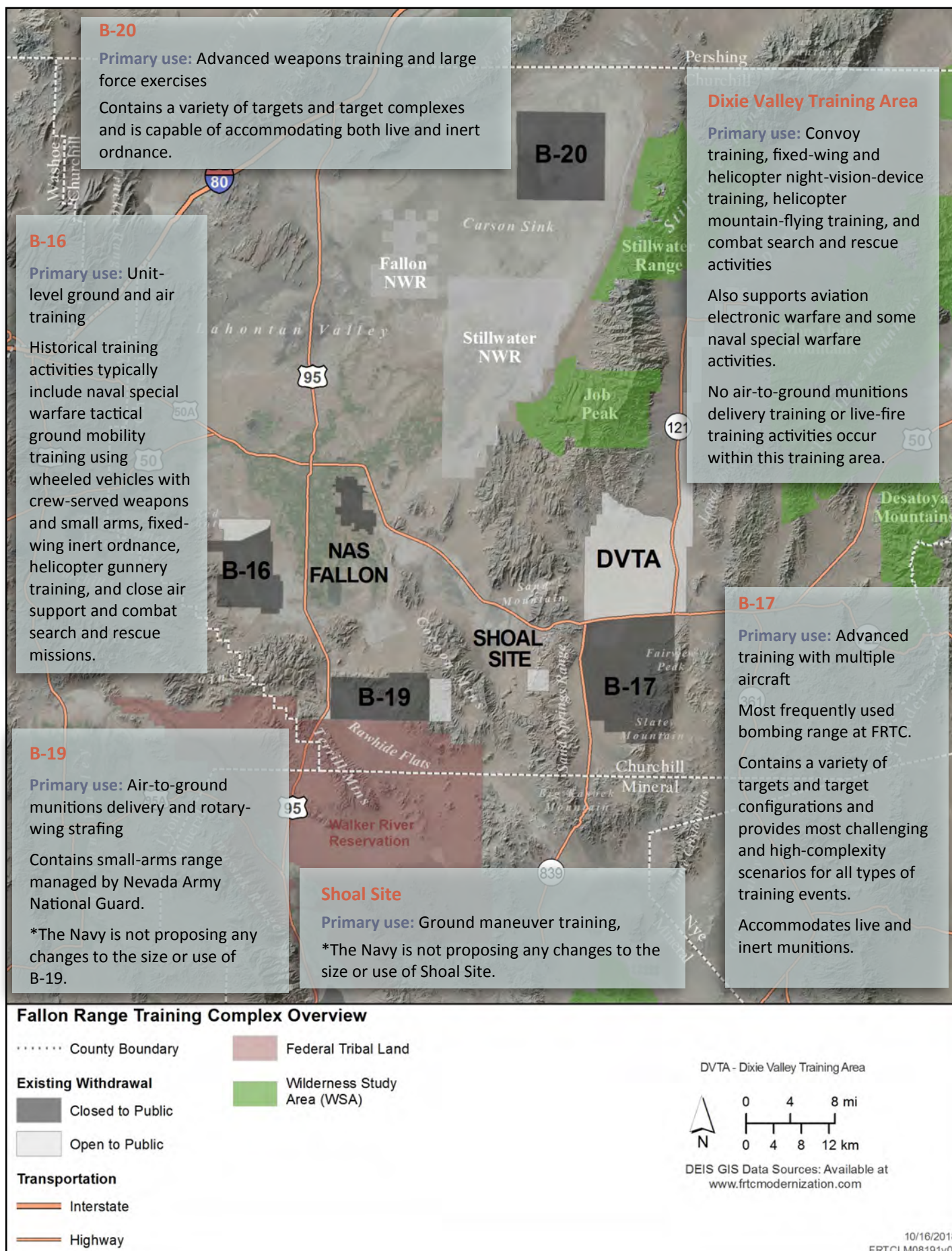


Figure 1: Current Fallon Range Training Complex Bombing Ranges and Training Areas

Purpose and Need

Ninety Days to Combat Study

To evaluate the Navy's ability to counter evolving current and future threats worldwide, the Naval Aviation Warfighting Development Center, naval aviation's warfare authority, initiated the *Ninety Days to Combat Required Training Capabilities Study* to evaluate the effectiveness of existing aviation training requirements and assess the need to reconfigure the FRTC. The study identified significant gaps in aviation weapons training. At the same time, the U.S. Navy Sea, Air, and Land Teams (SEALs) identified similar gaps and actions needed to support ground mobility training at the FRTC. The analysis showed that the current size of the bombing ranges and the DVTA severely restricts the extent to which the Navy can use its various weapons systems to train. As a result, aircrews and special operations forces are unable to train in sufficiently realistic conditions, which compromises their safety and success in combat.



Training Space Needs

Current aircraft and weapons require a far greater amount of training space than previous aircraft and weapons required (Figure 2). Historically, older aircraft flew at lower altitudes (10,000 feet), approached targets from close distances (4 to 5 miles away), and required a smaller impact area for weapons. Now, modern aircraft fly at higher altitudes (30,000 feet), release weapons from 10 to 12 miles away, and require a larger impact area during training for weapons safety and containment.

At the FRTC, a number of new weapons systems have been introduced into the fleet in recent years, such as joint direct attack munitions. Additionally, new systems, including new aircraft such as the F-35C Lightning II Joint Strike Fighter and EA-18G Growler, will need to be employed in future training activities. However, the bombing ranges and the DVTA have not changed substantially in size or configuration since the 1990s.

Figure 3 depicts what the B-17 range would need to look like to achieve realistic training in accordance with the full implementation of tactics, techniques, and procedures. In this scenario, the weapons danger zones at B-17 would extend significantly beyond the current controlled range property. Therefore, to ensure public safety, the Navy currently trains at far below maximum capabilities.

While the Navy continues to train at the FRTC, the current configuration of the bombing ranges forces the Navy to limit training in the air and on the ground. Training is limited to scenarios that only partially resemble what personnel would experience in actual combat. This includes limitations to the extent to which the Navy can replicate enemy capabilities.

The Navy evaluated the gaps in both air and ground training capabilities against the real-world physical constraints of expanding the FRTC to meet the full tactics, techniques, and procedures. The evaluation allowed for the development of revised requirements, called "tactically acceptable" parameters that could support suitable training while considering these constraints.

Figure 4 depicts the proposed modernization of the B-17 range with tactically acceptable parameters. These parameters do not represent the full capability recommended in the *Ninety Days to Combat Study*, but have been deemed acceptable by the Navy for training purposes.

The modernization proposal would address the gaps between current training capabilities and current and future training requirements. Modernization of the ranges would provide the land and airspace necessary to train to tactically acceptable parameters in accordance with the Navy's mission.

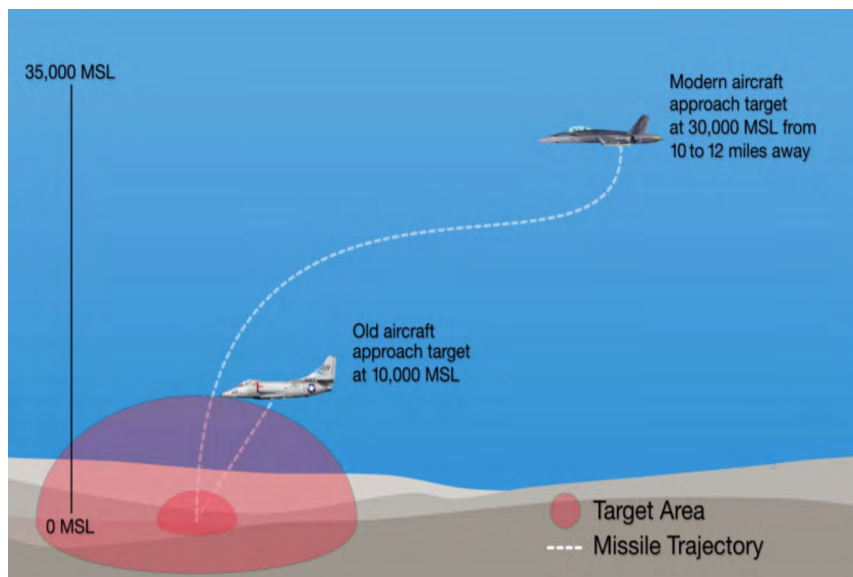


Figure 2: Current and Historic Training Space Needs

B-17 Weapons Danger Zones: Full Training Capabilities and Tactically Acceptable Parameters (Proposed Modernization)

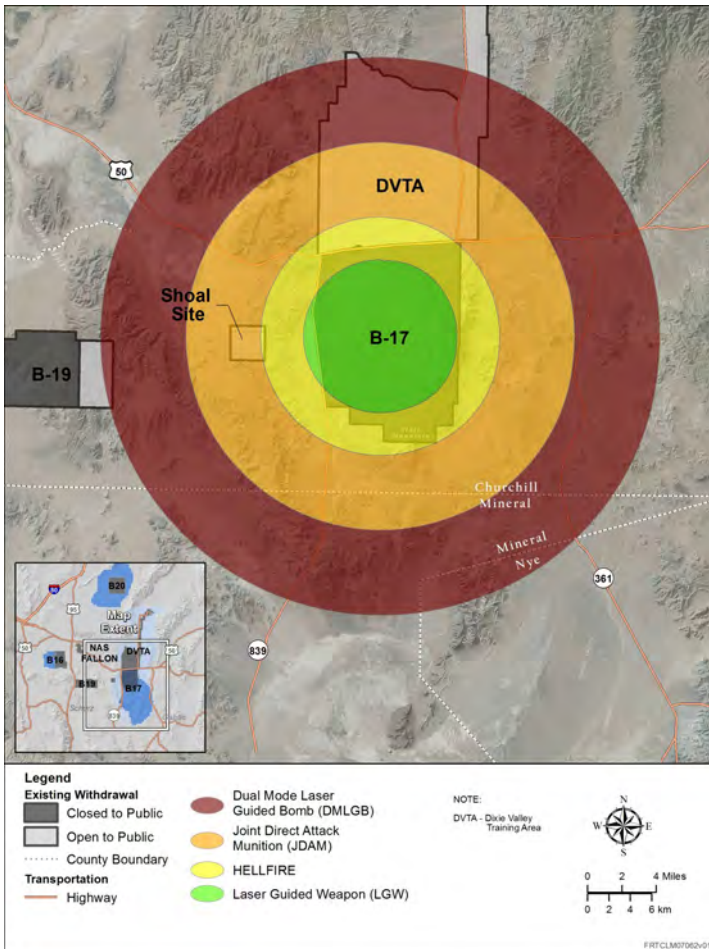


Figure 3: Weapons Danger Zones Reflecting Full Training Capabilities Overlapping Current B-17 Bombing Range

