
3.11 Cultural Resources

No Action Alternative

Under the No Action Alternative, the 1999 Congressional land withdrawal of 201,933 acres from public domain (Public Law 106-65) would expire on November 5, 2021, and military training activities requiring the use of these public lands would cease. Expiration of the land withdrawal would terminate the Navy's authority to use nearly all of the Fallon Range Training Complex's (FRTC's) bombing ranges, affecting nearly 62 percent of the land area currently available for military aviation and ground training activities in the FRTC.

Alternative 1 – Modernization of the Fallon Range Training Complex

Under Alternative 1, the Navy would request Congressional renewal of the 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021. The Navy would request that Congress withdraw and reserve for military use approximately 618,727 acres of additional Federal land and acquire approximately 65,153 acres of non-federal land. Range infrastructure would be constructed to support modernization, including new target areas, and expand and reconfigured existing Special Use Airspace (SUA) to accommodate the expanded bombing ranges. Implementation of Alternative 1 would potentially require the reroute of State Route 839 and the relocation of a portion of the Paiute Pipeline. Public access to B-16, B-17, and B-20 would be restricted for security and to safeguard against potential hazards associated with military activities. The Navy would not allow mining or geothermal development within the proposed bombing ranges or the Dixie Valley Training Area (DVTA). Under Alternative 1, the Navy would use the modernized FRTC to conduct aviation and ground training of the same general types and at the same tempos as analyzed in Alternative 2 of the *2015 Military Readiness Activities at Fallon Range Training Complex, Nevada, Final Environmental Impact Statement* (EIS). The Navy is not proposing to increase the number of training activities under this or any of the alternatives in this EIS.

Alternative 2 – Modernization of Fallon Range Training Complex with Managed Access

Alternative 2 would have the same withdrawals, acquisitions, and SUA changes as proposed in Alternative 1. Alternative 2 would continue to allow certain public uses within specified areas of B-16, B-17, and B-20 (ceremonial, cultural, or academic research visits, land management activities) when the ranges are not operational and compatible with military training activities (typically weekends, holidays, and when closed for maintenance). Alternative 2 would also continue to allow grazing, hunting, off-highway vehicle (OHV) usage, camping, hiking, site and ceremonial visits, and large event off-road races at the DVTA. Additionally under Alternative 2, hunting would be conditionally allowed on designated portions of B-17, and geothermal and salable mineral exploration would be conditionally allowed on the DVTA. Large event off-road races would be allowable on all ranges subject to coordination with the Navy and compatible with military training activities.

Alternative 3 – Bravo-17 Shift and Managed Access (Preferred Alternative)

Alternative 3 differs from Alternative 1 and 2 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 places the proposed B-17 farther to the southeast and rotates it slightly counter-clockwise. In conjunction with shifting B-17 in this manner, the expanded range would leave State Route 839 in its current configuration along the western boundary of B-17 and would expand eastward across State Route 361 potentially requiring the reroute of State Route 361. The Navy proposes designation of the area south of U.S. Route 50 as a Special Land Management Overlay rather than proposing it for withdrawal as the DVTA. This Special Land Management Overlay would define two areas, one east and one west of the existing B-17 range. These two areas, which are currently public lands under the jurisdiction of BLM, would not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy.

Environmental Impact Statement

Fallon Range Training Complex Modernization

TABLE OF CONTENTS

3.11 CULTURAL RESOURCES	3.11-1
3.11.1 METHODOLOGY	3.11-2
3.11.1.1 Region of Influence	3.11-2
3.11.1.2 Regulatory Framework	3.11-8
3.11.1.3 Approach to Analysis	3.11-9
3.11.1.4 Public Scoping Concerns and Tribal Issues	3.11-11
3.11.2 AFFECTED ENVIRONMENT	3.11-12
3.11.2.1 Cultural Context	3.11-12
3.11.2.2 Traditional Cultural Properties	3.11-13
3.11.2.3 Bravo-16.....	3.11-14
3.11.2.4 Bravo-17.....	3.11-15
3.11.2.5 Bravo-20.....	3.11-17
3.11.2.6 Dixie Valley Training Area	3.11-18
3.11.2.7 Special Use Airspace	3.11-20
3.11.3 ENVIRONMENTAL CONSEQUENCES	3.11-24
3.11.3.1 No Action Alternative	3.11-24
3.11.3.2 Alternative 1: Modernization of the Fallon Range Training Complex	3.11-25
3.11.3.3 Alternative 2: Modernization of Fallon Range Training Complex and Managed Access...	3.11-33
3.11.3.4 Alternative 3: Bravo-17 Shift and Managed Access (Preferred Alternative)	3.11-36
3.11.3.5 Proposed Management Practices, Monitoring, and Mitigation	3.11-40
3.11.3.6 Summary of Effects and Conclusions.....	3.11-41

List of Figures

FIGURE 3.11-1: AREA OF POTENTIAL EFFECT.....	3.11-3
FIGURE 3.11-2: DIRECT IMPACT AREAS WITHIN BRAVO-16.....	3.11-4
FIGURE 3.11-3: DIRECT IMPACT AREAS WITHIN BRAVO-17.....	3.11-5
FIGURE 3.11-4: DIRECT IMPACT AREAS WITHIN BRAVO-20.....	3.11-6
FIGURE 3.11-5: DIRECT IMPACT AREAS WITHIN THE DIXIE VALLEY TRAINING AREA.....	3.11-7

List of Tables

TABLE 3.11-1: NATIVE AMERICAN TRIBES WITH POTENTIAL INTEREST IN THE AREA OF POTENTIAL EFFECT	3.11-14
TABLE 3.11-2: ELIGIBLE ARCHAEOLOGICAL SITES IN THE PROPOSED B-16 LAND WITHDRAWAL	3.11-15
TABLE 3.11-3: NRHP ELIGIBLE ARCHAEOLOGICAL SITES WITHIN LANDS REQUESTED FOR WITHDRAWAL OR PROPOSED FOR ACQUISITION FOR B-17	3.11-16
TABLE 3.11-4: TRIBAL RESOURCES IN THE APE WITHIN AND NEAR B-17	3.11-17
TABLE 3.11-5: NRHP LISTED AND ELIGIBLE ARCHAEOLOGICAL SITES WITHIN LANDS REQUESTED FOR WITHDRAWAL OR PROPOSED FOR ACQUISITION FOR B-20	3.11-17

TABLE 3.11-6: NRHP ELIGIBLE ARCHAEOLOGICAL SITES WITHIN LANDS REQUESTED FOR WITHDRAWAL OR PROPOSED FOR ACQUISITION FOR THE DVTA.....	3.11-18
TABLE 3.11-7: NRHP ELIGIBLE ARCHITECTURAL SITES WITHIN LANDS REQUESTED FOR WITHDRAWAL OR PROPOSED FOR ACQUISITION FOR THE DVTA.....	3.11-19
TABLE 3.11-8: TRIBAL RESOURCES WITHIN AND NEAR THE DVTA APE	3.11-19
TABLE 3.11-9: NRHP ELIGIBLE ARCHITECTURAL RESOURCES UNDERNEATH SUPERSONIC OPERATING AREA B.....	3.11-21
TABLE 3.11-10: TRIBAL RESOURCE SITES UNDERLYING THE SUPERSONIC OPERATING AREA B	3.11-22
TABLE 3.11-11: SUMMARY OF EFFECTS FOR CULTURAL RESOURCES	3.11-41

3.11 Cultural Resources

This section describes existing cultural resources in the Fallon Range Training Complex (FRTC) and areas requested for withdrawal or proposed for acquisition.

Cultural resources, as defined by the National Historic Preservation Act (NHPA), are any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP) (36 Code of Federal Regulations [CFR] part 800.16(l)(1)).

Properties of religious and cultural significance to Native American tribes may be determined to be eligible for inclusion in the National Register (16 United States Code [U.S.C.] 470a(d)(6)(A)).

Cultural resources can be divided into three major categories:

- Archaeological resources
- Architectural properties
- Traditional cultural properties

Archaeological resources (prehistoric and historic) are locations where human activity measurably altered the earth or left deposits of physical remains. Prehistoric resources are physical properties resulting from human activities that predate written records and are generally identified as archaeological sites. They can include village sites, temporary camps, lithic scatters, roasting pits/hearths, milling features, petroglyphs, rock features, and burials. Historic archaeological resources postdate the arrival of European explorers or settlers to a region, must be at least 50 years old, and can include building foundations, ruins, mines, and refuse scatters. Travel corridors can also provide physical evidence as archaeological resources that show previous human activity. These corridors include segments of the Pony Express Route, the Overland Stage and Mail Line, the California Emigrant Trail, and the Lincoln Highway, which traverse the region of influence.

Architectural resources include standing buildings, structures, landscapes, and other built-environment resources of historic or aesthetic significance. Buildings provide shelter for human activity and may consist of residential buildings (e.g., farmhouses and associated resources (prehistoric and historic). Architectural outbuildings, including sheds and barns), commercial buildings (e.g., stores, banks, and other business-related office buildings), and military buildings (e.g., administrative buildings and ancillary outbuildings). Structures are defined as those that do not provide shelter for human activity and include transportation-related structures (e.g., roads and bridges), military structures (e.g., water tanks or beacons), and irrigation features (e.g., canals).

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. Traditional cultural properties differ from other cultural properties types in that there may not actually be any evidence of use. The beliefs and practices associated with the traditional cultural property and community must be rooted in the group's history and important to maintaining the group's cultural identity. Traditional cultural properties are not limited to Native Americans and can represent any ethnic group with strong ties to the property (National Park Service, 1998). Traditional cultural properties listed in or eligible for listing in the NRHP are afforded the same protection as other types of historic properties. Native American Tribes are located within the FRTC region of influence and have lands beneath the existing and proposed Special Use Airspace (SUA). Resources that are significant to Native American Tribes (i.e., Native American resources) and may be considered traditional cultural properties include, but are not limited to,

prehistoric sites and artifacts, sacred areas, traditional use areas (e.g., native plant gathering areas or wildlife habitat), traditional materials and their sources, and sites for cultural practices. Many traditional cultural properties are also sacred sites (sacred by virtue of its established religious significance or ceremonial use) important to Native Americans and may include mountain peaks, springs, and burial sites. Traditional practice may prescribe the use of particular native plants, animals, or minerals from specific places. Therefore, activities that may affect sacred areas or the availability of materials used in traditional practices may be of concern to Native Americans.

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.

3.11.1 Methodology

This analysis focuses on the potential for significant impacts on cultural resources as a result of the Proposed Action discussed in this Environmental Impact Statement (EIS).

3.11.1.1 Region of Influence

For purposes of this EIS, the region of influence for cultural resources is considered the Area of Potential Effect (APE). As defined by 36 CFR 800.16(d) of Section 106 of the NHPA, the APE represents “...the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking.” An APE has been identified based on activities associated with the Proposed Action. The APE includes areas of potential direct and indirect effects (e.g., ground disturbance, noise, vibration from sonic booms, vibration from aerial target strikes and military expended material strikes, and visual intrusions) 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 SUA (Figure 3.11-1). This includes Supersonic Operating Area A (supersonic operations above 30,000 feet), Supersonic Operating Area B (supersonic operations above 11,000 feet, Bureau of Land Management [BLM] lands, and private lands (Bureau of Land Management, 2013a) within the 60 C-Weighted Day Night Level contours for munitions activity associated with the four Bravo training ranges (B-16, B-17, B-19, and B-20), and the Dixie Valley Training Area (DVTA) (Figure 3.11-1) (Bureau of Land Management, 2013a). The Section 3.7 (Noise) includes the types or sources of noise and the associated sensitive receptors in the human environment.