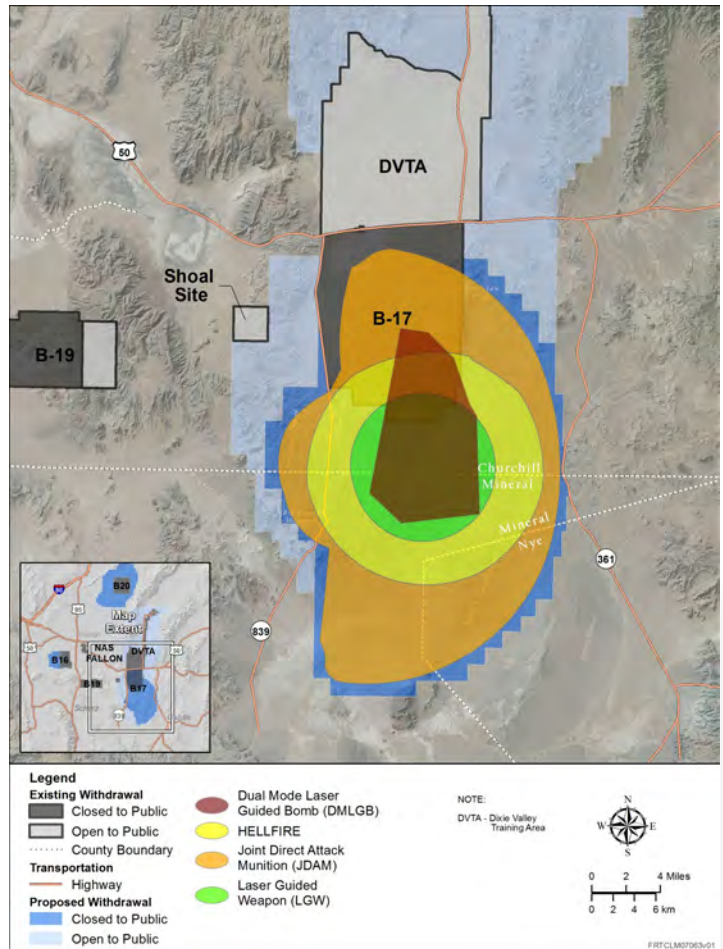


Figure 4: B-17 Bombing Range with Modified (Reduced) Weapons Danger Zones Under Alternatives 1 and 2

The Navy has conducted rigorous exploration and objective evaluation of reasonable alternatives to the Proposed Action as presented in the 2016 Notice of Intent. Reasonable alternatives are those that meet the purpose and need, meet screening factors, and are practical or feasible from a technical and economic standpoint.

The Navy used the following primary screening factors to evaluate potential alternatives:

- ◆ Provide a realistic training environment that meets tactically acceptable parameters.
- ◆ Provide a training environment capable of supporting readiness training, including the use of high-explosive ordnance, in a manner that protects the safety of the public and of military personnel.
- ◆ Provide adequate training tempo to support year-round air-to-ground and air-to-air carrier air wing training.



Proposed Action and Alternatives

The Navy's Proposed Action is to modernize the FRTC, which would include the renewal of the Navy's current withdrawal, land range expansion through additional withdrawal of public lands and acquisition of non-federal land, airspace modifications, and upgrades to range infrastructure.

Under Alternatives 1, 2, and 3, the Navy would use the modernized FRTC to conduct aviation and ground training of the same general types and at the same levels as currently authorized. The Navy is not proposing to increase the number of training activities under any of the alternatives in the Draft EIS. Rather, the Navy would redistribute training activities across the expanded ranges for more efficient use of training space. Expanding B-16, B-17, and B-20 would accommodate the larger safety zones needed for standoff weapons training. Expanding the DVTA would enhance the safety of aviators during low-altitude and nighttime non-weapons training events, and offer a more realistic non-weapons environment for electronic warfare, convoy training, and search and rescue training. In general, construction activities would include the installation of perimeter fencing; land grading for placement of conex (container express) boxes and small, pre-engineered buildings; and construction of ground targets and communication towers.

All alternatives were compared to the environmental baseline to determine potential impacts on existing conditions. The environmental baseline for the Draft EIS is based on current aviation and ground training activities and land withdrawal at the FRTC.

No Action Alternative

The No Action Alternative does not include the renewal of the 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021, nor does it propose any withdrawal or acquisition of new land.

Alternative 1 (Proposed Action)

Under Alternative 1, the FRTC would be expanded, except for B-19 and the Shoal Site (Figure 5).

Specifically, under Alternative 1, the Navy would:

- ◆ Request Congressional renewal of 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021
- ◆ Request Congress withdraw and reserve for military use up to 618,727 acres of additional federal land
- ◆ Acquire approximately 65,153 acres of private or state-owned (non-federal) land
- ◆ Construct range infrastructure to support modernization, including new target areas
- ◆ Expand and reconfigure existing special use airspace and establish new airspace within the FRTC airspace boundary to accommodate expanded bombing ranges

Alternative 1 includes the extension of B-17 over a portion of State Route 839 and part of the Paiute Pipeline, a natural gas pipeline. Implementation of Alternative 1 would potentially require the rerouting of State Route 839 and the relocation of a portion of the Paiute Pipeline, because Navy policy does not allow public land use of any kind to occur within *active* weapons danger zones. Follow-on, site-specific NEPA analysis of the anticipated impacts associated with any potential route(s) would be required prior to making any decision with respect to a final route.

Except for a slight expansion beyond the current northern boundary, airspace modifications would be within existing FRTC boundaries.

Currently, public uses such as grazing, hunting, locatable mining, geothermal development, salable mining, solar and wind energy development, utilities and rights-of-way, off-highway vehicle use, camping and hiking, academic and ceremonial visits, management access, and events such as large-scale races are allowed on public lands requested for withdrawal. Under Alternative 1, the Navy would limit public access to B-16, B-17, B-19, and B-20 for security and to safeguard against potential hazards associated with military activities. The DVTA would remain open to the public.

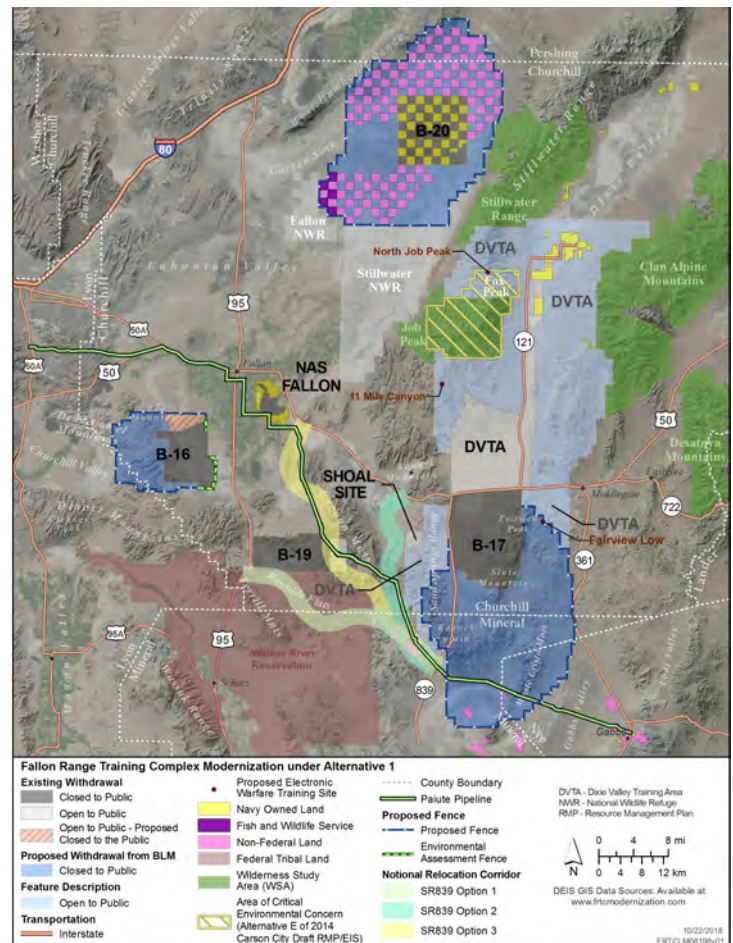


Figure 5: Fallon Range Training Complex Modernization Under Alternative 1



Allowable Activities Within the Land Areas of the Fallon Range Training Complex Under Alternative 1



The Navy issued a notice of intent to prepare an EIS with only the Proposed Action, now known as Alternative 1, and without other defined alternatives to collect comments from the public, cooperating agencies, and tribal participants regarding potential impacts, concerns, and suggestions for other alternatives. The Navy reviewed all submitted comments and analyzed potential viable alternatives that met the purpose and need, and screening factors. Additionally, the Navy met with various stakeholders to discuss potential alternatives and impacts. Many comments indicated the desire to have an alternative with a reduced level of public access restrictions. Alternative 2 (Managed Access) and Alternative 3 (Preferred Alternative) allow more public access for recreation, hunting, and leasable (geothermal) and salable mining than Alternative 1.

Alternative 2 (Managed Access)

Under Alternative 2, the Navy would expand the FRTC to the same extent as described in Alternative 1 and continue to allow certain public uses within specified areas of B-16, B-17, B-19, and B-20 when the ranges are not operational. However, under Alternative 2, bighorn sheep hunting would be conditionally allowed on designated portions of B-17, and geothermal and salable materials exploration and development would be conditionally allowed on the DVTA. Academic research,

ceremonial and cultural visits, and large event off-road races would be allowed on all ranges, subject to coordination with the Navy.

Allowing such public access would be more complex and challenging for the Navy. Alternative 2 would still meet the purpose of and need for the Proposed Action to ensure the FRTC possesses the present and future capabilities necessary to train deploying forces for combat.

Allowable Activities Within the Land Areas of the Fallon Range Training Complex Under Alternative 2



Alternative 3 (Preferred Alternative)

Alternative 3 (Preferred Alternative) is similar to Alternatives 1 and 2 in terms of its requested land withdrawals and proposed acquisitions, except with respect to the orientation, size, and location of B-16, B-17, B-20, and the DVTA, and is similar to Alternative 2 in terms of managed access. Alternative 3 would move B-17 farther to the southeast and rotate it slightly counterclockwise, retaining access to Rawhide Mine, entirely avoiding Fairview Peak, and providing increased access to Sand Springs Range. Unlike Alternatives 1 and 2, the Navy would not withdraw land south of U.S. Route 50 as DVTA (Figure 6). Rather, the Navy proposes that Congress categorize this area as a Special Land Management Overlay created through withdrawal legislation.

This Special Land Management Overlay would define two areas (one east and one west of the B-17 range) as “military electromagnetic spectrum special use zones.” These two areas would be public lands under the jurisdiction of the Bureau of Land Management (BLM) and would not be withdrawn by the Navy for land-based military training. The zones would remain open to public access and available for all BLM-allowable uses (e.g., grazing, hunting, recreation) and all mining. However, prior to issuing any decisions on projects, permits, leases, studies, and other land uses, the BLM would consult with the Navy.

In conjunction with shifting B-17 in this manner, the expanded range would leave State Route 839 in its current configuration, but would expand eastward, requiring the potential rerouting of State Route 361. B-17 would also expand southward, requiring the potential relocation of a portion of the Paiute Pipeline. Under Alternative 3, airspace changes would be

implemented largely in the same way as Alternatives 1 and 2. However, the Navy would create a new restricted area (R-4805) south of existing restricted areas (R-4804 A/B and R-4812) to overlay the reconfigured land withdrawal for B-17 (see Section 3.6, Airspace).

The Navy’s Preferred Alternative is Alternative 3 because it best meets the purpose of and need for the Proposed Action while allowing the greatest amount of public land access and use.