The APE for noise and vibration includes prehistoric archaeological sites with natural features (e.g., caves, rockshelters, petroglyphs or pictographs on rock faces), historic architectural resources (e.g., adobe structures in the DVTA, unreinforced stone structures, and mine shafts and adits [horizontal mine passages]), and places of cultural and religious importance. The town of Austin is located beneath the APE for indirect effects. There have been noise complaints from residents regarding sonic boom events. The city of Reno is not within the direct or indirect APE because supersonic activities do not occur over that area.

For this action, 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 (Figure 3.11-2, Figure 3.11-3, Figure 3.11-4, and Figure 3.11-5).

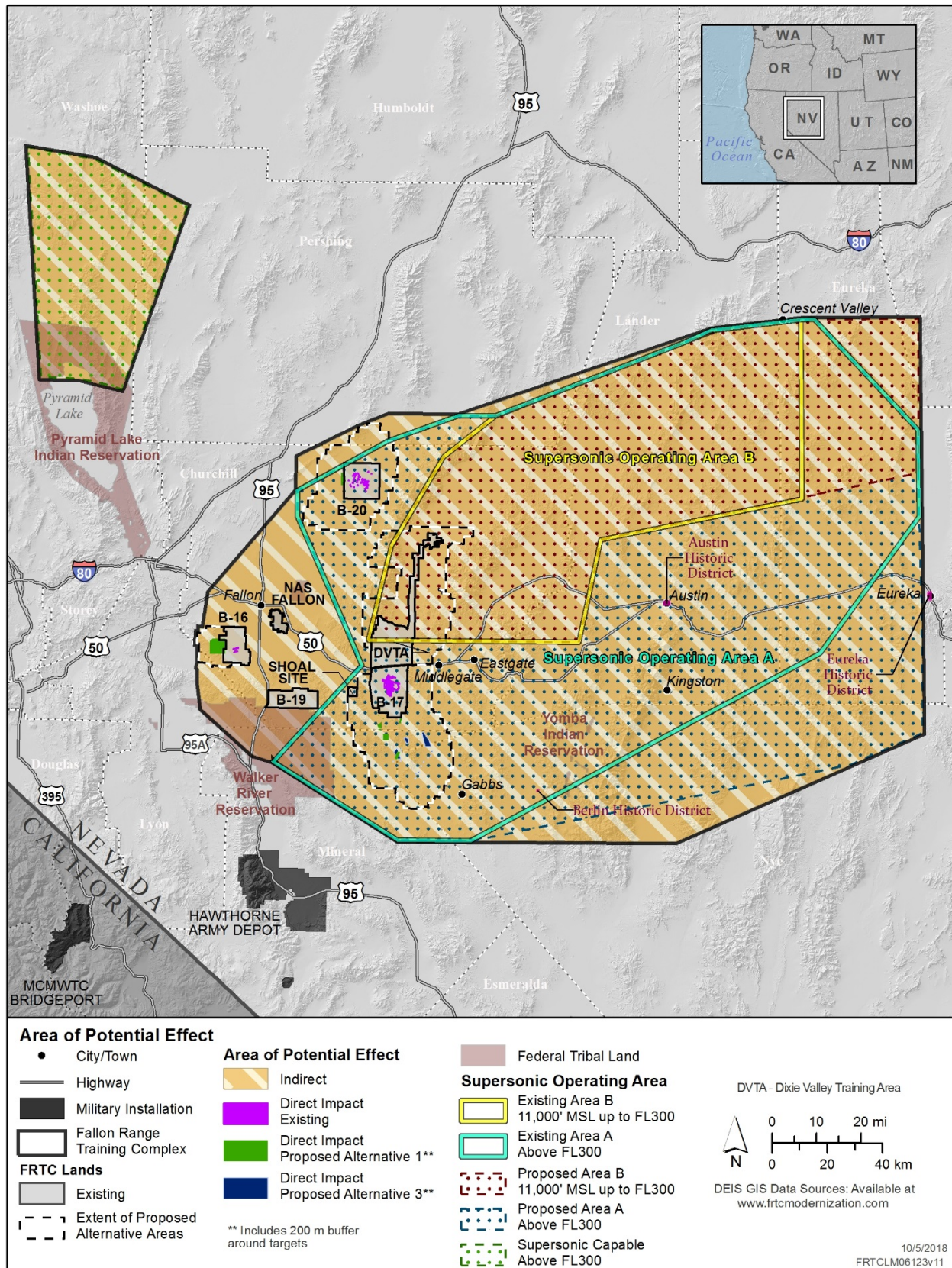


Figure 3.11-1: Area of Potential Effect

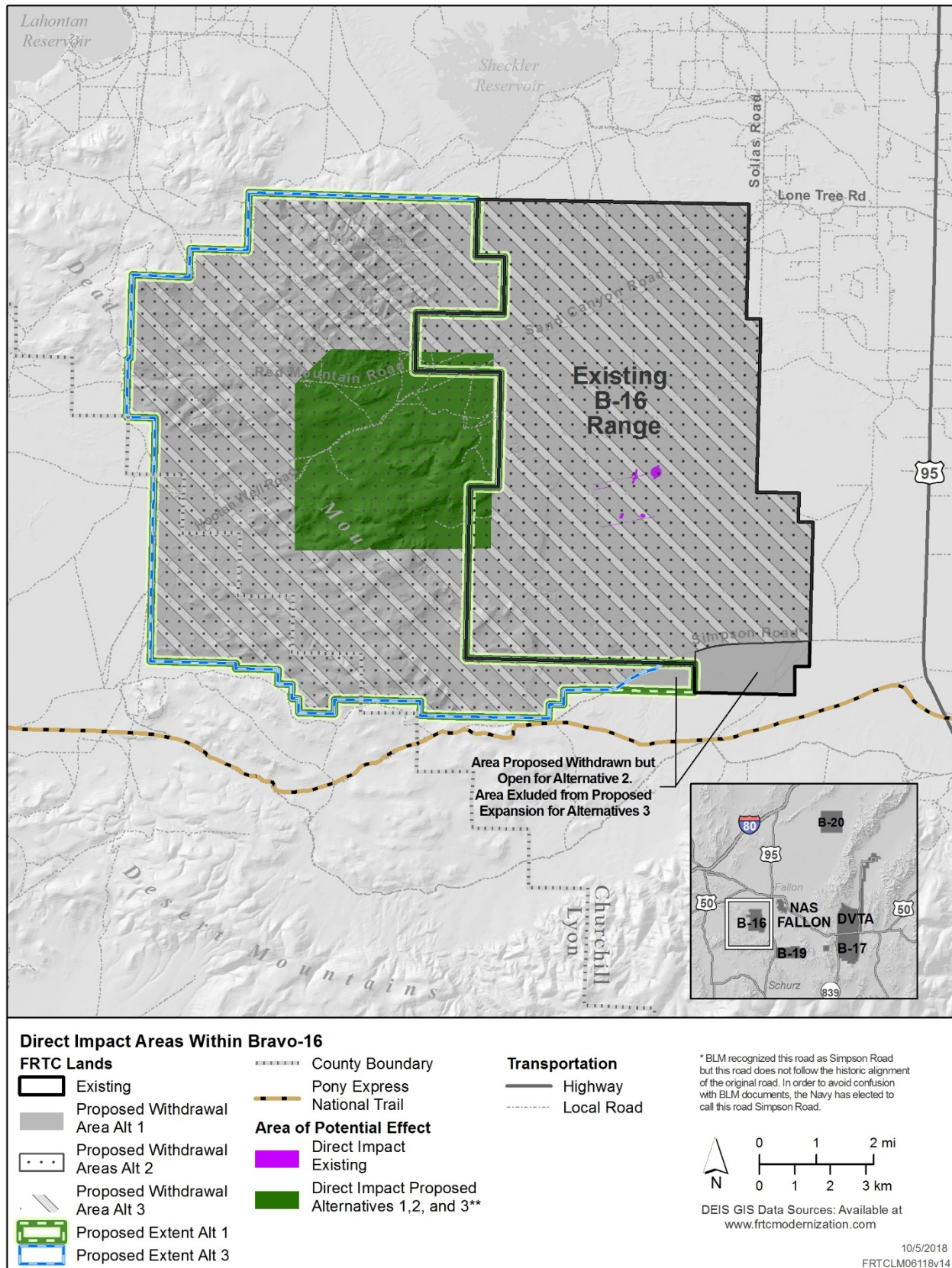


Figure 3.11-2: Direct Impact Areas Within Bravo-16

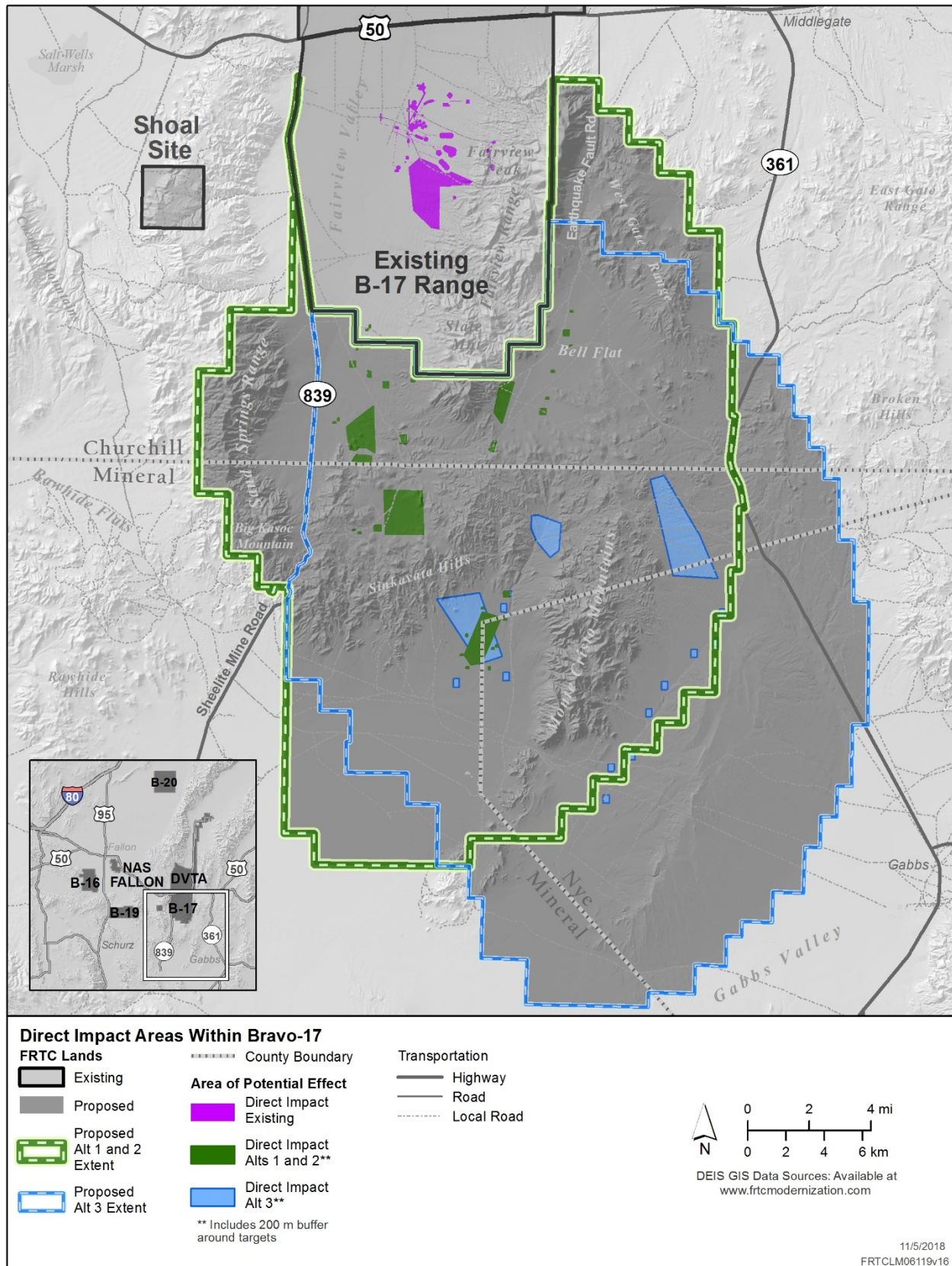


Figure 3.11-3: Direct Impact Areas Within Bravo-17

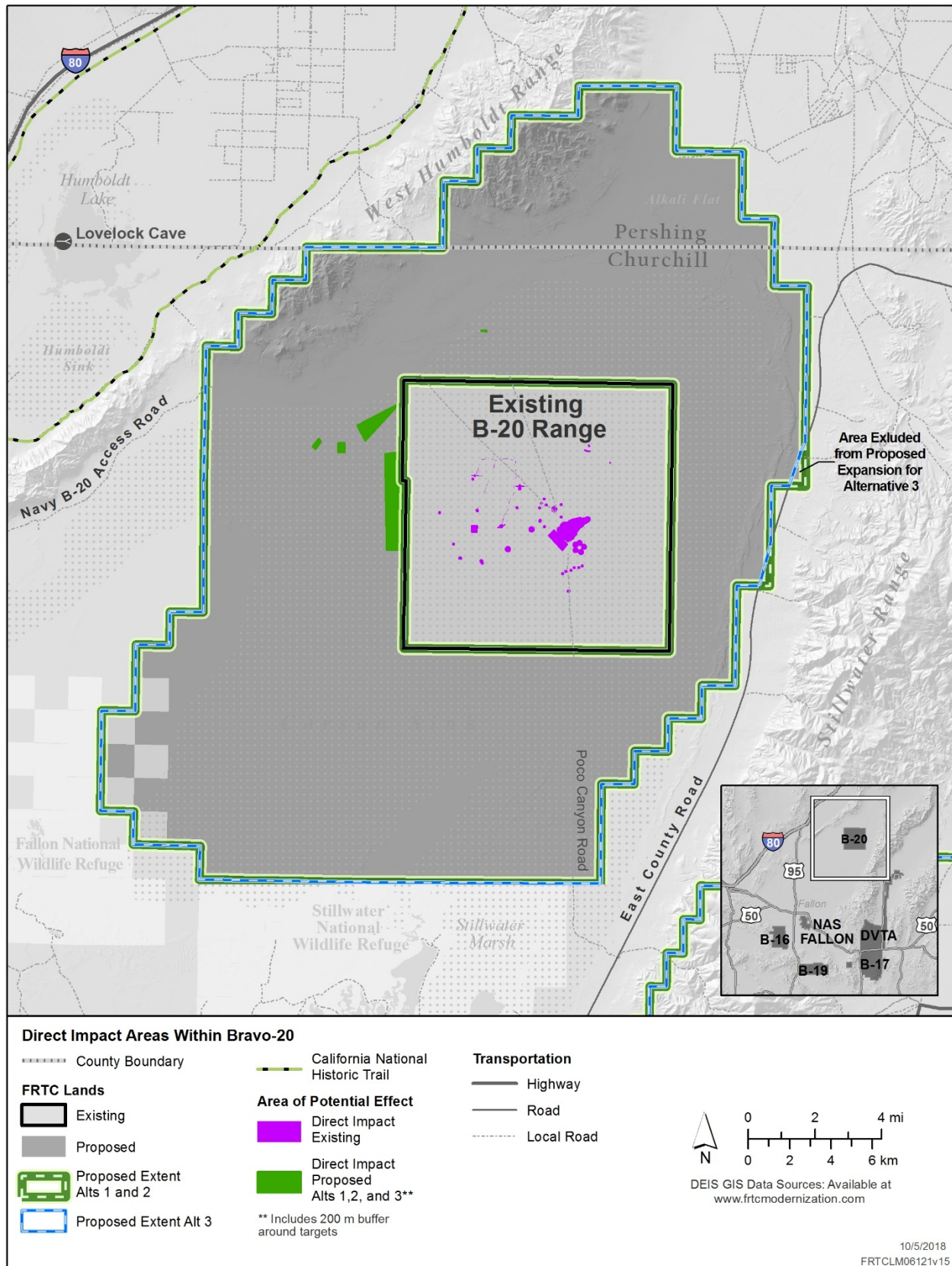


Figure 3.11-4: Direct Impact Areas Within Bravo-20

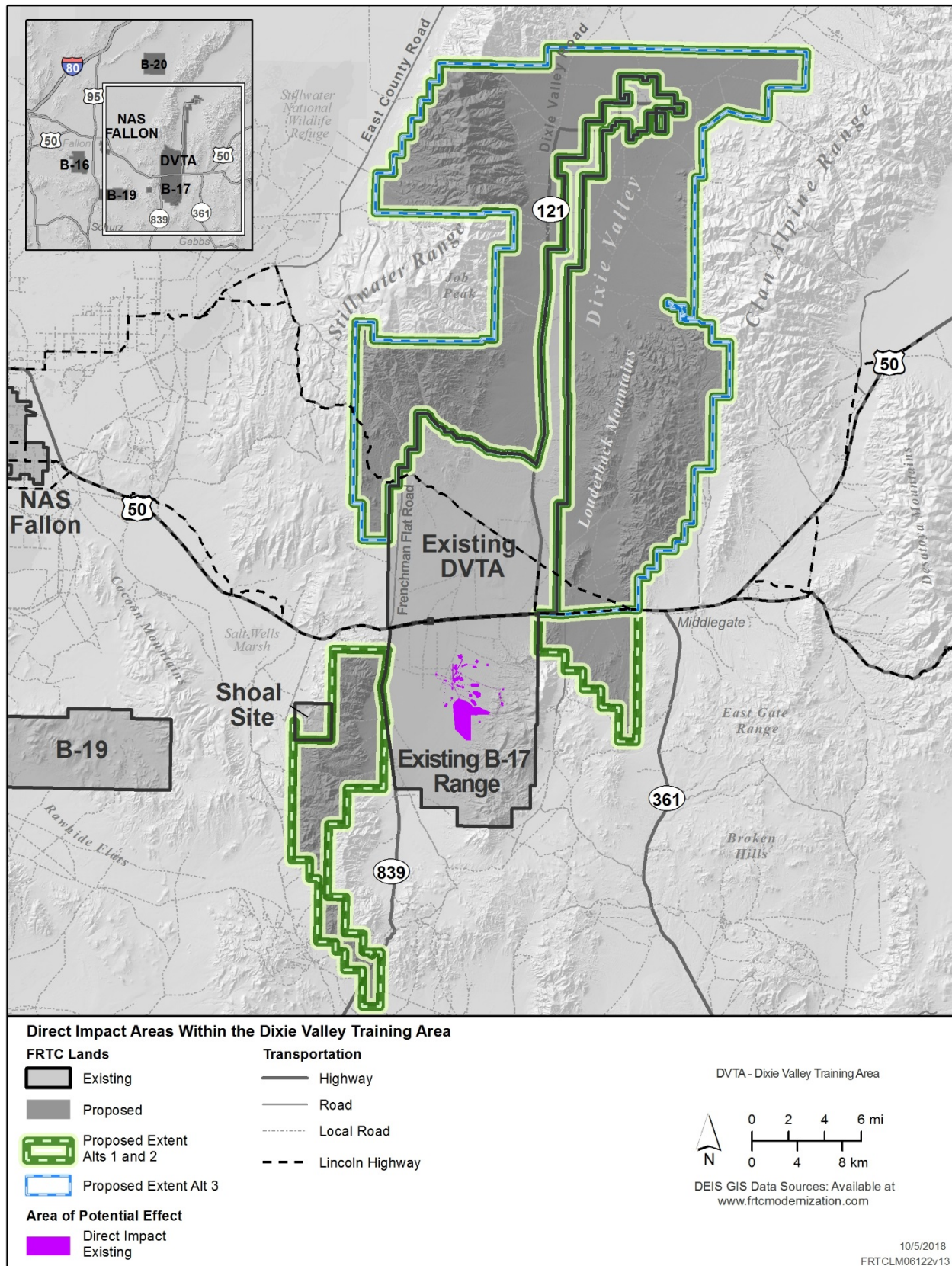


Figure 3.11-5: Direct Impact Areas Within the Dixie Valley Training Area

3.11.1.2 Regulatory Framework

Various laws protect archaeological resources, architectural resources, and traditional cultural properties. These laws are listed below:

- Section 106 of the NHPA of 1966, as amended (54 U.S.C. section 306108)
- Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469–469c-2)
- American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996 and 1996a)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa–mm)
- Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 U.S.C. 3001–3013)
- Executive Order (EO) 13007 Indian Sacred Sites

Section 106 of the NHPA is implemented by regulation 36 CFR section 800. It requires “Federal agencies to take into account the effects of their undertakings on historic properties and afford the Council a reasonable opportunity to comment on such undertakings,” (36 CFR section 800). Historic properties, as defined by the NHPA, represent cultural resources that are eligible for inclusion in the NRHP.

Historic properties must be important in American history, have physical integrity, and meet at least one of the following NRHP criteria defined in 36 CFR part 60.4:

- Criterion A: Be associated with events that have made a significant contribution to the broad patterns of American history
- Criterion B: Be associated with the lives of persons significant in the American past
- Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D: Yield, or may be likely to yield, information important in prehistory or history

To convey significance and qualify for the NRHP, historic properties also possess several, and usually most, of the following aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

Traditional cultural properties are eligible for listing in the NRHP under the same criteria as other historic property. Traditional cultural properties are typically associated with cultural practices or beliefs of a living community that are rooted in that community’s history, and are important in maintaining and continuing cultural identity of the community. Native Americans or other living communities may identify traditional cultural properties.

Under 36 CFR Section 800 of Section 106 of the NHPA, federal agencies must take into account the effects that an action would have on historic properties. The regulations implementing Section 106 (36 CFR Section 800) specify a consultation process to assist in satisfying this requirement. The Navy initiated consultation with the Nevada State Historic Preservation Office (SHPO) on May 23, 2018. In support of consultation, the Navy has completed a Class I Cultural Resources Overview and Class III Cultural Resources Inventory for requested land withdrawal and proposed acquisition areas. The Final EIS will be updated with information regarding Navy Section 106 consultation with the Nevada SHPO and with appropriate federally recognized tribes.

Under the National Environmental Policy Act (NEPA), an EIS must address the adverse and beneficial effects of a proposed federal action on important historic and cultural aspects of our national heritage (40 CFR part 1508.8) (here defined as resources eligible for or listed in the NRHP, and other designations such as the National Trails System). Secretary of the Navy Instruction 5090.8a, *Policy for Environmental Protection, Natural Resources and Cultural Resources Programs* (U.S. Department of the Navy, 2006), and Chief of Naval Operations Instruction 5090.1D, Chapter 13, *Cultural Resources Compliance and Management*, require the United States (U.S.) Department of the Navy (Navy) to consider the effects of its undertakings on cultural resources in its planning and program efforts. Secretary of the Navy Instruction 4000.35a, *Department of the Navy Cultural Resources Program* (U.S. Department of the Navy, 2001), establishes policy and assigns responsibilities within the Department of the Navy for fulfilling the requirements of cultural resources laws such as the NHPA, EO 13007, and EO 13175.