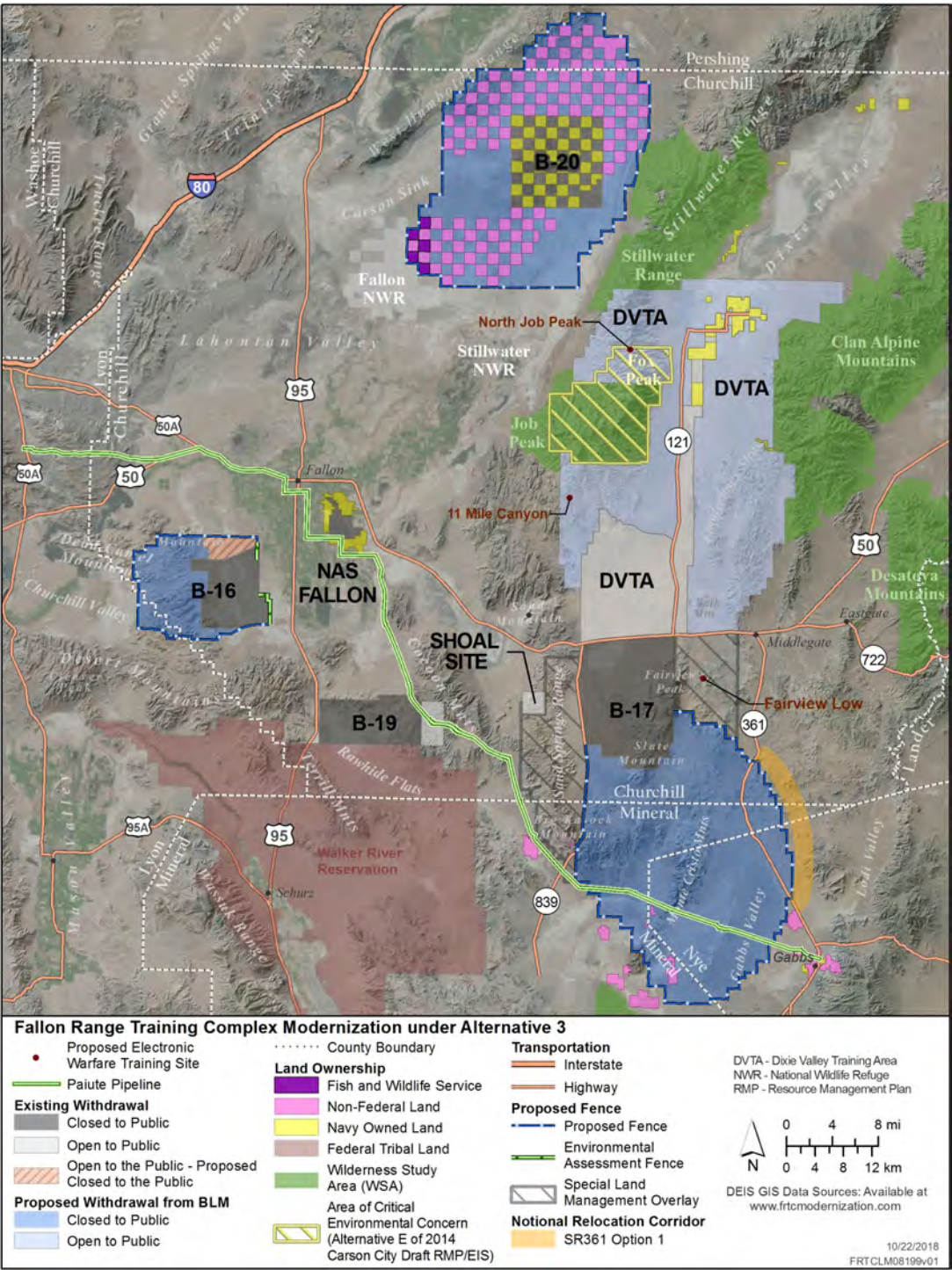


Figure 6: Fallon Range Training Complex Modernization Under Alternative 3

Allowable Activities Within the Land Areas of the Fallon Range Training Complex Under Alternative 3



Community Involvement

Community involvement is an important part of the NEPA process. Input from the public, agencies, and tribes allows decision makers to benefit from local knowledge and consider the issues and concerns of the community. The public is given the opportunity to participate in the NEPA process during the Scoping Period, Draft EIS Public Review and Comment Period, and the Final EIS Public Review and Wait Period. In addition, the Navy has held quarterly and one-on-one meetings with Cooperating Agencies and Tribal Participants since January 2017 to discuss constituent concerns and improve the analysis of potential impacts on resources.

Notice of Intent and Scoping Period:

- ◆ **Notice of Intent to Prepare an EIS and to Announce Public Scoping Meetings (Aug. 26, 2016):** The publication of this notice in the Federal Register initiated the public involvement phase of the NEPA process.
- ◆ **Scoping Period (Aug. 26, 2016 - Dec. 12, 2016):** The scoping period provided an opportunity for the public to learn more about the modernization proposal and to comment.
- ◆ **Public Scoping Meetings (Oct. 3 – Oct. 7, 2016):** During the scoping period, the Navy held seven public scoping meetings in Fallon, Lovelock, Reno, Austin, Eureka, Hawthorne, and Gabbs, Nevada to provide information and answer questions from the public. Informational materials from the public scoping meetings can be found on the project website, www.FRTCModernization.com.
- ◆ **Public Scoping Comments:** A total of 328 comment letters were received during the scoping period (see Appendix D of the Draft EIS for detailed list of scoping comments). Since the notice of intent was published, the Navy reviewed comments and conducted more than 170 additional meetings with various stakeholders and tribes to discuss potential alternatives to the Proposed Action.

With the initiation of the Draft EIS public review and comment period, the public is able to further comment on the Proposed Action and provide input to be considered in the development of the Final EIS.

Draft EIS Public Review Comment Period:

- ◆ **Notices of Availability of the Draft EIS and Notice of Public Meetings:** The publication of these notices on Nov. 16, 2018, in the Federal Register announce the availability of the Draft EIS for public review and comment and the public meetings. The Draft EIS and information about the public meetings are found on the project website, www.FRTCModernization.com.
- ◆ **Draft EIS Public Review and Comment Period:** The public comment period is from Nov. 16, 2018, to Jan. 15, 2019. Comments can be made on the website, by mail, or at public meetings.
- ◆ **Draft EIS Public Meetings:** The Navy will hold seven public meetings from Dec. 10-13, 2018, to provide information, answer questions, and receive comments from the public.
- ◆ **Draft EIS public meetings are planned for:**
 - ◇ Hawthorne, NV: Dec. 10, 2018
 - ◇ Gabbs, NV: Dec. 10, 2018
 - ◇ Austin, NV: Dec. 11, 2018
 - ◇ Eureka, NV: Dec. 11, 2018
 - ◇ Fallon, NV: Dec. 12, 2018
 - ◇ Lovelock, NV: Dec. 13, 2018
 - ◇ Reno, NV: Dec. 13, 2018

See www.FRTCModernization.com for more information.

Resource Areas and Summary of Potential Environmental Impacts

The Draft EIS documents the results of the environmental analysis and potential impacts of all alternatives on 15 resource areas. Additionally, the Navy conducted 20 supporting studies and worked closely with cooperating agencies and tribes to thoroughly review and incorporate the best available science relevant to analyzing environmental impacts. The cumulative impacts of past, present, and reasonably foreseeable future actions were also assessed.

The following sections describe potential environmental impacts of Alternative 3 (the Navy's Preferred Alternative) for each resource area and details instances where potential impacts differ from Alternatives 1 and 2. Tables depicting potential impacts of all alternatives can be found at the bottom of each page.

The Navy currently has or is proposing management practices, monitoring, and mitigation measures to reduce impacts on the environment from proposed modernization. More detail on potential impacts and current and proposed management practices, monitoring, and mitigation measures can be found in the Draft EIS.

The Navy analyzed potential impacts on:

- ◆ Geological Resources
- ◆ Land Use
- ◆ Mining and Mineral Resources
- ◆ Livestock Grazing
- ◆ Transportation
- ◆ Airspace
- ◆ Noise
- ◆ Air Quality
- ◆ Water Resources
- ◆ Biological Resources
- ◆ Cultural Resources
- ◆ Recreation
- ◆ Socioeconomics
- ◆ Public Health and Safety and Protection of Children
- ◆ Environmental Justice

Methodology

In accordance with NEPA and the Administrative Procedure Act of 1946 (5 U.S.C. sections 551–559), the analyses used the best available data accepted by the appropriate regulatory and scientific communities. The Navy reviewed primary literature, including journals, books, periodicals, bulletins, Department of Defense operations reports, County Master Plans, theses, dissertations, species management plans, and other technical reports published by government agencies, private businesses, or consulting firms to assist in analysis of potential environmental consequences. The Navy conducted internet searches and evaluated websites for the credibility of the source, the quality of the information, and the relevance of the content to ensure the use of high-quality information.

The Navy considered both direct and indirect effects resulting from each alternative. Direct effects occur in the same location and at the same time as the agency action (40 CFR part 1508.8).

Indirect effects are reasonably foreseeable and caused by the action, but occur later in time or at a distance (40 CFR part 1508.8).

The term “significantly” or “significance,” as used in NEPA, requires considerations of both context and intensity. Context means analyzing the significance of an action in several perspectives, such as society as a whole (e.g., human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of a proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant. Intensity refers to the severity or extent of the potential environmental impact. Intensity also relates to the potential extent of the likely change. In general, the more sensitive the receptor, the less intense a potential impact would need to be to

be considered significant. The less sensitive the receptor, the more intense a potential impact would need to be to be considered significant.

The Navy reviewed and evaluated additional information, such as unique resource characteristics; public and cooperating agency scoping comments; previous environmental analyses; agency and tribal consultations; resource-specific information; and applicable laws, regulations, and executive orders. This process helped focus information presented in affected environment sections and analyses presented in the environmental consequences section.



In the impact summary tables presented on each resource page, the following symbols are used to generally identify the impacts of each alternative; more detail is presented in the Draft EIS. The public is highly encouraged to read the discussion and analysis presented in the Draft EIS.

Blank = No impact. ●=Impact. ◐=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

While specific methods used to analyze the effects of the alternatives vary by resource, all resource analyses follow this general approach:

- ◆ Review existing federal and state regulations and standards relevant to each resource-specific management or protection.
- ◆ Describe existing resource conditions (affected environment) based on geographic areas within the FRTC or as otherwise appropriate based on the resource area-specific region of influence. Because the FRTC is a large area, each resource section splits the affected environment discussion into the five main areas (B-16, B-17, B-20, the DVTA, and special use airspace). Impacts pertaining to B-19 are analyzed in a more limited manner since the Navy is not proposing or requesting any changes to the current configuration of B-19.
- ◆ Identify resource conditions or areas that require specific analytical attention.
- ◆ Analyze specific actions entailed within a given alternative (environmental consequences) to determine what components of the alternative may affect the particular resource.
 - ◇ Review and analyze data sources for information on the resource, including modeling efforts and scientific research.
 - ◇ Determine specific impacts to the resource that could result from Navy activities.
 - ◇ Adjust initial impact determinations as appropriate to account for use of standard operating procedures, management practices, and other impact avoidance, minimization, or mitigation measures.
 - ◇ Determine overall impacts to the resource associated with the alternatives, given the applicable regulatory framework.
- ◆ Summarize impact findings concerning resource impacts.

Geological Resources

When determining potential impacts on geological resources, the land’s topography and soils is assessed along with its geology. The region of influence for geological resources includes the topography, rocks, geologic structure, and soil within the proposed withdrawal areas as well as any mining claims, portions of historical mining districts, and revised mineral resource areas that could be affected.

- ◆ **Geology:** The study of the earth, the materials of which it is made, the structure of those materials, and the processes that influence them. Geology includes discussion of rock type, geologic structure (e.g., faults, folds, and tilting of rocks), mineral deposits, and fossil remains.
- ◆ **Topography:** Location of landforms and physical features of a land area. Topography is typically described with respect to a given area’s elevation, slope, and surface features.
- ◆ **Soils:** An accumulation of organic material and weathered rock and minerals that overly bedrock in layers or horizons. Soil is the upper layer of the earth where plants grow and is typically described in terms of type, slope, physical characteristics, and whether or not it can support specific types of land use, such as construction or agriculture.

Environmental Consequences

New target areas would be created at B-16, B-17, and B-20. Ordnance strikes would occur in active target areas, resulting in the potential for munition constituents to impact soil or shallow bedrock; however, existing management practices would minimize long-term permanent impacts. Construction activities would permanently impact up to an estimated 241 acres (approximately 347 under Alternatives 1 and 2) and temporarily impact approximately 715 acres (approximately 700 acres under Alternatives 1 and 2). Ground convoy training would result in soil disturbance and compaction, exposing soils to erosion in some limited areas.

Alternative 3 (Preferred Alternative) would not result in significant impacts on geological resources. Under the No Action Alternative, geological resources in the region

of influence could be impacted by potentially foreseeable mineral development that may occur should the area not be withdrawn for Navy use.

Management Practices, Monitoring, and Mitigation

Current: The Navy would continue to implement management practices to avoid and minimize potential impacts on geological resources. Practices include conducting regular range-condition assessments and periodic range clearance activities to minimize accumulation of munitions constituents in target areas, mandating secondary containment areas for refueling activities, using drip pads under parked equipment, and requiring vehicles to use existing roads and two-track trails.

Proposed: During construction, personnel would stay within established corridors and follow posted speed limits. Any proposed relocations of either the Paiute Pipeline and/or State Route 839 (Alternatives 1 and 2) or State Route 361 (Alternative 3) would be sited to avoid prime or unique farmland as well as farmland of statewide or local importance. If warranted, pedestrian field surveys would be conducted by a qualified and BLM-permitted paleontologist prior to surface grading or excavation. If there were an unanticipated discovery of a potential paleontological resource, surface-disturbing activities would cease in the immediate area of the discovery until the significance of the discovery could be analyzed and all regulatory requirements could be met.



Table 1: Potential Impacts on Geological Resources	Alternatives			
	1	2	3	No Action
Wider distribution of munitions constituents	○	○	○	
Increase in soil compaction or erosion	○	○	○	
Permanent impact from construction	●	●	●	
Temporary impact from construction	○	○	○	
Conversion of prime, unique, or important farmland				
Significant impacts on geological resources				●

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Land Use

The term *land use* refers to property classifications that indicate either natural conditions or the types of human activity occurring on a parcel. Two main objectives of land use planning are to ensure orderly growth and compatible uses among adjacent property parcels or areas. The meanings of land use descriptions, labels, and definitions may vary among jurisdictions.

For this Draft EIS, the environmental analysis for land use includes land on and within approximately five miles of the FRTC land and special use airspace. The region of influence is within western and central Nevada and includes all or portions of Churchill, Elko, Eureka, Lander, Lyon, Mineral, Nye, Pershing, and Washoe counties.

- ◆ **Wilderness Study Area:** an area for further study to determine whether it meets criteria to be designated by the U.S. Congress as a Wilderness Area
- ◆ **Wildlife Refuge:** an area managed by U.S. Fish and Wildlife Service to ensure fish, wildlife, and plant resources within the refuge endure and their needs are prioritized first
- ◆ **Area of Critical Environmental Concern:** areas where special management is needed to protect and prevent irreparable damage to important historic, cultural, and scenic values, fish, or wildlife resources
- ◆ **Unique or Important Farmland:** land used for production of specific high-value food and fiber crops, or that is of statewide or local importance used for the production of food, feed, fiber, forage, or oilseed crops
- ◆ **Utility Planning Corridor:** tract of land that may serve as a passageway through which various commodities, such as oil, gas, and electricity, could be transported

Environmental Consequences

Withdrawn and acquired land would no longer be managed for the purpose of multiple public use due to the hazardous nature of military activities occurring on the bombing ranges (but not the DVTA). Access to previously open land would be closed and restricted from public use except for activities authorized by the Navy, such as ceremonial site visits, research and academic

pursuits, and regulatory or management activities conducted by the BLM, U.S. Fish and Wildlife Service, or Nevada Department of Wildlife.

The expanded B-20 boundary would overlap the Stillwater National Wildlife Refuge Complex, including 3,200 acres of the Fallon National Wildlife Refuge, and 1,920 acres of adjoining Churchill County conservation easements. The refuge lands would continue to be maintained as the refuge; however, the public would not have access to the portion under the weapons danger zones.

The expanded DVTA would overlap 11,600 acres of the BLM's proposed Fox Peak Area of Critical Environmental Concern (ACEC). The BLM would change the boundaries of the Fox Peak ACEC to remove those areas within the expanded DVTA. These acres would be withdrawn by the Navy.

There would be no conversion of prime or unique farmland or farmland of statewide importance. Utility planning corridors within the range expansion areas would be incompatible with military operations.

Energy development and infrastructure, minerals exploration and development, and transportation would not be allowed due to the restriction of public access to the bombing ranges.

Changes in airspace, including the extension of military operations areas in the eastern portion of the FRTC special use airspace, would result in low-altitude overflights.

Management Practices, Monitoring, and Mitigation

Current: The Navy would continue to implement current land use policies and procedures, such as avoiding noise-sensitive areas.

Proposed: Due to changes in airspace and low-altitude overflights, the Navy is proposing to designate Crescent Valley and Eureka as noise-sensitive areas and implement buffer zones (five nautical miles and 3,000 feet above ground level) to reduce noise impacts on these communities.

Table 2: Potential Impacts on Land Use	Alternatives			
	1	2	3	No Action
Public access restricted to bombing ranges proposed for withdrawal or acquisition	●	○	○	
Public access restricted to the DVTA proposed for withdrawal and acquisition	○	○	○	
Proposed expansion area overlaps portions of Fallon National Wildlife Refuge	●	●	●	
Proposed expansion area overlaps 11,600 acres of BLM's proposed Fox Peak Area of Critical Environmental Concern	○	○	○	
Utility planning corridors within proposed bombing range expansion areas not allowed	●	●	●	
Renewable resource development	●	○	○	●
Significant impacts on land use				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Mining and Mineral Resources

A mineral resource is defined as a concentration of naturally occurring solid, liquid, or gaseous materials in or on the earth’s crust in such form that economic extraction of a commodity is currently or potentially feasible. The term “economic” implies that profitable extraction or production under defined investment assumptions has been established, analytically demonstrated, or assumed with reasonable certainty.

Locatable minerals: Includes metallic minerals (e.g., gold, copper, silver, molybdenum, tungsten, iron, and uranium) and industrial minerals (e.g., diatomaceous earth, fluorspar, gypsum, and barite)

Leasable minerals: Includes solid minerals (e.g., phosphate, coal, oil shale) and fluid minerals (e.g., oil, gas, and geothermal resources)

Salable minerals: Minerals that are used mainly for construction materials and building roads (e.g., sand, stone, gravel, pumice, pumicite, cinders, and petrified wood)

Environmental Consequences

The Navy’s proposed modernization of the FRTC would impact and/or potentially impact planning activities related to mining and mineral resources, as well as potential exploration, development, and production of such resources. Although Alternative 3 (Preferred Alternative) includes changes from Alternatives 1 and 2 meant to reduce impacts on mineral resources, this alternative would still include the withdrawal of lands with high potential for locatable, leasable (geothermal), and salable minerals, and may have an economic impact if market conditions were favorable for more mineral resource development.

Under Alternative 3:

- ◆ Locatable mining would not be allowed within bombing ranges or the DVTA.
- ◆ Access would be allowed to the mining districts west of State Route 839 and would not overlap active mine workings.
- ◆ Geothermal development would be impacted; however, development would be allowed on the west side of DVTA with required design features.
- ◆ Access for mining exploration and development would be allowed with the designation of the Special Land Management Overlay south of the U.S. 50.

Management Practices, Monitoring, and Mitigation

Proposed: Under Alternative 3, the Navy proposes to allow geothermal development and mining activities to continue on certain withdrawn areas as long as the actions are consistent with training activities and approved by the Navy. The Navy would allow salable mining activities and, subject to conditions established in conjunction with BLM leasing procedures, would allow geothermal development west of State Route 121 with required design features.

The Navy is currently proposing the following required design features for geothermal development:

- ◆ Expand rights-of-way only on west side of current transmission corridor (close to current line as possible)
- ◆ Construct underground transmission line connection from facility to existing transmission line right-of-way along State Route 121
- ◆ Use compatible lighting with downward facing shades, lighting with frequency that doesn’t “wash out” night-vision devices
- ◆ Coordinate with Navy on frequency spectrum
- ◆ Use cooling towers and other structures no higher than 40 feet
- ◆ Avoid steam field piping blocking current access roads to/from State Route 121 and canyon areas
- ◆ Avoid photovoltaic solar/geothermal hybrid design

Table 3: Potential Impacts on Mining and Mineral Resources	Alternatives			
	1	2	3	No Action
Restricts exploration and development of locatable mineral resources within proposed boundaries of FRTC	●	●	◐	
Restricts exploration and development of geothermal within proposed boundaries of FRTC	●	◐	◐	
Restricts mineral exploration and development within existing withdrawn areas	●	●	●	○
Significant impacts on exploration and development of mining and mineral resources	●	●	●	

Blank = No impact. ●=Impact. ◐=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Livestock Grazing

The impacts on public land grazing in the proposed land boundaries of the FRTC would potentially affect 17 BLM grazing allotments and one Bureau of Reclamation grazing area. An allotment is a designated area or management unit that allows grazing and can be made up of multiple pastures. The Navy reviewed all lands within or adjacent to the proposed FRTC withdrawal areas, whether or not grazing allotments exist there. If a particular grazing allotment would be affected, the region of influence would extend beyond the proposed FRTC withdrawal area to include the entire allotment. The environmental analysis also included any area that could potentially be impacted by construction noise, training noise, sonic booms, or engine noise from aircraft. This region is largely rural and is composed of public and private lands as well as Native American reservations.



Environmental Consequences

The analysis indicates that Alternative 3 (Preferred Alternative) would result in a significant impact on livestock grazing due to the closure of approximately 356,400 acres of BLM allotments (approximately 319,653 acres under Alternatives 1 and 2) and 4,187 acres of Bureau of Reclamation livestock grazing areas. The Navy estimates that Alternative 3 would result in a loss of between 7,920 and 10,992 animal unit months (AUMs) (6,394 - 8,604 AUMs for Alternatives 1 and 2) for all livestock (approximately 14 to 20 percent from affected allotments). AUM is defined as the amount of forage needed to fulfill metabolic requirements by one animal unit for one month. This would result in a loss of up to approximately 6.93 percent of AUMs within the BLM Carson City District, 0.04 percent of AUMs within the BLM Winnemucca District, and 0.53 percent of all AUMs in Nevada.

Management Practices, Monitoring, and Mitigation

Current: The Navy would continue to implement policies and procedures in the Integrated Natural Resources Management Plan to avoid conflicts between livestock grazing and natural resources. The Navy would monitor fence lines surrounding potentially hazardous areas to ensure the fence is secure and cannot be crossed by people or animals.