Cultural resources within the existing FRTC are managed in accordance with the NHPA, the Archaeological Resources Protection Act, the American Indian Religious Freedom Act, NAGPRA, and appropriate Navy and BLM Instructions. The Navy abides by stipulations found within the Programmatic Agreement (PA) on withdrawn lands between Nevada SHPO, BLM, and the Advisory Council on Historic Preservation. The PA requires identifying, evaluating, and treating historic properties on withdrawn lands jointly managed by Naval Air Station (NAS) Fallon and BLM to ensure protection of cultural resources and coordination between the Navy and the Nevada SHPO (Naval Air Station Fallon, 2011). The PA contains stipulations that address cultural resource staffing, coordination and information exchange with the SHPO, standard procedures, special procedures, public participation, dispute resolution, training of nonprofessional staff, reports and monitoring, reviews, amendments, suspension, termination, execution, and implementation. On withdrawn lands, the Navy also follows the cultural resources procedures of the Nevada BLM based on a State Protocol Agreement between BLM and the Nevada SHPO, which they developed pursuant to provisions of BLM's nationwide Programmatic Agreement in December 2014.

The Navy completed an Integrated Cultural Resources Management Plan (ICRMP) for FRTC in 2013. The document provides guidance to staff at NAS Fallon and users of the FRTC to ensure that all laws, regulations, policies, and directives related to cultural resources are appropriately followed while fulfilling the installation's mission. The ICRMP also provides standard operating procedures for routine actions that may affect cultural resources (U.S. Department of the Navy, 2013).

Any inadvertent discovery of sensitive archaeological materials within the existing and proposed FRTC area would be handled in accordance with the Navy's management practices, which include provisions for stopping work and notifying the appropriate parties. Depending on the origin and age of the remains, if human remains were discovered, the Navy would then follow the procedures established under the NAGPRA and Chief of Naval Operations Instruction 11170.2 series, *Navy Responsibilities Regarding Undocumented Human Burials*.

3.11.1.3 Approach to Analysis

The Navy has derived the information provided in this EIS from fieldwork, literature reviews, and direct input from tribal representatives. The Council on Environmental Quality regulations (40 CFR Section 1502.25) requires agencies to coordinate the preparation of EISs with other environmental reviews and consultation requirements to the fullest extent possible, including those of the NHPA. The NEPA process typically includes evaluating the significance of cultural resources relative to the American Indian

Religious Freedom Act, Archaeological Resources Protection Act, NAGPRA, and EO 13007 and 13175, and evaluating eligibility for inclusion in the NRHP.

The extent of cultural resource studies conducted varies from project to project. Consultation with SHPO under Section 106 of the NHPA is generally accepted as demonstrating the consideration of cultural resources mandated by NEPA. Compliance requires identifying potential impacts on archaeological and historic sites that are listed or potentially eligible for listing on the NRHP by conducting Class I, II, or III investigations, and due consideration to historic properties for avoiding or mitigating any adverse impacts that might be identified. In support of this project, Class I and Class III investigations and consultation with Native American Tribes were conducted to identify and evaluate archaeological and historic resources to support the analysis of potential effects to historic properties associated with the Proposed Action and Alternatives.

A Class I Inventory consists of three components: (1) conducting background research with the purpose of informing archaeologists of the studies that have been conducted in the past, (2) determining whether or not a previous inventory and consultation already covers the current undertaking, and (3) establishing the type and eligibility of the cultural properties previously recorded. The results of Class I report are often incorporated into a Class III report and are frequently fundamental in determining the direct and indirect effects of a particular undertaking.

A Class III inventory is an intensive investigation of the area by archaeologists to inventory the location of the undertaking, document sites, and evaluate their eligibility, in order to support consultation with the SHPO. Identification of sites may also include consultation with federally recognized tribes.

The approach to analysis follows the Section 106 process. The Section 106 process requires Federal agencies to take into account the effects of their undertakings on NRHP-listed or eligible properties. Under Section 106, an undertaking is considered to have an effect on a historic property when the undertaking alters characteristics of the property that may qualify it for inclusion in the NRHP. An effect is considered adverse when it alters any characteristic of a historic property in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR part 800.5[a][1]).

Cultural properties are considered sites, buildings, structures, objects, districts, and include traditional cultural properties important to living communities. Adverse effects on cultural properties are determined in accordance with 36 CFR Section 800.5(a)(2)(i) through (vii). Adverse effects include the following examples:

- physical destruction, damage, or alteration of all or part of the property
- isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the NRHP
- introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting
- neglect of a property resulting in its deterioration or destruction
- transfer, lease, or sale of the property out of federal ownership/control without adequate and enforceable restrictions/conditions

Analysis of adverse effects under the NHPA includes reasonably foreseeable effects, both direct and indirect, caused by the Proposed Action and Alternatives, and those effects that could occur later in time, be farther removed in distance, or be cumulative in nature (36 CFR part 800.5(a)(1)). Direct impacts may be the result of physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the importance of the resource; introducing visual, atmospheric, or audible elements that are out of character for the period the resource represents (thereby altering the setting); or neglecting the resource to the extent that it deteriorates or is destroyed. Indirect impacts can include the visual and audible elements that could adversely affect NRHP listed or eligible properties.

Several studies have been conducted on the effects of subsonic aircraft overflights, during flights as low as 120 meters above ground level, on fragile cultural resources such as caves and rockshelters associated with archaeological sites, rock faces containing petroglyphs and pictographs, adobe and unreinforced stone structures, and mine shafts and entrances (Battis, 1988; Miller and Hanson Inc., 1991). Noise and vibration have the potential cause effects to caves, rock shelters and rock formations containing rock art. However, noise and vibration studies related to subsonic aircraft overflights demonstrate that those potential effects do not generate sufficient vibrations to cause physical damage to these types of cultural resources or alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places. Therefore, vibration associated with subsonic overflights will not be analyzed further for cultural resources.

3.11.1.4 Public Scoping Concerns and Tribal Issues

Public and tribal issues raised during scoping in regards to cultural resources included compliance by the Navy in its treatment of Native American resources with respect to NAGPRA (25 U.S.C. sections 3001–3013) and the American Indian Religious Freedom Act (42 U.S.C. section 1996). Possible conflicts between the Proposed Action and the objectives of federal, regional, state and local, and Native American Tribes' land use plans, policies, and controls for the concerned areas. Public concerns were focused on cultural resources related to Gabbs Valley, historic sites and effects from sonic booms, access issues, noise, as well as visual integrity.

Concerns from the Walker River Paiute Tribe specifically include monitoring of cultural resources, using Native resources for monitoring efforts, access to tribal lands, ordnance issues in regards to contamination and safety, increased aircraft (jet) activity and noise, increased use of Tribal airspace, and increased pollution. Concerns from the Duckwater Shoshone Tribe include conducting archaeological surveys after tribal consultation, use of a tribal monitor, placing a higher value on visual integrity in regards to vision quest sites, and access to vision quest sites. The Yomba Shoshone Tribe expressed concerns related to use of native people when conducting cultural resource surveys, sonic bombs and jet flyovers and associated noise, and consultation with elders and natives.

This section and Section 3.7 (Noise) address the cultural resources issues identified through scoping that are within the scope of the EIS. Conclusions from the noise section are incorporated into the analysis for cultural resources.

For further information regarding comments received during the public scoping process, please refer to Appendix D (Public Involvement).

3.11.2 Affected Environment

3.11.2.1 Cultural Context

The following cultural context is excerpted and adapted from the ICRMP for NAS Fallon (U.S. Department of the Navy, 2013), and from the Class I Survey Report for the lands requested for withdrawal or proposed for acquisition (see Supporting Study: Class I Cultural Resources Investigation, available at <http://www.frtcmodernization.com>).

3.11.2.1.1 Prehistoric Context

Prehistoric periods identified in or near the existing and proposed FRTC Modernization Area include the Hypothetical Pre-Clovis (< 20,000–9500 BC), Western Clovis (9500–8500 BC), Great Basin Stemmed Point (8500–5000 BC), Mixed Dart (5000–2500 BC), Gatecliff (2500–500 BC), Elko (500 BC–AD 500), Rosegate (AD 500–1350), and Desert (AD 1350–1850) periods (U.S. Department of the Navy, 2013).

Pre-Clovis groups were probably organized into highly mobile, independent family units with an unspecialized subsistence economy based on hunting and gathering a wide variety of plants and animals. Sites would most likely be identified along the former shorelines of Pleistocene Lakes. The Western Clovis period occupations areas are identified by the presence of fluted points (ancient stone weaponry) and may represent an adaptation to lacustrine (marshes, lakes, and rivers) resources rather than big game hunting, as defined in other parts of the western United States. The lacustrine adaptation continues in the Great Basin Stemmed Point period and is characterized by weakly shouldered large blades with heavily ground and usually rounded bases. Twined basketry and weaving are present during this period.

The Mixed Dart period represents a shift from the large stemmed points to a variety of strongly shouldered dart points, some notched with expanding stems, others with square stems, and most importantly the Pinto Split-stem point. Milling slabs and handstones for processing seeds are common. Basketry including simple S-twist and diagonal twisting as well as some of the earliest examples of coiled basketry are associated with this period. Olivella shell beads were also being traded from the California coast.

The Gatecliff period occupations indicate some degree of sedentism suggested by the structural complexity, and the size and number of houses found in winter villages. Lowland sites tend to have well-developed milling assemblages and fauna dominated by rabbits and rodents. Periodic movement to resource zones away from these villages is indicated by the use of caves as temporary camps and cache sites. Specialized hunting camps in the mountains are also common throughout the area and often include faunal assemblages dominated by bighorn sheep. Trade of Olivella shell beads increased during this time. The Elko period occupations were a continuation of the Gatecliff adaptation; however, the trade of Olivella shell beads decreased greatly.

Bow and arrow technology characterizes the Rosegate Period. Villages along major rivers were occupied but the houses became smaller. Cave sites continued to be used for burials and caches. Intensification of plant food processing and small game harvest (especially rabbits) characterized the subsistence in the Rosegate period, with less emphasis on the use of large game. The Desert period is identified by the presence of the Desert Side-Notched point. Residential sites near rivers and marshes were still in use in this period, but house size decreased, and most houses lack internal features such as hearths, post holes, and cache and burial pits. The diet appears to have been dominated by fish, small game,

waterfowl, and seeds. Some groups began to intensively exploit pinyon along the eastern slope of the Sierra and in some of the higher interior ranges.

3.11.2.1.2 Historic Context

The Fallon area's Euro-American history began in the late 1820s with fur trapping parties and exploratory expeditions. Major events that influenced the region's chronology included emigrant wagon trains in the 1840s, the 1849 California Gold Rush, and Comstock Lode (1859–1880). In the early 20th century, the Newlands Project (1903–1905), highway construction, and the construction of the Churchill County's airstrip set the stage for the Fallon area's strong ties to the federal government that continue to the present.

In 1943, the Navy assumed control of the airfield and constructed barracks, hangars, air traffic control facilities, and target ranges. In 1944, it commissioned the Naval Auxiliary Air Station Fallon. The Navy placed the station on caretaker status in 1946, but reactivated it in 1951. On January 1, 1972, Naval Auxiliary Air Station Fallon became NAS Fallon. NAS Fallon's training mission expanded steadily in the 1980s with the arrival of the Tactical Aircrew Combat Training System and the permanent assignment of Strike Fighter Squadron 127, the "Desert Bogeys." Changes in aviation technology brought more advanced aircraft to NAS Fallon, such as the F/A-18 Hornet. In 1995 and 1996, the U.S. Navy Fighter Weapons School (TOPGUN) and the Carrier Airborne Early Warning Weapons School (TOPDOME) were merged with Strike University, creating the Naval Strike and Air Warfare Center, which is now named the Naval Aviation Warfighting Development Center.

3.11.2.2 Traditional Cultural Properties

Traditional cultural properties are locations that have cultural or religious value and are determined to be eligible for the NRHP or are already listed. They include some prehistoric and historic archeological sites (especially those with cemeteries), locations of harvestable resources, and spiritual locations that lack physical artifacts. The term "places of cultural and religious importance" denotes a general category of places that have not been designated as a traditional cultural property but have been identified as culturally or spiritually significant to the Native American Tribes.

The Fallon Paiute-Shoshone, the Walker River Paiute, and the Yomba Paiute Tribes have land or utilize resources within the existing and proposed FRTC Modernization area (U.S. Department of the Navy & Bureau of Land Management, 2001). Based on previous consultation and discussions with the Tribes regarding the Resource Management Plan for certain federal lands in Churchill County, the Navy and BLM identified sensitive areas that have religious or cultural importance (U.S. Department of the Navy & Bureau of Land Management, 2001). These include mountain peaks, springs, plant resources, and pinyon stands. Numerous other religious or sacred sites are present, but land-managing agencies have not identified these areas.

Table 3.11-1 provides a list of Native American Tribes that the Navy believes have a potential interest in this project.

The Navy invited culturally affiliated and interested Tribes to participate in the NEPA process for this EIS (see Appendix C, Tribal Correspondence). In addition, the Navy invited interested Tribes to (1) participate in project meetings, (2) provide additional information related to cultural resources, and (3) provide internal document review (e.g., of the Class III Cultural Resources Inventory Report) during the development of this Draft EIS. The Navy has invited Government-to-Government consultations with the Inter-Tribal Council of Nevada and the following federally recognized Tribes: the Duckwater

Shoshone Tribe, Fallon Paiute-Shoshone Tribe, Fort McDermitt Paiute and Shoshone Tribes, Lovelock Paiute Tribe, Pyramid Lake Paiute Tribe, Reno-Sparks Indian Colony, Summit Lake Paiute Tribe, Te-Moak Tribe of Western Shoshone Indians of Nevada (consisting of the Battle Mountain Band, Elko Band, South Fork Band, and Wells Band), Washoe Tribe of Nevada and California, Walker River Paiute Tribe, Winnemucca Paiute Tribe, Yerington Paiute Tribe, and Yomba Shoshone Tribe (Table 3.11-1).

Table 3.11-1: Native American Tribes with Potential Interest in the Area of Potential Effect

Reservation/Colony	Primary Tribal Composition
Duckwater Shoshone Tribe	Western Shoshone
Fallon Paiute-Shoshone Tribe	Northern Paiute/Western Shoshone
Fort McDermitt Paiute and Shoshone Tribe	Northern Paiute/Western Shoshone
Lovelock Paiute Tribe	Northern Paiute
Pyramid Lake Paiute Tribe	Northern Paiute
Reno-Sparks Indian Colony	Northern Paiute/Western Shoshone/Washoe
Summit Lake Paiute Tribe	Northern Paiute
Te-Moak Tribe of Western Shoshone	Western Shoshone
Walker River Paiute Tribe	Northern Paiute/Western Shoshone
Washoe Tribes of California and Nevada	Washoe
Winnemucca Indian Colony	Northern Paiute
Yerington Paiute Tribe	Northern Paiute
Yomba Shoshone Tribe	Western Shoshone

3.11.2.3 Bravo-16

3.11.2.3.1 Studies Conducted

Four major sources of information are available for the B-16 APE (see Figure 3.11-2). The first is from the *Integrated Cultural Resources Management Plan* for NAS Fallon (U.S. Department of the Navy, 2013). The second is from five previously conducted Class III inventories that were conducted adjacent to and overlapping with the existing B-16 range. These were completed between 2012 and 2014, after the ICRMP was finalized. The third and fourth are from Class I (see Supporting Study: Class I Cultural Resources Investigation, available at <http://www.frtcmodernization.com>) and Class III cultural resource inventories conducted in 2017 and 2018 for the proposed B-16 land withdrawal expansion area in support of this EIS.

3.11.2.3.2 Archaeological Resources

Based on the ICRMP, 85 known archaeological sites were identified within the existing B-16 range. Of those sites, 56 were unevaluated, 26 were not eligible for the NRHP, and 3 were eligible for the NRHP (U.S. Department of the Navy, 2013). Since the publication of the ICRMP, unevaluated sites have been evaluated, and additional sites have been located and evaluated by the Navy. To date, 551 sites have been identified within the existing B-16 range. This includes those identified in the ICRMP. Of the 551 sites, 34 are unevaluated, 480 are not eligible for the NRHP, and 37 are eligible for the NRHP. Unevaluated sites are treated as “eligible” unless and until assessed and concluded to be “ineligible.” Four rock shelters have also been recorded in B-16.

Based on the Class I and Class III cultural resources investigation conducted for the direct and indirect APE for the proposed B-16 land withdrawal to date, there are 110 previously recorded archaeological sites: 5 unknown sites (sites that need further analysis), 1 unevaluated site, 95 not eligible sites, and 9

eligible sites. Of the nine eligible sites, five are single-component prehistoric and four are multicomponent, as shown in Table 3.11-2.

**Table 3.11-2: Eligible Archaeological Sites in the Proposed B-16 Land Withdrawal
Area Within and Near B-16**

BLM Site No. (CrNV- 03)	State Site No. (26-)	Age	Site Type	NRHP Eligibility
03-564	CH84	P	Rock Art	Eligible under Criteria C & D
03-4990	CH2083	M	Rock Art & Basic Habitation/Trapping	Eligible under Criteria C & D
03-5262	CH2082	M	Basic Habitation/Trapping	Eligible under Criteria C & D
03-6287	CH2092	P	Rock Art	Eligible under Criteria C & D
03-10350	CH2100	P	Rock Art	Eligible under Criteria C & D
03-10383	CH4449	P	Complex Flaked Stone	Eligible under Criterion D
03-10392	CH4458	P	Complex Flaked Stone	Eligible under Criterion D
03-10414	CH4480	M	Quarry/Refuse Scatter	Eligible under Criterion D

Notes: P = prehistoric; M = multicomponent (prehistoric and historic)

3.11.2.3.3 Architectural Resources

Based on previous studies, including the Class I cultural resources investigation, there are no known NRHP-eligible architectural resources within the B-16 range APE (U.S. Department of the Navy, 2013).

3.11.2.3.4 Traditional Cultural Properties and Tribal Resources

Based on previous studies, including the Class I cultural resources investigation, no known traditional cultural properties are present in the B-16 APE. One tribal resource site known as Salt Cave is located in the B-16 APE. The Salt Cave has pictographs that are culturally significant to the Northern Paiute.

3.11.2.4 Bravo-17

3.11.2.4.1 Studies Conducted

Four major sources of information are available for the B-17 APE (see Figure 3.11-3). The first is from the *ICRMP* for NAS Fallon (U.S. Department of the Navy, 2013). The second is from nine Class III inventories that the Navy previously conducted within the existing B-17 range. The third and fourth are from Class I (see Supporting Study: Class I Cultural Resources Investigation, available at <http://www.frtcmodernization.com>) and Class III cultural resource inventories the Navy conducted in 2017 and 2018 for the anticipated direct impact areas and the entire proposed B-17 land withdrawal and acquisition expansion area in support of this EIS. The Class III cultural resource inventory is ongoing and the Final EIS will be updated accordingly.

3.11.2.4.2 Archaeological Resources

Based on the *ICRMP*, currently, there are 163 known archaeological sites within the existing B-17 range. Of those sites, 129 are unevaluated, 30 are not eligible for the NRHP, and 4 are eligible for the NRHP. Archaeological sites associated with mining sites and camps have been identified within the existing B-17 range and consist of dry stacked stone structures, mine adits, shafts, and prospect pits; none of these sites have yet been inventoried or evaluated to determine NRHP eligibility (U.S. Department of the

Navy, 2015). The Navy will not evaluate these sites further for this EIS because they are not located within a proposed target or direct impact area. Most of the sites within the existing B-17 range are open lithic scatters (chipped stone debris).

Based on the Class I and Class III investigations conducted for the direct and indirect APE for the proposed B-17 land withdrawal (to date), the Navy identified 317 archaeological sites, consisting of 1 unknown site, 12 unevaluated sites, 181 not eligible sites, 1 exempt site (exempt from NRHP because it is an isolate), 1 collected site (taken by private collectors and donated to the Nevada State Museum), and 20 eligible sites. Of the eligible sites, 15 are single-component prehistoric and 5 are multicomponent, as shown in Table 3.11-3. Additional data will be presented upon completion of on-going cultural resource studies associated with Alternative 3 between the Draft and Final EIS.

Table 3.11-3: NRHP Eligible Archaeological Sites within Lands Requested for Withdrawal or Proposed for Acquisition for B-17

BLM Site No. (CrNV-03)	State Site No. (26-)	Age	Site Type	NRHP Evaluation
03-3504	CH942	P	Complex Habitation	Eligible under Criterion D
03-3730	CH1236	M	Complex Habitation/Ranching (Bell Flat Well)	Eligible under Criterion D
03-3731	CH1237	P	Lithic Quarry	Eligible under Criterion D
03-4655	CH2055	M	Basic Habitation/Historic Camp	Eligible under Criterion D
03-7012	MN1735	P	Complex Habitation	Eligible under Criterion D
03-7017	MN1740	P	Complex Flake Stone/Prospect Complex	Eligible under Criterion D
03-7019	MN1742	M	Complex Habitation/Refuse Scatter	Eligible under Criterion D
03-7021	MN1744	P	Complex Habitation	Eligible under Criterion D
03-7169	MN1753	P	Basic Habitation	Eligible under Criterion D
03-7439	MN1898	M	Basic Habitation/Homestead	Eligible under Criterion D
03-7809	MN1986	P	Basic Habitation	Eligible under Criterion D
03-8550	CH3403	M	Basic Habitation/Refuse Scatter	Eligible under Criterion D
03-8553	CH3406	P	Basic Habitation	Eligible under Criterion D
03-8564	CH1765	P	Complex Flaked Stone	Eligible under Criterion D
03-10446	CH4512	P	Quarry	Eligible under Criterion D
03-10449	CH4515	P	Quarry	Eligible under Criterion D
03-10475	CH4541	P	Complex Flaked Stone	Eligible under Criterion D
03-10499	CH4565	P	Complex Flaked Stone	Eligible under Criterion D
03-10509	CH4575	P	Quarry	Eligible under Criterion D
03-10529	MN2406	P	Complex Flaked Stone	Eligible under Criterion D

Note: P = prehistoric; M = multicomponent (prehistoric and historic)

3.11.2.4.3 Architectural Resources

Based on previous studies, including the Class I cultural resources investigation, there are no known NRHP-eligible architectural resources within the existing B-17 range (see Figure 3.11-3) (U.S. Department of the Navy, 2015).

3.11.2.4.4 Traditional Cultural Properties and Tribal Resources

Based on previous studies, including the Class I cultural resources investigation, one traditional cultural property and four important tribal resource sites are located in the B-17 APE and listed in Table 3.11-4. These sites are affiliated with the Northern Paiute and Western Shoshone.