Proposed: The Navy would revise standard operating procedures for handling the removal of cattle that wander onto bombing ranges. Livestock-friendly erosion controls would be used during construction on or adjacent to grazing land actively being used. The Navy would expand fence line monitoring and maintenance procedures to include fences on withdrawn lands. The Navy would propose to hire two conservation law enforcement officers to monitor the additional fence line. Based on the analysis in the Draft EIS, no mitigation measures are proposed for livestock grazing. Though not a NEPA mitigation measure, the Navy acknowledges that it has the authority, under the Taylor Grazing Act of 1934, to make payments to federal grazing permit holders for losses suffered as a result of the withdrawal or other use of former federal grazing lands for war or national defense purposes.

Potentially Affected Allotments

- ◆ Bell Flat
- ◆ Bucky O'Neill
- ◆ Copper Kettle
- ◆ Cow Canyon
- ◆ Dixie Valley
- ◆ Eastgate
- ◆ Frenchman Flat
- ◆ Horse Mountain
- ◆ Humboldt Sink
- ◆ La Beau Flat
- ◆ Lahontan
- ◆ Mountain Well-LaPlata
- ◆ Phillips Well
- ◆ Pilot-Table Mountain
- ◆ Rochester
- ◆ Salt Wells
- ◆ Sheckler Pasture
- ◆ White Cloud

Table 4: Potential Impacts on Livestock Grazing

	Alternatives			
	1	2	3	No Action
Closure of BLM allotments or Bureau of Reclamation pastureland on expansion areas proposed for bombing ranges	●	●	●	
Closure of BLM allotments or Bureau of Reclamation pastureland on expansion areas proposed for training areas (DVTa)				
Loss of AUMs	●	●	●	
Significant impacts on livestock grazing	●	●	●	

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

For the purpose of this Draft EIS, transportation is defined as the capacity of individuals to move themselves or others, as well as to move vehicles and/or various goods over and through land areas. The Navy evaluated roadways, railways, bikeways, and trails as transportation facilities that overlap or are adjacent to existing and proposed bombing ranges and the DVTA. The Navy also initiated a Transportation Study for the implementation of Alternative 3 and potential relocation of State Route 361. The Navy acknowledges that there may be impacts that have yet to be defined and will continue to develop and incorporate mitigation measures as necessary based on the results of the 2018 Transportation Study. Section 3.6 (Airspace) of the Draft EIS addresses special use airspace and impacts on airports, airspace, and air transportation and Section 3.12 (Recreation) addresses recreational characteristics of transportation facilities, such as off-highway vehicle use.

Environmental Consequences

Implementation of Alternative 3 (Preferred Alternative) would result in significant impacts on transportation and traffic by restricting access to range areas; closing roads, rights-of-way, and off-highway vehicle areas; and impacting customary and familiar transit routes. The Navy would propose the potential relocation of State Route 361 (State Route 839 under Alternatives 1 and 2), subject to further study. Areas surrounding B-16 would experience an impact on traffic patterns due to the closure of Sand Canyon Road. However, Simpson Road would be open for public use under Alternative 3. The areas surrounding B-17 and B-20 would experience loss of access via customary transit routes due to the closure of the B-20 Access Road (also known as Pole Line Road), which is currently authorized only for Navy use.

The Navy is also proposing to fund construction of a new road (one of two potential options) within an approximately 12-mile notional corridor with similar specifications to the existing State Route 361 outside of the proposed withdrawal area. Site-specific NEPA analysis would need to be conducted before any decision could be implemented with respect to any

particular proposal; however, it is not anticipated that any changes in level of service and transit times associated with any such relocation would be appreciable. The Navy would not close the existing State Route 361; the public would still be permitted to use the route until follow-on NEPA analysis and construction of the replacement route was completed. Only once the relocation corridors are available for public use would the existing State Route 361 be closed and training activities at the expanded B-17 range commence.



Management Practices, Monitoring, and Mitigation

Proposed: The Navy has responsibility for planning, designing, permitting, funding and constructing any realignment of highways. The Navy would coordinate with Nevada Department of Transportation during each of these phases. The Navy has submitted a request to utilize the Defense Access Roads program. If approved, the Navy would coordinate construction execution through the Federal Highway Administration.

The Navy proposes to continue to work with right-of-way users to review potentially impacted county-designated access roads and other potential rights-of-way in the lands requested for withdrawal or proposed for acquisition. If appropriate and applicable, on a case-by-case basis, the Navy would look for appropriate replacement routes if appropriate and applicable.

Table 5: Potential Impacts on Transportation	Alternatives			
	1	2	3	No Action
Closure and relocation of a State Route	●	●	●	
Transportation access (via state/county roads) closed to public within areas proposed for bombing ranges	●	○	○	
Transportation access (via state/county roads) closed to public within areas proposed for training areas (DVTA)				
Significant impacts on transportation	●	●	●	

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Airspace is defined in both vertical and horizontal dimensions and by time. It is considered to be a finite national resource that must be managed for the benefit of all aviation sectors, including commercial, general, and military. The FAA manages all airspace within the United States and U.S. territories.

The Navy analyzed potential impacts from reconfiguration of restricted areas over the bombing ranges, changes in commercial and public use of the FRTC airspace, and civil and private airports. The Navy and the FAA are closely coordinating on the Draft EIS. The FAA reviews Navy airspace proposals and conducts an aeronautical study to determine potential impacts on the National Airspace System.



Environmental Consequences

The Navy proposes to reconfigure existing military operating areas and air traffic control assigned airspace and create additional restricted airspace. The design of this special use airspace would maximize the Navy’s use of the airspace while allowing as much public and commercial use as possible.

Under Alternative 3 (Preferred Alternative), the reconfiguration of B-17 would require a new restricted airspace, R-4805. Reconfigured airspace would not interfere with existing commercial air traffic patterns or airports/ airstrips, with the exception of westerly departures from Gabbs Airport. Pilots departing Gabbs Airport would need to turn north or south immediately following departure to avoid R-4805. Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines.

There would be no increase in collision potential between military and non-participating civilian operations, as the level of

military operations would remain at current levels. There would be no impact on the extended Visual Flight Rules corridor or commercial or general aviation’s use of the FRTC airspace. Unrestricted medical evacuation (MEDEVAC), wildlife management activity, and fire-suppression flights would continue to be supported, and civilian aviation would not be significantly restricted. Therefore, Alternative 3 would not result in significant impacts on airspace.

Management Practices, Monitoring, and Mitigation

Current: The Navy would continue current levels of operations and manage the FRTC airspace under the guidance of official policies, procedures, and Navy instructions, and maintain a close working relationship with the FAA in the management of FRTC special use airspace. The Navy would continue proactive outreach to civil and commercial aviation to ensure safe and efficient transit across the FRTC via the Visual Flight Rules corridor, and safe and efficient managed access and civil flight profiles within special use airspace.

The Navy conducts activities in controlled airspace and implements safety procedures:

- ◆ Abiding by visual and instrument flight rules
- ◆ Scheduling activities through the Naval Aviation Warfighting Development Center
- ◆ Ensuring hazard zones are clear before commencing hazardous activities
- ◆ Coordinating with range safety officers prior to expending military munitions
- ◆ Continuing close working relationships with the FAA to manage special use airspace

Proposed: The Navy would continue to implement policies and procedures to avoid conflicts in new airspace and ensure range operations manuals are maintained with the most current airspace information, restrictions, and compliance requirements. The Navy would update operational guidance on any noise-sensitive areas and confirm FAA airport exclusion area guidelines.

Table 6: Potential Impacts on Airspace	Alternatives			
	1	2	3	No Action
Increase in collision potential between military and non-participating civilian operations				
Impact on Visual Flight Rules corridor or commercial and general aviation’s use of airspace				
Interference with existing commercial air traffic patterns or airports/airstrips			●	
Interfere with or restrict MEDEVAC flights				
Significant impacts on airspace				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Noise

The Draft EIS noise analysis examines the types or sources of noise and associated sensitive receptors in the human environment as well as noise in relation to biological resources and wildlife species. The environmental analysis includes the lands on and within the FRTC and special use airspace; noise from NAS Fallon is not addressed, as no proposed alternative changes the type or number of airfield operations.

Environmental Consequences

Overall, Alternative 3 (Preferred Alternative) would not have significant noise impacts in the areas surrounding the bombing

ranges. With the exception of B-16, all Day-Night-Level (DNL) contours above 65 A-weighted decibels (dBA) from air-to-ground munitions activities are contained within the range boundaries. At B-16, the area that DNLs above 65 dBA reach off range are similar to the environmental baseline and do not overlap sensitive receptors.

In the proposed military operations areas within the eastern portion of the FRTC airspace, DNLs would increase 10 – 20 dBA, although the noise contours themselves do not exceed 65 dBA. There would be a slight increase in the number of incidents of indoor and outdoor speech interference, classroom interference, and a slightly higher probability of awakening, especially for sensitive receptors near Gabbs.

While the number of supersonic activities would not change, the expansion of supersonic training areas would create new areas that could be impacted by sonic booms. While individual sonic booms may provide a brief, impulsive noise, the contribution to C-weighted DNLs does not represent a degradation of the noise environment with respect to DNLs.

Overall, noise associated with training activities at the FRTC would result in significant impacts on the acoustic environment, but would not interfere with normal land use activities.

Management Practices, Monitoring, and Mitigation

Current: Existing policies and procedures would continue to be implemented to ensure proper use of the FRTC airspace and adherence to munitions release rules. The Air Operations Office would continue to log and respond to noise complaints. Pilots flying over designated noise-sensitive areas are instructed to maintain altitudes no lower than 3,000 feet above ground level to minimize potential impacts.

Proposed: The Navy would revise its range operations manual to designate Crescent Valley and Eureka as noise-sensitive areas due to the extension of military operations areas. The Navy would implement buffer zones (five nautical miles and 3,000 feet above ground level) to reduce noise impacts on these communities. Additionally, the Navy is proposing to implement an airspace exclusion area over Gabbs airport. Though established for airspace separation, this will serve as an additional means to reduce low-level overflights near Gabbs.

Figure 7: Aircraft Noise Contours Within the Fallon Range Training Complex Under Alternative 3

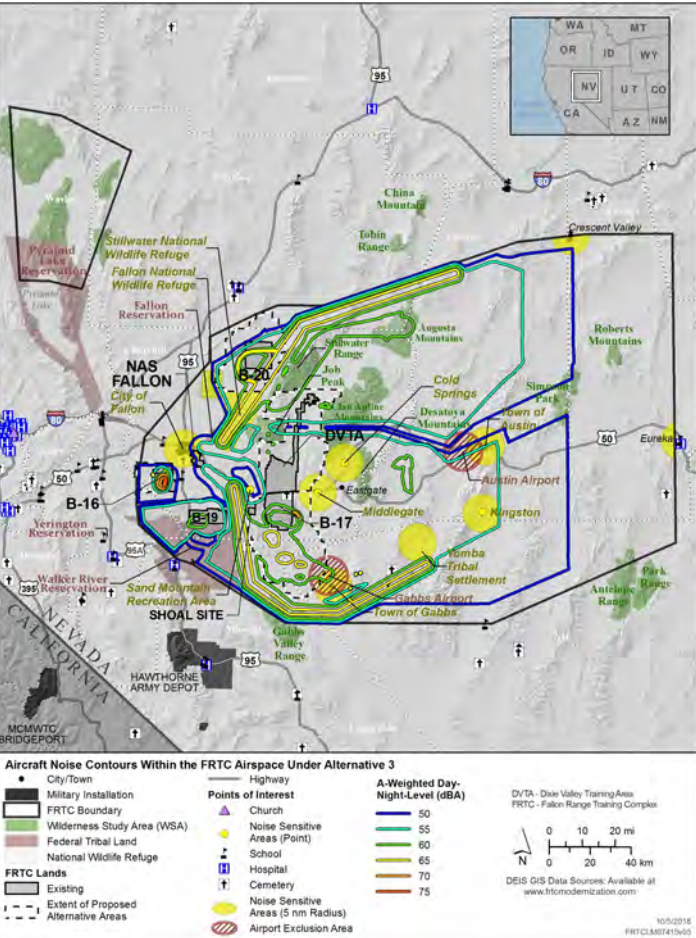


Table 7: Potential Impacts on Noise	Alternatives			
	1	2	3	No Action
Creation of new areas of noise exposure on lands under eastern portion of FRTC special use airspace	●	●	●	
Creation of new areas potentially receiving sonic booms	●	●	●	
Sensitive receptors impacted by noise contours above 65 dBA from aircraft and ordnance use near bombing ranges				
Significant impacts on acoustic environment	●	●	●	

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Air quality is defined by atmospheric concentrations of specific air pollutants that the U.S. Environmental Protection Agency determined may affect the health or welfare of the public. The six major air pollutants of concern, called “criteria pollutants,” are carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone, particulate matter, and lead. Particulate matter is further categorized as particulates less than or equal to 10 microns in diameter and fine particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}). For this Draft EIS, the environmental analysis includes resources in the Nevada Intrastate Air Quality Control region.

attainment status in the Northwest Nevada Intrastate Air Quality Control Region and Nevada Intrastate Air Quality Control Region would not be affected.

Small increases in fugitive dust from construction activities would occur; however, management practices would minimize the generation of dust. Construction emissions would be localized and temporary, minimizing the overall impact on ambient air quality. Alternative 3 (Preferred Alternative) includes the installation of approximately three additional miles of fence compared to Alternatives 1 and 2. However, this would not result in a significant change in air quality.

The environmental analysis indicates there would not be significant impacts on air quality.

Management Practices, Monitoring, and Mitigation

Current: Strategies for dust control are described in current Navy dust control plan and would continue to be implemented.

Proposed: Specific measures, using best practical methods available for dust suppression, would include but would not be limited to the following approaches and procedures:

- ◆ Phasing surface area disturbance activities
- ◆ Using water trucks for water spraying
- ◆ Scheduling surface area disturbance activities immediately following periods of precipitation
- ◆ Properly maintaining equipment to meet federal and state emission standards, where applicable
- ◆ Minimizing dust generation by operating vehicles on existing roads and two-track trails
- ◆ Implementing traffic control measures that minimize fugitive dust generation by vehicles on unpaved surfaces, including vehicle speed controls
- ◆ Promptly removing material tracked from surface area disturbance locations onto adjoining paved roads
- ◆ Cleaning equipment and machinery at designated on-base facility
- ◆ Determining additional dust abatement measures during pre-construction planning on a case-by-case basis



The environmental baseline for this Draft EIS are the air emissions associated with the same general types and levels of aviation and ground training as analyzed in Alternative 2 of the 2015 Military Readiness Activities at Fallon Range Training Complex, Nevada Final EIS. Therefore, this analysis focuses on air emissions from proposed construction activities.

Environmental Consequences

Small increases of criteria and hazardous air pollutant emissions would occur, relative to baseline Nevada emissions and the environmental baseline for this Draft EIS. Measurable changes in air quality would be expected locally, but the

Table 8: Potential Impacts on Air Quality	Alternatives			
	1	2	3	No Action
Increase of criteria and hazardous air pollutants above <i>de minimis</i> levels relative to baseline Nevada emissions and environmental baseline	○	○	○	
Increase in fugitive dust above PM _{2.5} and PM ₅ criteria levels from construction activities	○	○	○	
Attainment status affected in Northwest Nevada Intrastate Air Quality Control Region and Nevada Intrastate Air Quality Control Region	○	○	○	
Significant impacts on air quality				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. Blank = No impact.

Water Resources

The discussion of water resources includes surface waters (streams, floodplains, and playas) and groundwater (confined and unconfined aquifers), along with climate factors that contribute to hydrologic conditions. The Navy analyzed water resources in the project footprint of the proposed acquisition and requested withdrawal areas and any other area that could be directly or indirectly impacted by modernization.

Environmental Consequences

Under Alternative 3 (Preferred Alternative), there would be temporary impacts from road construction and facilities, but the Navy would implement current management practices to reduce impacts on water quality. Potential impacts on water quality would not be significant because:

- ◆ Limited amount of disturbance from munitions use within withdrawal lands
- ◆ Localized areas of disturbance from munitions use within the withdrawal areas
- ◆ Small footprint of new infrastructure
- ◆ Management practices and mitigation measures specifically designed to reduce or avoid potential impacts on surface and groundwater
- ◆ Operational range clearance activities would periodically remove expended munitions and munitions fragments (removing a source of potential contamination to surface and groundwater) in training ranges where they are expended (B-16, B-17, and B-20)
- ◆ An arid environment would likely dry and degrade chemical compounds in expended munitions not retrieved.

Under Alternative 3, the Navy would not seek to acquire water rights within the DVTA. Water right holders would continue to exercise their beneficial uses associated with the water right. Between the Draft and Final versions of this EIS, the Navy would continue to consult with Churchill County planners and engineers so that future water development projects are designed to meet Churchill County water development goals with project design features consistent with military training activities within the DVTA.

Management Practices, Monitoring, and Mitigation

Current: The Navy would continue to implement current management practices to minimize impacts on water

resources, such as avoiding incidental spills, using drip pads under equipment, addressing potential groundwater contamination issues through regular range condition assessments, complying with the operational range clearance plan, and avoiding ground training activities in streams, ponds, and wetlands.

Proposed: The Navy will evaluate the necessity to purchase or modify any affected water rights on a case by case basis in accordance with applicable federal and state law. If a condition of the water right can be modified in a way that the right would still have a viable beneficial use while not impacting the FRTC mission, such as moving the point of use outside of the withdrawal areas, then the Navy may elect not to acquire the water right. The Navy will continue to refine the analysis and develop and incorporate mitigation measures as necessary.

The Navy would continue to implement management practices to avoid and minimize potential impacts on water quality, including:

- ◆ Operational range clearance plan updated and implemented to address any new range requirements
- ◆ Continuance of range condition assessment five-year reviews and appropriate steps taken, if necessary, to prevent or respond to release, or substantial threat of release, of munitions constituents of potential concern to off-range areas that could pose unacceptable risks to human health or the environment
- ◆ Evaluation of wells on expansion areas prior to closure to determine if beneficial use (fire suppression, wildlife/stock water, etc.) exists
- ◆ Incidental fuel spills avoided by conducting ground-based refueling in secondary containment area
- ◆ Drip pads placed under equipment when parked
- ◆ Spill prevention, control, and countermeasures plan developed to respond to any event that would exceed spill prevention, containment, and countermeasures quantity thresholds
- ◆ Any spills of petroleum or other waste products managed and cleaned up in accordance with applicable state and federal regulatory requirements

Table 9: Potential Impacts on Water Resources

	Alternatives			
	1	2	3	No Action
Increased number of targets and areas for munitions accumulation could create increased chance of surface and subsurface waters potentially receiving trace amounts of residual material from larger areas up-gradient	●	●	●	
Impacts on water resources from road construction and facilities	●	●	●	
Impacts on surface and groundwater features from training activities	●	●	●	
Significant impacts on water resources				●

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Biological Resources

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal. For the purposes of this EIS, biological resources is divided into three categories: vegetation types, wildlife, and special-status species. Vegetation types include dominant plant species that occur within the project areas, and the study of wildlife includes all common animal species (birds, mammals, reptiles, amphibians, and invertebrates).

For the purposes of this EIS, special-status species include:

- ◆ Endangered Species Act-listed species*
- ◆ Bureau of Land Management-listed sensitive species
- ◆ Bald eagle and golden eagle pursuant to Bald and Golden Eagle Protection Act
- ◆ Migratory Bird Treaty Act species
- ◆ Birds of Conservation Concern as identified by U.S. Fish and Wildlife Service
- ◆ Species listed as threatened, endangered, sensitive, or otherwise protected by the State of Nevada under Nevada Administrative Code
- ◆ Species listed as Species of Conservation Priority by Nevada Department of Wildlife in 2013 Nevada Wildlife Action Plan
- ◆ Species ranked by the Nevada Natural Heritage Program as critically imperiled, imperiled, or vulnerable

*Considered in environmental analysis but none occur in region of influence

Environmental Consequences

Under Alternative 3 (Preferred Alternative), military training levels would continue at the same levels of activities analyzed in the 2015 Military Readiness Activities Fallon Range Training Complex EIS, with activities dispersed more widely with the inclusion of the proposed expansion areas. Alternative 3 would not result in significant impacts on biological resources.

Training activities within newly configured airspace would expand the area where birds and aircraft overlap. However, through the Bird Aircraft Strike Hazard awareness protocol, the Navy would minimize potential impacts on migratory birds.

Construction activities would impact vegetation communities and wildlife habitat, but the areas proposed for impact are small, relative to the amount of surrounding areas, approximately 5,882 acres (approximately 4,519 acres under Alternative 1 and 2).

Management Practices, Monitoring, and Mitigation

Current: Current requirements and management practices applicable to wildlife and vegetation at the FRTC focus on minimizing disturbance, controlling invasive plants, and restoring native habitats. Management practices that are currently applied to the existing ranges would continue to be implemented and expanded to the withdrawn lands.

Proposed: If the Proposed Action is implemented, the Navy’s Integrated Natural Resources Management Plan would be revised to include the expanded withdrawn and acquired lands. The Navy would coordinate with the BLM, Nevada Department of Wildlife, and U.S. Fish and Wildlife Service when revising the Integrated plan and consider if additional management or monitoring activities can be incorporated.

Table 10: Potential Impacts on Biological Resources	Alternatives			
	1	2	3	No Action
Noise exposure to biological resources to stressors from military training activities within and adjacent to existing ranges and new areas	○	○	○	○
Impact on wildlife populations from overflights at altitudes less than 500 ft.	○	○	○	○
Increased impacts on wildlife populations as a result of experiencing sonic booms	○	○	○	○
Increase of potential impacts on migratory birds by pilots	○	○	○	○
Vegetation impacted by proposed construction activities	○	○	○	
Bighorn sheep and pronghorn sheep habitat directly impacted by proposed construction activities within proposed expansion areas	○	○	○	
Significant impact on biological resources				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Cultural Resources

Cultural resources, as defined by the National Historic Preservation Act, are any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places. Properties of religious and cultural significance to Native American tribes may be eligible for inclusion in the National Register.

- Cultural resources can be divided into three major categories:
- ◆ Archaeological resources (prehistoric and historic) are locations where human activity measurably altered the earth or left deposits of physical remains.
 - ◆ Architectural properties include standing buildings, structures, landscapes, and other built-environment resources of historic or aesthetic significance.
 - ◆ Traditional cultural properties may include archaeological resources, structures, neighborhoods, prominent topographic features, habitat, plants, animals, and minerals that Native Americans or other groups consider essential for the preservation of traditional culture.