Table 3.11-4: Tribal Resources in the APE within and Near B-17

Tribal Resources	Tribal Affiliation	Traditional Cultural Property	Property Type
Fairview Peak	Northern Paiute Western Shoshone	No	Resource collection area
Pah-rum Peak	Northern Paiute	No	Unknown
Monte Cristo Paint Source	Northern Paiute	No	Resource collection area
Rawhide Spring	Western Shoshone	Yes	Spiritual and ceremonial location
South End of NAS Fallon	Northern Paiute	No	Unknown

3.11.2.5 Bravo-20

3.11.2.5.1 Studies Conducted

Five major sources of information are available for the B-20 APE (see Figure 3.11-4). The first is from the ICRMP for NAS Fallon (U.S. Department of the Navy, 2013). The second and third are two Class III inventories that the Navy previously conducted within the existing B-20 range. The fourth and fifth are from Class I (see Supporting Study: Class I Cultural Resources Investigation, available at <http://www.frtcmodernization.com>) and Class III cultural resource inventories the Navy conducted in 2017 for direct impacts within the proposed B-20 requested land withdrawal and proposed acquisition expansion area in support of this EIS (see Figure 3.11-4).

3.11.2.5.2 Archaeological Resources

Based on previous studies such as the ICRMP for NAS Fallon (U.S. Department of the Navy, 2013), and information found during the Class I cultural resources investigation in B-20, one known archaeological site exists. It is not eligible for the NRHP. Based on a Class III cultural resources investigation conducted for the direct APE for the proposed B-20 land withdrawal, 30 archaeological sites were identified, consisting of 1 listed site, 5 unevaluated sites, 16 not eligible sites, 5 eligible sites, and 3 collected sites. The one listed site and five eligible sites are classified as single component prehistoric, as shown in Table 3.11-5.

Table 3.11-5: NRHP Listed and Eligible Archaeological Sites within Lands Requested for Withdrawal or Proposed for Acquisition for B-20

BLM Site No. (CrNV-03)	State Site No (26-)	Age	Site Type	NRHP Eligibility
-	CH1446	P	Complex Habitation	Eligible under Criterion D
-	CH1448	P	Complex Habitation	Eligible under Criterion D
-	CH1449	P	Complex Habitation	Eligible under Criterion D
-	CH304	P	Stillwater Marsh Archaeological District	Listed
22-7736	-	P	Complex Habitation	Eligible under Criterion D
22-7738	-	P	Complex Habitation	Eligible under Criterion D

Note: P = prehistoric

3.11.2.5.3 Architectural Resources

Based on previous studies, including the Class I and III cultural resources investigation, there are no known NRHP-eligible architectural resources within the existing or the proposed B-20 requested land withdrawal and proposed acquisition area (U.S. Department of the Navy, 2015).

3.11.2.5.4 Traditional Cultural Properties and Tribal Resources

Based on previous studies, including the Class I cultural resources investigation, there is one potential traditional cultural property site, Lone Rock, located within the B-20 APE. It is affiliated with the Northern Paiute as a traditional origin and mythological place, as well as a spiritual and ceremonial location. The Northern Paiute considered Lone Rock to be a healing and vision questing site. A tribal resource site in the B-20 APE known as the West Humboldt Range is also considered a place of cultural significance for the Northern Paiute.

3.11.2.6 Dixie Valley Training Area

3.11.2.6.1 Studies Conducted

Two major sources of information available for the DVTA APE (see Figure 3.11-5) are the ICRMP for Naval Air Station Fallon (U.S. Department of the Navy, 2013) and a Class I cultural resources (Supporting Study: Class I Cultural Resources Investigation, available at <http://www.frtcmodernization.com>) investigation conducted in 2017 and 2018 in support of this EIS. A Class III cultural resource inventory is ongoing through 2018, and the Final EIS will be updated with information from it accordingly.

3.11.2.6.2 Archaeological Resources

Based on previous studies, including the Class I cultural resources investigation, currently, there are 101 known archaeological sites in the DVTA APE. Of those sites, 5 are unevaluated, 72 are not eligible, and 18 are eligible for the NRHP. Other historic resources within the APE include approximately 10 ranches located on the DVTA. Based on a Class I cultural resources investigation conducted for the indirect APE for the DVTA land requested for withdrawal or proposed for acquisition (to date), the Navy identified 54 archaeological sites, consisting of 2 unknown sites, 11 unevaluated sites, 32 not eligible sites, 1 exempt site, 6 eligible sites, and 2 collected sites. Of the eligible sites, one is multicomponent, one is prehistoric, and four are historic (Table 3.11-6). Additional data will be presented upon completion of on-going cultural resource studies associated with Alternative 3.

Table 3.11-6: NRHP Eligible Archaeological Sites within Lands Requested for Withdrawal or Proposed for Acquisition for the DVTA

BLM Site No. (CrNV-)	State Site No. (26-)	Age	Site Type	NRHP Eligibility
-	CH1891	M	Complex Habitation/Refuse Deposit	Eligible under Criterion D
03-3618	CH1078	P	Cave/Rockshelter	Eligible under Criterion D
03-7846	CH2177	H	Homestead (Lorraine Spencer Homestead)	Eligible under Criteria A and D
03-7848	CH2179	H	Homestead (Devore Homestead)	Eligible under Criterion C
03-7849	CH2180	H	Homestead (Ellis Homestead)	Eligible under Criteria A, C, & D
03-7852	CH2183	H	Homestead (Derrick Complex)	Eligible under Criteria A and D

Notes: P = prehistoric, M = multicomponent (historic and prehistoric), H = historic

3.11.2.6.3 Architectural Resources

The Navy manages four NRHP-eligible architectural resources within the proposed DVTA withdrawal area based on the ICRMP (Table 3.11-7) (U.S. Department of the Navy, 2013). Several homesteads and ranches settled between 1914 and 1940. Despite the abandonment of nearly all of the ranches in the 1980s, a number of features continue to exist that are preserved by the efforts of the people in the valley. Eligible resources in Dixie Valley include the Devore Homesite, Ellis Ranch, and the Spencer-Derrick Homestead.

Table 3.11-7: NRHP Eligible Architectural Sites within Lands Requested for Withdrawal or Proposed for Acquisition for the DVTA

Building/Site Number	Name	Location	Date of Construction	Description
26CH2177	Lorraine-Spencer Homestead	Dixie Valley Training Area	1920s	Eroded stone foundation, cottonwoods and corrals, 1950s refuse scatter
26CH2179	Devore Homesite (formerly part of Ellis Ranch)	Dixie Valley Training Area	1920s	Eroded adobe structure and small adobe food cellar associated with the historic archaeological deposits
26CH2180	Ellis Ranch	Dixie Valley Training Area	1920s	Semi-subterranean food storage building with stone foundation associated with the historic archaeological deposits
26CH2183	Spencer-Derrick Homestead	Dixie Valley Training Area	1920s	Nine contributing elements (five wood frame buildings consisting of two stores and three residences, four structures including three wood frame and earthen root cellars and a wood headframe) and two non-contributing elements

3.11.2.6.4 Traditional Cultural Properties and Tribal Resources

Based on previous studies, including the Class I cultural resources investigation, there is one traditional cultural property and five tribal resource sites in the DVTA APE (Table 3.11-8). These sites are affiliated with the Northern Paiute and Western Shoshone.

Table 3.11-8: Tribal Resources Within and Near the DVTA APE

Tribal Resources	Tribal Affiliation	Traditional Cultural Property	Property Type
Chalk Mountain	Paiute-Shoshone	Yes	Traditional origin or mythological place and a resource collection area
Spring in Cox Canyon	Northern Paiute	No	Unknown
Job Peak	Northern Paiute	No	Traditional origin or mythological place, spiritual and ceremonial location, and resource collection area
Silver Hill	Northern Paiute	No	Resource collection area

Table 3.11-8: Tribal Resources Within and Near the DVTA APE (continued)

Tribal Resources	Tribal Affiliation	Traditional Cultural Property	Property Type
Stillwater Range	Northern Paiute	No	Traditional origin or mythological place, spiritual and ceremonial location, and resource collection area
Wolf's Battleground	Northern Paiute	No	Traditional origin or mythological place and spiritual and ceremonial location

3.11.2.7 Special Use Airspace

3.11.2.7.1 Studies Conducted

The major source of information available for the existing and proposed FRTC Special Use Airspace is the *Analysis of the Management Situation: Carson City District Resource Management Plan Revision and Environmental Impact Statement* (Bureau of Land Management, 2013b). Other sources include those found during a site files search conducted with the Nevada SHPO and information compiled from BLM documents as part of the 2015 *Military Readiness Activities at Fallon Range Training Complex Nevada Final Environmental Impact Statement* (U.S. Department of the Navy, 2015).

3.11.2.7.2 Archaeological Resources

About 10 percent of BLM-managed land, or less than 500,000 acres, has been inventoried for cultural resources in the BLM Carson City District, which includes land beneath the SUA (Figure 3.11-1). Approximately 9,000 prehistoric and historic archaeological sites have been recorded district-wide. Only two NRHP-listed resources are located near but not underneath the Supersonic Operating Area B (where sonic booms originate below 30,000 feet but above 11,000 feet): the Grimes Point Archaeological Area and Hidden Cave, and the Sand Springs Pony Express Station (Bureau of Land Management, 2013b). No NRHP-listed archaeological sites have been identified within the expanded supersonic operations area (Supersonic Operating Area B) (see Figure 3.11-1). The Supersonic Operating Area A occurs above 30,000 feet, and no NRHP-listed archaeological sites have been identified within the expanded supersonic operations area. In addition, no NRHP-listed archaeological sites were identified within the Reno Military Operations Area (MOA).

3.11.2.7.3 Architectural Resources

Based on the site files search conducted with the Nevada SHPO and information compiled from BLM documents as part of the 2015 *Military Readiness Activities at Fallon Range Training Complex Nevada Final Environmental Impact Report*, 18 NRHP-eligible architectural resources and two historic districts were identified beneath the Supersonic Operating Area B (Table 3.11-9) (U.S. Department of the Navy, 2015). No NRHP-listed architectural sites have been identified within the expanded Supersonic Operations Area A (above 11,000 feet) (refer to the Zircon MOA in Figure 1-1). The Eureka Historic District is on the eastern edge of the Supersonic Operating Area B and SUA (see Figure 3.11-1). In addition, only one NRHP-listed resource, the Gerlach Water Tower, and no historic districts are located under the Reno MOA (Wierprecht, 1981).