The environmental analysis for cultural resources considered resources in the Area of Potential Effect (APE). The APE includes the extent of the potential direct and indirect effects area and the types of resources that could be affected by these activities. The APE for indirect effects (activities that could generate noise and vibration from sonic booms) consists of areas that lie beneath the special use airspace. The APE for direct effects is associated with ground-disturbing training activities (e.g., bomb drops, vehicles and trainees transiting), road construction, construction of pre-engineered buildings, and installation of new targets and perimeter fencing. Cultural resources currently identified in the FRTC and areas requested for withdrawal or proposed for acquisitions consist of archaeological sites, historic trails, historic architectural resources, and Native American resources.

Environmental Consequences

With the implementation of protective measures for cultural resources eligible for National Register of Historic Places in accordance with the Programmatic Agreement and the Integrated Cultural Resources Management Plan, the Navy anticipates that the project would have no adverse effect on historic properties under Section 106 of the National Historic Preservation Act (NHPA). Access for ceremonial, cultural, and

academic activities would be allowed dependent on the Navy’s approval, and procedures for site visits would be implemented. Noise and vibration associated with sonic booms have the potential to result in minor to negligible damage to caves, rock shelters, or rock formations containing petroglyphs, adobe walls, and stone structures. However, noise and vibration studies demonstrate that those potential effects would not alter the characteristics contributing to NRHP eligibility. Procedures are in place for identifying, evaluating, and protecting such resources as defined by the Programmatic Agreement. No significant impacts on cultural resources are anticipated to occur. The Navy would continue to consult on ongoing cultural resources surveys or sensitive sites.

Management Practices, Monitoring, and Mitigation

Current: Current management practices would continue to be implemented on existing withdrawn lands and lands requested for withdrawal or proposed for expansion. The Navy also abides by a Programmatic Agreement with the Nevada State Historic Preservation Office, the BLM, and the Advisory Council on Historic Preservation that requires the identification, evaluation, and treatment of historic properties on lands managed by the Navy to ensure protection of cultural resources and coordination between the Navy and the Nevada State Historic Preservation Office. Additionally, an Integrated Cultural Resources Management Plan was completed in 2013, which provides guidance to Navy staff to ensure that all laws, regulations, policies, and directives related to cultural resources are appropriately followed while fulfilling the installation’s mission.

Proposed: Any inadvertent discovery of sensitive archaeological materials on the FRTC region of influence would be handled in accordance with the Navy’s management practices. If human remains are inadvertently discovered, established procedures would be followed. The Navy acknowledges that there may be impacts that have yet to be defined and will continue to develop and incorporate mitigation measures as necessary.

The Navy is currently and will continue consulting with the Nevada State Historic Preservation Office and federally recognized tribes, which includes the development of a Programmatic Agreement establishing protocols for the future management of historic properties in association with the proposed action.

Table 11: Potential Impacts on Cultural Resources	Alternatives			
	1	2	3	No Action
Impact on cultural resources due to decommissioning, decontamination, and reuse of closed range				●
Access for ceremonial or cultural activities restricted				
Damage to caves, rockshelters, or rock formations containing petroglyphs as a result of noise and vibration associated with sonic booms	○	○	○	
Adverse effect on historic properties under Section 106 of National Historic Preservation Act				
Significant impacts on cultural resources not anticipated				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Recreation

Recreational activities refer to outdoor activities conducted in the region of influence such as hunting, fishing, hiking, popular racing events, camping, wildlife viewing, rock/fossil collecting, horseback riding, operating off-highway vehicles, sightseeing, and visiting historic sites. Recreation areas are defined as federal, state, or local designated parks, playgrounds, recreation areas, recreation management areas, and wildlife refuges, as well as other discernable areas where the public regularly recreates.



Environmental Consequences

Alternative 3 would have significant impacts on public recreation, as approximately 424,466 acres would no longer be accessible. Certain Navy-authorized activities would be allowed when the bombing ranges are not operational and when compatible with military training activities, such as ceremonial and cultural site visits, research and academic pursuits, or regulatory or management activities. Alternative 3 would allow access for racing events, like the Vegas to Reno, on B-16, B-17,

and B-20. This alternative also would minimize impacts by shifting the proposed expansion of B-17 off popular hunting areas within the Sand Springs Mountain Range and around Fairview Peak.

Alternative 3 also includes Congressional legislation to remove the Wilderness Study Area (WSA) designation of withdrawn portions of the Clan Alpine Mountains, Job Peak, and Stillwater Range WSAs, potentially opening these areas to new types of recreation activities. Alternative 3 would close public access to 3,200 acres of the Fallon National Wildlife Refuge and 1,920 acres of adjoining Churchill County conservation easements.

Alternative 3 would allow limited public access to designated portions of B-17 for bighorn sheep hunting tag holders and their hunting parties in accordance with proposed program requirements.

Management Practices, Monitoring, and Mitigation

Current: Land uses, including recreational activities, within the FRTC region of influence are compatible with current training activities. Management practices in place for other resources, such as noise and land use, which affect recreation would continue to be implemented. These management practices also serve to avoid and minimize impacts on recreation.

Proposed: The Navy and the Nevada Department of Wildlife would manage and annually review the B-17 hunting program through a memorandum of agreement. Access and safety would be managed by the Navy, while all other hunt management, such as the number of tags and hunt seasons, would remain the responsibility of the Nevada Department of Wildlife.

The BLM or Nevada Department of Wildlife would continue to be able to access the bombing ranges for management purposes. The Navy would install wildlife-friendly fencing for any new fences and remove all existing fences not required for safety and security purposes within the withdrawal area. The U.S. Fish and Wildlife Service would continue to manage the Fallon National Wildlife Refuge under a memorandum of understanding with the Navy.

Table 12: Potential Impacts on Recreation	Alternatives			
	1	2	3	No Action
Land within FRTC potentially converted to recreational use				●
Public access restricted to bombing ranges proposed for withdrawal or acquisition	●	●	●	
Public access restricted to training areas (DVTA) proposed for withdrawal or acquisition				
Loss of public access to approximately 18 percent of Fallon National Wildlife Refuge for recreation	●	●	●	
Loss of large racing events on bombing ranges	●	○	○	
Significant impacts on recreation	●	●	●	

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Socioeconomics

In the context of NEPA, socioeconomics is defined as the economic and social conditions of the region potentially affected by a Proposed Action. While social impacts could potentially affect all aspects of people's and communities' way of life, this section focuses specifically on economic conditions related to population and demographics, housing occupancy status, employment characteristics, economic activity, and tax revenue. The purpose of this socioeconomic analysis is to assess the potential impacts of the Proposed Action related to these economic conditions. Significance of population and expenditure impacts is assessed in terms of their direct impact on the local economy and related effects on socioeconomic resources.

The region of influence for socioeconomics and economic impact analysis is Churchill, Lyon, Mineral, Pershing, and Nye Counties because they would be directly affected by the Proposed Action. Eureka, Elko, and Lander Counties are not included in the region of influence because impacts within these counties would be negligible.

Environmental Consequences

Although Alternative 3 (Preferred Alternative) would restrict some access to public lands, this would not result in significant impacts on population, demographics, employment, housing, property values, or agricultural or recreational revenues.

Alternative 3 would, however, result in permanent economic impacts associated with lost federal land grazing. While there would be impacts on individual ranchers, there would be no significant impact on the total economic activity within the affected counties. Alternative 3 could potentially result in significant impacts with respect to mining and geothermal opportunities that could potentially be lost. In general, impacts would be less compared to Alternative 1 due to greater access for geothermal operations within the DVTa and recreational opportunities (hunting) within B-17. Under Alternative 3, there



would be no change in payments in lieu of taxes (PILT) for Churchill, Mineral, Nye, or Pershing County, and minimal changes in PILT for Lyon County. While there would be no significant impact associated with lost sales and tax revenues, lost hunting opportunities could result in a reduction in wildlife application fees and funding sources for the Nevada Department of Wildlife.

Management Practices, Monitoring, and Mitigation

Proposed: Requirements and management practices in place for other resources (e.g., air quality, water quality, noise, and public health and safety and protection of children) would ensure that nonparticipants would not be affected by actions within the region of influence. For any acquisition of privately owned property, private landowners would receive just compensation for loss of any privately-owned land acquired by the U.S. due to the proposed expansion of the bombing ranges and the DVTa. Just compensation would be determined by calculating the fair market value of parcels in accordance with federal appraisal rules codified in the Uniform Appraisal Standards for Federal Land Acquisitions.

Table 13: Potential Impacts on Socioeconomics	Alternatives			
	1	2	3	No Action
Decrease in PILT for Lyon County	●	●	●	
Economic or employment losses	○	○	○	●
Impacts on population and demographics	○	○	○	
Reduced property values	○	○	○	●
Impacts on agriculture	○	○	○	●
Impacts on grazing	●	●	●	
Impacts on mining and geothermal	●	●	●	
Impacts on recreation	●	●	●	
Significant impacts on socioeconomics				

Blank = No impact. ●=Impact. ●=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Public Health and Safety and the Protection of Children

This discussion of public health and safety and protection of children includes consideration of any activities, occurrences, or operations that have the potential to affect the safety, well-being, or health of members of the public. A safe environment is one in which there is either no potential, or an optimally reduced and ultimately minimal potential, for death, serious bodily injury, illness, or property damage.

The environmental analysis for public health and safety concerns covers the entire FRTC (including both special use airspace and Navy-controlled lands) and the immediately adjacent lands. Within the region of influence, areas of heightened sensitivity to public health and safety and protection of children concerns include areas where large groups of people may gather, such as recreational areas and parks.

Environmental Consequences

Under Alternative 3 (Preferred Alternative), current plans and procedures for emergency services, wildfire management, aircraft and ground operations, range clearance procedures, electromagnetic energy, use of lasers, and abandoned mine lands would continue to be implemented and include expanded range areas. B-16, B-17, and B-20 would be fenced and the public would be restricted from accessing the ranges except for allowable uses.

The DVTA would remain accessible to the public. Due to Navy standard operating procedures and management practices that are in place to maintain safety while training, safety issues while driving, bicycling, or hiking on roads near or within the area remaining open to the public would not result in increased risks to health and safety or to children. Construction and improvement activities would follow standard safety measures to include construction fencing, signs, and security to minimize safety risks and unauthorized access. Therefore, Alternative 3 would not result in significant impacts on public health and safety and protection of children, and there would be no

disproportionate environmental health or safety risks to children.

Management Practices, Monitoring, and Mitigation

Current: Measures are in place to ensure that nonparticipants are not endangered by actions at the FRTC, and they would remain in effect with the implementation of any of the alternatives.

Proposed: The Navy is actively developing a Fire Management Plan to reduce the risk of wildfire in the region of influence. Standard operating procedures and range clearance procedures would remain in place to ensure that training areas are clear of nonparticipants before an activity commences.

With the implementation of existing management practices on proposed withdrawn or acquired lands, no additional management practices nor monitoring or mitigation measures would be warranted for public health and safety and protection of children.

The following management practices would be implemented to reduce hazards associated with unexploded ordnance:

- ◆ Post signs warning of areas where unexploded ordnance clearance has not been confirmed when the public is allowed on bombing ranges.
- ◆ Establish procedures for public access to protect the public if authorized to enter the ranges.
- ◆ Maintain the Range Sustainability Environmental Program Assessment.
- ◆ Continue operational range clearance activities which remove unexploded ordnance and other materials to reduce munitions constituent loading.

Table 14: Potential Impacts on Public Health & Safety & Protection of Children

	Alternatives			
	1	2	3	No Action
Emergency responses within the FRTC restricted	○	○	○	
Increase in aircraft-related accidents	○	○	○	
Exposure to aircraft-delivered ordnance	○	○	○	
Exposure to electromagnetic radiation	○	○	○	
Exposure to lasers	○	○	○	
Access to abandoned mines within bombing ranges and training areas	○	○	○	
Exposure to hazardous materials and waste	○	○	○	
Significant impacts on public health and safety and protection of children				

Blank = No impact. ●=Impact. ◐=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Environmental Justice

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Meaningful involvement means that:

- ◆ People have an opportunity to participate in decisions about activities that may affect their environment or health.
- ◆ The public’s contribution can influence the regulatory agency’s decision.
- ◆ The public’s concerns will be considered in the decision-making process.
- ◆ The decision makers seek out and facilitate the involvement of those potentially affected.

The environmental analysis for environmental justice considered any minority or low-income population that could be exposed to a disproportionately high and adverse human health or environmental effect as a result of implementing the Proposed Action or any of the alternatives. This includes census block groups that overlap or are adjacent to existing bombing ranges and training areas (also known as fenceline communities) and any other community that could experience DNL noise of 65 dBA or above as a result of naval training activities.

Environmental Consequences

Although significant impacts are outlined within this EIS, implementation of Alternative 3 (Preferred Alternative) would not cause disproportionately high and adverse human

health or environmental effects on any minority or low-income populations. Despite this, the Navy has embarked on robust community outreach and tribal engagement programs as part of this EIS process and will continue to engage with affected communities throughout the public comment period. The Navy acknowledges that there may be impacts that have yet to be defined and will continue to develop and incorporate mitigation measures as necessary.

Management Practices, Monitoring, and Mitigation

Current: It is the Navy’s policy to identify and address any disproportionately high and adverse human health or environmental effects of its actions on minority and low-income populations.

Proposed: No new management practices, monitoring, or mitigation measures are warranted for environmental justice impacts based on the analysis.



Table 15: Potential Impacts on Environmental Justice	Alternatives			
	1	2	3	No Action
Increased noise at B-16, B-17, or B-20 from military activities (minority and low-income populations living in study areas)	○	○	○	
Noise contours above 65 dbA DNL would adversely affect minority or low-income communities in a manner that would be greater than comparison groups				
Air emissions or water discharges would adversely affect minority or low-income communities in a manner that would be greater than comparison groups				
Significant impacts on environmental justice				

Blank = No impact. ●=Impact. ○=Impacts, but reduced as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation. ○=No meaningful impact or impact reduced to less than meaningful as a result of project design change, implementation of current or proposed management practice, monitoring, or mitigation.

Cumulative Impacts

Cumulative impacts were analyzed for each resource category across all alternatives and in combination with past, present, and reasonably foreseeable future actions. In accordance with CEQ guidance, the cumulative impacts analysis focused on impacts that are “truly meaningful.” Specific projects and actions identified as having the greatest likelihood to generate potential cumulative impacts when added to the Proposed Action are shown visually in the following figures (Figure 8).

As a result of this analysis, the following conclusions were determined for each analyzed resource:

- ♦ The incremental contribution of Alternative 3 (Preferred Alternative) to cumulative impacts on geological resources, airspace, air quality, biological resources, cultural resources, public health and safety, and environmental justice would not have the potential to contribute meaningfully to any potential significant cumulative impact with respect to these resource areas.

- ♦ The incremental contribution of Alternative 3 to cumulative impacts on socioeconomics would be appreciable. There would be a potential loss of revenue in some of the counties within the region of influence. However, for most counties these impacts would not rise to the level of significance. Nye County would experience a significant impact on their economic resources due to the cumulative nature of the U.S. Air Force’s Nevada Test and Training Range Proposed Action and the Navy’s Proposed Action.

- ♦ The incremental contribution of Alternative 3, viewed in conjunction with other projects in the area, would result in cumulatively significant impacts with respect to land use, mineral resources and mining, grazing, transportation, water resources, noise, and recreation.

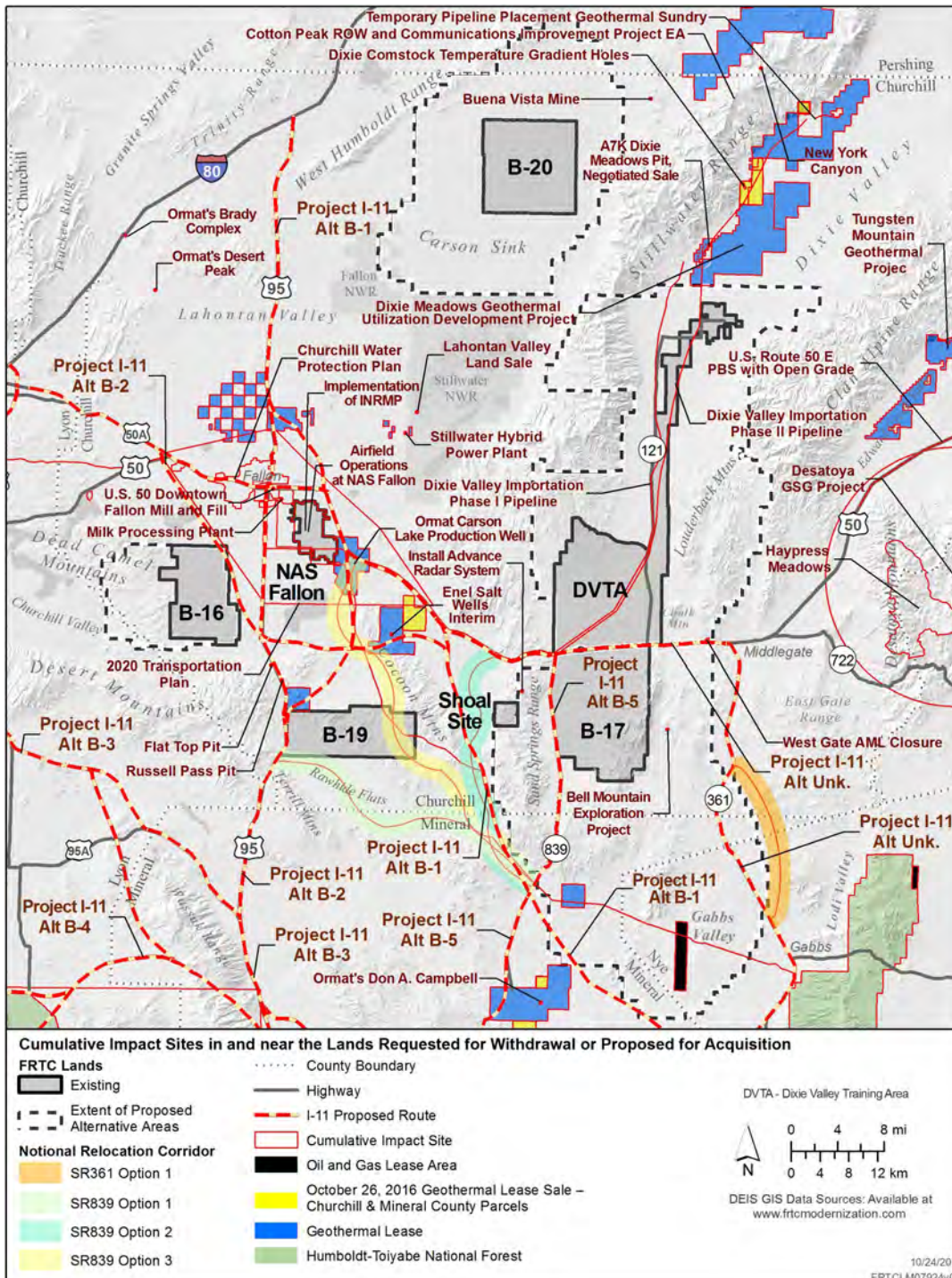


Figure 8: Cumulative Impacts Sites in and Near Lands Requested For Withdrawal or Proposed For Acquisition

Management Practices, Monitoring, and Mitigation Measures

As part of the Navy's commitment to sustainable use of resources and environmental stewardship, the Navy incorporates mitigation measures to avoid, reduce, or minimize impacts on the environment and the community from its activities. Measures may include the employment of management practices, standard operating procedures, monitoring programs, conservation practices, or others. Each of the alternatives considered in the Draft EIS includes proposed mitigation measures intended to avoid, reduce, or minimize potential impacts. Mitigation measures were developed and will continue to be developed through preparation of the Final EIS.

The Council on Environmental Quality regulations identify five ways to reduce or mitigate the severity or intensity of adverse impacts:

- ◆ Avoid the impact altogether by not taking all or part of the action
- ◆ Minimize the impact by limiting the degree or magnitude of the action and its implementation
- ◆ Rectify the impact by repairing, rehabilitating, or restoring the affected environment
- ◆ Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action
- ◆ Compensate for the impact by replacing or providing substitute resources or environments



There are three categories that serve to potentially reduce impacts from any proposed alternative:

- ◆ **Management Practices:** Policies, procedures, or plans that aim to preserve the environment or the integrity of the ranges. Management practices are implemented to reduce impacts that projects can generally have on the surrounding environment.
- ◆ **Monitoring Measures:** Measures that involve systematic sampling of physical and biological resources to derive knowledge of the environment, its resources, and processes or activities that affect them. Monitoring can be conducted for a number of purposes, including establishing environmental baselines and trends, informing decision-making for management actions, assessing the effects of natural and human influences,

assessing the effectiveness of management practices and mitigation measures, and ensuring compliance with environmental regulations. Monitoring results inform coordination with regulatory agencies to ensure effective measures are employed. Monitoring measures facilitate adaptive management efforts and help to track completion of measures the action proponent has committed to implement in an environmental planning decision document.

- ◆ **Mitigation Measures:** Measures that reduce specific impacts a project or action could have on a particular resource, replace the impacted resource, or relocate threatened resources to a new location.



To view the Draft EIS in its entirety please visit the project website at www.FRTCModerization.com or one of the following libraries:

- ♦ Austin Branch Library
- ♦ Carson City Library
- ♦ Churchill County Library
- ♦ Crescent Valley Branch Library
- ♦ Downtown Reno Library
- ♦ Eureka Branch Library
- ♦ Fernley Branch Library
- ♦ Gabbs Community Library
- ♦ Mineral County Library
- ♦ Pershing County Library
- ♦ Yerington Branch Library



How to submit comments on the Draft EIS:

The Navy encourages the public, government agencies, and tribes to participate and comment on the Draft EIS:

- ♦ Submit oral or written comments at the public meetings
- ♦ Submit comments via the project website
- ♦ Mail comments to:
Naval Facilities Engineering
Command Southwest
Code EV21.SG
1220 Pacific Highway
Building 1, 5th Floor
San Diego, CA 92132

Comments must be postmarked or received online by Jan. 15, 2019, for consideration in the Final EIS.

Next Steps

Following the Draft EIS public review and comment period, the Navy will consider public comments and incorporate as appropriate into the Final EIS. The Navy will continue to discuss potential mitigation measures with cooperating agencies and federally recognized tribes.

The NEPA process will continue with:

- ♦ **Final EIS Notice of Availability:** anticipated fall 2019
- ♦ **Final EIS Public Review and Wait Period:** Provides a 30-day wait period after the Final EIS is published before the Navy may take final action
- ♦ **Record of Decision:** anticipated winter 2020