Table 3.11-9: NRHP Eligible Architectural Resources Underneath Supersonic Operating Area B

Building/Site Number	Name	Date of Construction	Description
D142	Tenabo Townsite Historic District	1907–1950s	Nine contributing elements (five wood frame buildings consisting of two stores and three residences, four structures including three wood frame and earthen root cellars and a wood headframe) and two non-contributing elements
C40	Carico Lake Ranch Bunkhouse	1941–1942	Wood frame building (adjacent adobe structure)
C41	Carico Lake Ranch Cellar	1890s	Stone cellar located under bunkhouse
26EU2621	Lime Kiln	1885	Top-loading lime kiln; contributing element to the Cortez Historic District
26LA1314	Dwelling A	1900	Wood frame and eroded adobe building; contributing element to the Cortez Historic District
26LA1314	Dwelling B	1900	Adobe walled building with stone foundation; contributing element to the Cortez Historic District
26LA1314	Dwelling C	1900	Adobe walled building with stone foundation; contributing element to the Cortez Historic District
26LA1314	Dwelling D	1890	Wood frame building; contributing element to the Cortez Historic District
26LA1314	Dwelling E	1910	Wood frame building; contributing element to the Cortez Historic District
26LA1314	Dwelling F	1890	Wood frame building; contributing element to the Cortez Historic District
26LA1314	Dwelling G (Cortez Company Store/Boarding House/Office Storage Room/Warehouse)	1890	Stone building; contributing element to the Cortez Historic District
26LA1314	Dwelling H	1900	Adobe building with stone foundation; contributing element to the Cortez Historic District
26CH310	Cold Springs Station (Pony Express station)	1860	Large multi-room stone foundation with mud (representing living quarters, barn, corral, and storage area); 116 feet by 51 feet in size
26CH302 (State Historic Landmark 83)	Rock Creek Station, also known as Cold Springs Station 2 (Rock Creek Station was the designation of the Overland Stage stop; Cold Springs Station 2 was the designation of the Pony Express station)	1860	Two large multi-room dry-laid stacked stone wall and foundations
No assigned number	Edwards Creek Station (Pony Express Station)	1860	Dry-laid stacked stone walls and foundation

Table 3.11-9: NRHP Eligible Architectural Resources Underneath Supersonic Operating Area B (continued)

Building/Site Number	Name	Date of Construction	Description
26LA78	Edwards Creek Station (Pony Express Station)	1860	Adobe structure with thatched roof and adobe and stone wall and foundations
No assigned number (State Historic Landmark 135)	New Pass Station (Overland Stage Station)	1861–1869	Large multi-room dry-laid stacked stone walls and foundation
No assigned number	Overland Telegraph Repeater and Maintenance Station	1861–1869	Large multi-room dry-laid stacked stone walls and foundation

3.11.2.7.4 Traditional Cultural Properties and Tribal Resources

Based on the site files search conducted with the Nevada SHPO and information compiled from BLM documents as part of the 2015 *Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Report*, there are 50 tribal resource sites underlying the indirect APE for Supersonic Operating Area B, in addition to those already listed above for B-16, B-17, B-20, and the DVTA (Table 3.11-10), but none underlying the Supersonic Operating Area A or the Reno MOA (Table 3.11-10) (U.S. Department of the Navy, 2015). These sites under Supersonic Operating Area B are affiliated with the Northern Paiute and Western Shoshone tribes.

In the Carson City District Draft Resource Management Plan and associated Draft EIS, the BLM has proposed one area of critical environmental concern (ACEC) near or beneath the Supersonic Operating Area B that contains sensitive Native American resources. The proposed Fox Peak Cultural ACEC is located in the Stillwater Mountain Range and includes the Stillwater Marsh area; this ACEC occurs beneath the western portion of Supersonic Operating Area B. This proposed Fox Peak Cultural ACEC is important to the Fallon Paiute-Shoshone Tribe because the area is associated with local creation stories, contains habitation sites with burials, and is a traditional procurement area for animals and plants for food, medicine, and basketry (Bureau of Land Management, 2013c). The Fallon Paiute-Shoshone Tribe initially proposed an ACEC for the majority of the Stillwater Range; however, the BLM has determined that only the area around Fox Peak meets the qualifications for an ACEC and is proposing one under Alternative E of the Draft Resource Management Plan (Bureau of Land Management, 2014).

In addition to prehistoric and historic archaeological sites (of which 60 of 104 are considered eligible for listing on the NRHP) and the presence of an important prehistoric transportation route, the Fallon Paiute-Shoshone Tribe considers Sand Mountain to be sacred (Bureau of Land Management, 2013c).

Table 3.11-10: Tribal Resource Sites Underlying the Supersonic Operating Area B

Tribal Resource Site	Tribal Affiliation	Traditional Cultural Property	Property Type
Allen Springs	Northern Paiute	No	Traditional origin or mythological place and historical location
Bonita Canyon Vision Quest	Western Shoshone	No	Spiritual and ceremonial location
Bowman Creek Water Baby Site	Western Shoshone	No	Traditional origin or mythological place

Table 3.11-10: Tribal Resource Sites Underlying the Supersonic Operating Area B (continued)

Tribal Resource Site	Tribal Affiliation	Traditional Cultural Property	Property Type
Bull Rush Spring Vicinity	Western Shoshone	No	Spiritual and ceremonial location
Bunejug Mountains	Northern Paiute	No	Unknown
Child Burial	Northern Paiute	No	Burial location
Calico Hills	Northern Paiute	No	Traditional origin or mythological place
Chocolate Butte	Northern Paiute	No	Resource collection area
Coyote Story	Western Shoshone	No	Traditional origin or mythological place
Cushman Ranch	Northern Paiute	No	Ethnohistoric habitations site
Cornish Canyon (Dave Canyon)	Northern Paiute	No	Spiritual and ceremonial location, historic location, and resource collection area
Dixie Hot Springs	Not identified	No	Spiritual and ceremonial location
Dynamic Cave	Northern Paiute	No	Spiritual and ceremonial location
East Gate Area	Northern Paiute or Western Shoshone	No	Traditional origin or mythological place, spiritual and ceremonial location, and historical location
Fairview Peak	Northern Paiute	No	Resource collection area
Gabbs Valley Treaty Site	Western Shoshone	No	Historic location
Grimes Point	Northern Paiute	No	Traditional origin or mythological place and spiritual and ceremonial location
Hickison Summit	Western Shoshone	No	Spiritual and ceremonial location
Iron Mountain	Western Shoshone	No	Unknown
Labou Flats	Northern Paiute	No	Ethnohistoric habitation site
Lee Hotsprings	Northern Paiute	No	Spiritual and ceremonial location
Lovelock Cave	Northern Paiute	No	Traditional origin or mythological place and historical location
Meteorite (Shoshone Mountain)	Western Shoshone	No	Traditional origin or mythological place
Middlegate	Northern Paiute	No	Traditional origin or mythological place
Mount Airy	Western Shoshone	No	Historical location and spiritual and ceremonial location
Mount Airy Spring	Western Shoshone	No	Historical location and spiritual and ceremonial location
Mount Callaghan	Western Shoshone	No	Spiritual and ceremonial location
Mount Hope	Western Shoshone	No	Resource collection area
Mount Tenabo	Western Shoshone	No	Traditional origin or mythological place, spiritual and ceremonial location, resource collection area, and ethnohistoric location
Reeds Canyon	Western Shoshone	No	Traditional origin or mythological place
The Needles	Northern Paiute	No	Spiritual and ceremonial location

Table 3.11-10: Tribal Resource Sites Underlying the Supersonic Operating Area B (continued)

Tribal Resource Site	Tribal Affiliation	Traditional Cultural Property	Property Type
Pilots Cones (Big and Little Sister)	Western Shoshone	No	Traditional origin or mythological place, spiritual and ceremonial location
Rattlesnake Hill	Unidentified	No	Unknown but contains small cave
Redmond's Station	Northern Paiute	No	Ethnohistorical habitation site and historic location
Roberts Mountains Vision Quest	Western Shoshone	No	Spiritual and ceremonial location
Rock Woman	Western Shoshone	No	Traditional origin or mythological place
Salt Works	Northern Paiute	No	Traditional origin or mythological place
Sand Mountain	Northern Paiute, Western Shoshone	No	Traditional origin or mythological place
Shooting Contest	Western Shoshone	No	Traditional origin or mythological place
Landform in the Middle of Smoke Valley	Western Shoshone	No	Traditional origin or mythological place
Soda Lake	Northern Paiute	No	Traditional origin or mythological place
Spencer Hot Springs	Western Shoshone	No	Traditional origin or mythological place
Limbo Mountain	Northern Paiute	No	Resource collection area
Stillwater Point	Northern Paiute	No	Spiritual and ceremonial location
Table Mountain	Northern Paiute	No	Spiritual and ceremonial location and historic location
Gabbs Valley Spring	Western Shoshone	No	Spiritual and ceremonial location
Shoshone Mountains Vision Quest/Sweat	Western Shoshone	No	Spiritual and ceremonial location
Volcanic Cone	Western Shoshone	No	Spiritual and ceremonial location
Weasel Trail	Northern Paiute	No	Traditional origin or mythological place and Spiritual and ceremonial location
Woman in the Rock	Western Shoshone	No	Traditional origin story or mythological place

3.11.3 Environmental Consequences

The following provides an analysis of environmental effects of the No Action Alternative and Alternatives 1 through 3 against the environmental baseline as described in Section 2.4 (Environmental Baseline [Current Training Activities]). Conclusions for the No Action Alternative, and Alternatives 1, 2, and 3 are located at the end of the section in Table 3.11-11.

3.11.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and the current withdrawal would be allowed to expire. All training activities within the FRTC that require ground ranges or restricted airspace would likely cease following the expiration of the land withdrawal in November 2021.

Upon the expiration of this withdrawal, the Navy would work with stakeholders to prioritize and address any environmental remediation needed on these lands, in anticipation of potential relinquishment to the BLM or other potential disposal options.

Under the No Action Alternative, some of the actions needed to decommission, decontaminate, and reuse the closed range could potentially affect the cultural resources present in the FRTC. Both the Department of the Navy and Department of the Interior would be involved in the processing of the closed FRTC. Management and use of the closed FRTC would continue to be subject to the regulations that implement the NHPA, including consultations in accordance with Section 106, NAGPRA, and other applicable law and regulations governing the protection and management of cultural resources. Thus, the potential effects of the closure process and future land use proposals on cultural resources would be addressed by the responsible agency at such time that these issues become timely. A decision to allow the FRTC land withdrawal to expire, however, would have no significant impact on cultural resources because federal management of the area would continue.

3.11.3.2 Alternative 1: Modernization of the Fallon Range Training Complex

Under Alternative 1, the Navy would renew the current public land withdrawal, propose to acquire additional land, and add SUA to be reserved for military use. This section addresses direct and indirect impacts associated with the proposed range expansions, airspace modifications, and range infrastructure-related changes, including construction and installation of perimeter fencing. The APE for the ranges encompass the proposed construction and ground disturbance areas related to Alternative 1 and provided in Figures 3.11-2 through 3.11-5. Figure 3.11-1 provides the APE for airspace modification and supersonic activities. Relocation of State Route 839 and Paiute Pipeline would potentially occur under Alternative 1.

3.11.3.2.1 Bravo-16

Land Withdrawal and Acquisition

Under Alternative 1, B-16 would expand to the west by approximately 32,201 acres. The Navy would close and restrict B-16 from public use, except for Navy-authorized ceremonial, cultural, or academic site visits.

Training Activities

For archaeological resources, the use of high explosives at existing designated target areas within B-16 would not be considered a source of new ground disturbance because these areas have been previously disturbed, intact archaeological sites do not exist, and the type of activities at designated target areas would not change. This particular activity (use of high explosives on the training ranges) does not require further Section 106 review because it is covered by the PA (Naval Air Station Fallon, 2011; Nevada State Historic Preservation Officer, 2014). Ground-disturbing training activities that would continue to occur at existing locations include convoy operations and tactical ground mobility. Firing and dropping explosive munitions would not change within the existing B-16 training area and would not occur within the expanded B-16 training area, but Explosive Ordnance Disposal (EOD) activities and Land Demolitions could occur there.

Ground-disturbing training activities would also occur within the proposed B-16 land withdrawal expansion area (see Figure 3.11-2). Reporting and monitoring measures for NRHP-eligible cultural resources located in the existing B-16 training area have been previously implemented in accordance with the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013) and

would be implemented for the proposed B-16 land withdrawal expansion area. NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources.

For Alternative 1, no architectural resources are present within the existing B-16 range or the proposed land withdrawal expansion area that would be affected by training activities (see Section 3.11.2.3.1, Studies Conducted). Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 1.

Public Accessibility

Under Alternative 1, the B-16 range would be fenced around the periphery to control access. The Navy would install approximately 31 miles of fencing to enclose the proposed B-16 land withdrawal expansion area and connect with existing B-16 perimeter fencing. One Native American tribal resource site known as Salt Cave is located within the B-16 APE. Access to this site for ceremonial, cultural, or academic purposes would be allowed, dependent on the Navy's approval. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 1.

Construction

Ground-disturbing activities associated with new target construction, facility construction, and construction staging areas would be conducted in accordance with the PA and the ICRMP and sited to avoid affecting NRHP-listed and NRHP-eligible sites. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects. If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 1.

In accordance with EO 13175; Presidential Memorandum dated April 29, 1994; Department of Defense (DoD) American Indian and Alaska Native Policy; and Section 106 of the NHPA, the Navy has initiated consultation for this project with the federally recognized tribes and bands and Inter-Tribal Council of Nevada listed in Section 3.11.1.2 (Regulatory Framework) and will continue to consult on any ongoing cultural resources surveys or other sensitive sites.

3.11.3.2.2 Bravo-17

Land Withdrawal and Acquisition

Under Alternative 1, the Navy would renew the current public land withdrawal and withdraw or acquire additional land to be reserved for military use. Under Alternative 1, B-17 would expand to the south by approximately 178,013 acres. The Navy would close and restrict the entire B-17 range from public use except for Navy-authorized activities such as ceremonial, cultural, or academic site visits.

Training Activities

For archaeological resources within the existing B-17 range, the continued use of high explosives in existing target areas would not be considered a source of new ground disturbance, as the areas have been previously disturbed and intact archaeological sites do not exist. This particular activity (use of high explosives on the existing training ranges) does not require further Section 106 review because it is covered by the PA (Naval Air Station Fallon, 2011). Ground-disturbing training activities including convoy operations and tactical ground mobility, as well as direct impacts from aerial target strikes and military

expended material strikes, would occur in some of the existing target areas, but also in new parts of the B-17 range. Based on the cultural surveys conducted in support of this EIS (see Section 3.11.2.5.1, Studies Conducted), when possible, the proposed new target areas would be sited such that no impacts would occur to identified cultural resources.

Ground-disturbing training activities would be relocated to the location of the new targets that would be constructed (created) within the B-17 range expansion area. Per Navy standard operating procedures, when possible, targets and convoys would be placed away from eligible or unevaluated sites. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects. Primary sources of vibrations would include live bombs with greater (than current) net explosive weights (e.g., GBU-12, GBU-13, GBU-16, GBU-32, MK-82, MK-83, MK-84, and BLU-111), AGM-114 Hellfire Missiles, EOD, and Land Demolitions. New target areas would be located away from historic mines sites in B-17, and there would be no effect on historic mine sites because intervening topographic features would disrupt any vibration from munitions detonation. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 1.

Reporting and monitoring measures for NRHP-eligible cultural resources located in the existing B-17 training area have been previously implemented in accordance with the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013) and would be implemented for the proposed B-17 land withdrawal expansion area. NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources. There are no known NRHP-eligible architectural resources within the B-17 range; therefore, for architectural resources, Alternative 1 would have no significant impact on any structures eligible for or listed in the NRHP.

Public Accessibility

Under Alternative 1, limited access would be allowed to the B-17 training area to the extent it is compatible with the Navy's mission. The Navy would restrict access by constructing a perimeter fence to include the requested land withdrawal and proposed acquisition expansion area. Access to B-17 would be restricted from public use except for Navy-authorized activities such as ceremonial, cultural, or academic site visits. Therefore, there would be no significant impact on cultural resources in terms of accessibility under Alternative 1.

Construction

Ground-disturbing activities associated with new target construction, facility construction, and construction staging areas would be conducted in accordance with the PA and the ICRMP and sited to avoid affecting NRHP-listed and NRHP-eligible sites. Pre-construction surveys would be conducted prior to any ground-disturbing construction activities. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects. If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements.

One traditional cultural property and four tribal resources are located within the B-17 APE (see Table 3.11-4); however, construction would not occur within or near these areas. As stated, the public and Tribes would have access to these sites for ceremonial or cultural purposes, dependent on the Navy's approval. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 1.

In accordance with EO 13175; Presidential Memorandum dated April 29, 1994; DoD American Indian and Alaska Native Policy; and Section 106 of the NHPA, the Navy has initiated consultation for this project with the federally recognized tribes and bands and Inter-Tribal Council of Nevada listed in Section 3.11.1.2 (Regulatory Framework) and will continue to consult on any ongoing cultural resources surveys or other sensitive sites.

Road and Infrastructure Improvements to Support Alternative 1

State Route 839

Under Alternative 1, the Navy has identified three notional relocation corridors for the potential realignment of State Route 839. Site-specific environmental analysis, appropriate cultural resource inventories, and pre-construction surveys would be conducted in the future in order to realign State Route 839. While any potential relocation of State Route 839 could occur, the Navy would not utilize any portion of the expanded B-17 range (if implemented) that would overlap the existing State Route 839 unless and until any such re-routing of the highway has been completed and made available for use. It is assumed that ground-disturbing activities associated with the realignment of State Route 839 would be sited to avoid impacting NRHP-listed and NRHP-eligible sites. Each road alignment option would follow pre-existing dirt roads or trails and would be developed into a paved two-lane highway. The analysis would need to consider potential impacts on the Pony Express National Trail located to the northwest of the APE (see Figure 3.11-3). If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects.

If cultural resources were encountered during road construction, then construction activities would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements.

In accordance with EO 13175; Presidential Memorandum dated April 29, 1994; DoD American Indian and Alaska Native Policy; and Section 106 of the NHPA, the Navy would consult specifically for the realignment of State Route 839 with the Walker River Paiute Tribe if the alignment and relocation of 839 were to go through the reservation. Consultation on this topic has occurred and would continue with the Walker River Paiute Tribe if this specific corridor is chosen.

Paiute Pipeline

Under Alternative 1, the Navy would potentially re-route approximately 12 miles of the existing Paiute Pipeline south of the proposed B-17 expansion area. At this time, the Navy has not determined a suitable re-location route (refer to Section 2.3.2.2.4, Road and Infrastructure Improvements to Support Alternative 1). Site-specific environmental analysis, appropriate cultural resource inventories, and pre-construction surveys would be conducted in the future in order to reroute the pipeline. While any potential relocation could occur, the Navy would not utilize any portion of the expanded B-17 range (if implemented) that would overlap the existing pipeline unless and until any such re-routing has been completed and made available for use. However, to the greatest extent practicable, the pipeline would be sited away from sensitive cultural resources. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects.

If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered

resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements.

3.11.3.2.3 Bravo-20

Land Withdrawal and Acquisition

Under Alternative 1, the Navy would renew current public land withdrawal and withdraw or acquire additional land to be reserved for military use. Under Alternative 1, the B-20 range would expand in all directions by 180,329 acres, totaling approximately 221,334 acres. The Navy would close and restrict the entire B-20 range area, except for Navy-authorized uses such as ceremonial, cultural, or academic site visits.

Training Activities

For archaeological resources within the existing B-20 range, the continued use of high explosives in current designated target areas would not be considered a source of new ground disturbance. These areas are disturbed, and intact archaeological sites do not exist. Furthermore, the use of high explosives on the existing training range does not require further Section 106 review because it is covered by the PA (Naval Air Station Fallon, 2011). Approximately 1,450 acres is proposed for new target areas (Figure 3.11-4). Based on the cultural surveys conducted in support of this EIS (see Section 3.11.2.5.1, Studies Conducted), the proposed new target areas would be sited such that no impacts would occur to identified cultural resources.

Ground-disturbing training activities that would continue to occur at locations within the existing B-20 range include direct impacts and vibration from aerial target strikes and military expended material strikes. These same types of ground-disturbing training activities would also occur within the proposed B-20 requested land withdrawal and proposed acquisition areas (see Figure 3.11-4). Primary sources of vibrations include live bombs with higher (than current) net explosive weights (e.g., GBU-12, GBU-13, GBU-16, GBU-32, MK-82, MK-83, MK-84, and BLU-111), AGM-114 Hellfire Missiles, EOD, and Land Demolitions. Based on surveys conducted in 2017, no cultural resource sites are located within the proposed B-20 target areas. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 1.

Reporting and monitoring measures for NRHP-eligible cultural resources located in the existing B-20 training area have been previously implemented in accordance with the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013) and would be implemented for the proposed B-20 requested land withdrawal and proposed acquisition expansion area. NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources. No known NRHP-eligible architectural resources are present within the proposed B-20 requested land withdrawal and proposed acquisition area; therefore, for architectural resources, Alternative 1 would affect no structures eligible for or listed in the NRHP.

Public Accessibility

Under Alternative 1, limited access would be allowed to the B-20 training area to the extent it is compatible with the Navy's mission. The Navy would restrict access by constructing a perimeter fence to include the requested land withdrawal and proposed acquisition expansion area. One potential traditional cultural property, Lone Rock, is located within the B-20 APE. Access to this site for ceremonial, cultural, or academic purposes would be allowed, as stated, dependent on the Navy's

approval. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 1.

Construction

Ground-disturbing activities associated with facility construction and construction staging areas would be conducted in accordance with the PA and the ICRMP and sited to avoid affecting NRHP-listed and NRHP-eligible sites. Pre-construction surveys would be conducted prior to any ground disturbing construction activities. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects. If cultural resources are encountered during fence construction, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements.

One traditional cultural property is located within the B-20 APE; however, construction would not occur within or near that area. As stated, access to this site for ceremonial, cultural, or academic purposes would be allowed, dependent on the Navy's approval. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 1.

In accordance with EO 13175; Presidential Memorandum dated April 29, 1994; DoD American Indian and Alaska Native Policy; and Section 106 of the NHPA, the Navy has initiated consultation for this project with the federally recognized tribes and bands and Inter-Tribal Council of Nevada listed in Section 3.11.1.2 (Regulatory Framework) and will continue to consult on any ongoing cultural resources surveys or other sensitive sites.

3.11.3.2.4 Dixie Valley Training Area

Land Withdrawal and Acquisition

Under Alternative 1, the Navy would renew the current public land withdrawal and withdraw additional land to be reserved for military use. Under Alternative 1, the DVTa would expand to the north, east, and southwest, totaling approximately 370,903 acres. Allowable public uses of the land would include grazing, hunting, existing utilities and rights-of-way, off-highway vehicles, camping and hiking, site visits (ceremonial or cultural), management activities, and coordinated events.

Training Activities

Based on the cultural surveys conducted in support of this EIS (see Section 3.11.2.5.1, Studies Conducted), the proposed new training areas would be sited such that no impacts would occur to identified cultural resources. Ground-disturbing training activities such as convoy operations and tactical ground mobility would continue to occur within the existing DVTa and would also occur within the proposed DVTa expansion area on existing roads and trails (see Figure 3.11-5). Reporting and monitoring measures for NRHP-eligible cultural resources located in the existing DVTa training area have been previously implemented in accordance with the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013) and would be implemented for the proposed DVTa land withdrawal expansion area. NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources.

For architectural resources, there are four structures eligible for or listed in the NRHP; however, ground-based training activities would avoid these structures. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 1.

Public Accessibility

Under Alternative 1, the DVTA would be open to the public for allowable uses and managed by the BLM. There are 50 Native American tribal resource sites located within the DVTA APE (see Table 3.11-8). The Navy would not restrict access to these sites. Allowable tribal use of lands would not change from current conditions. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 1.

Construction

Ground-disturbing activities associated with facility construction and construction staging areas would be conducted in accordance with the PA and the ICRMP and if possible, sited to avoid affecting NRHP-listed and NRHP-eligible sites. Pre-construction surveys would be conducted prior to any ground-disturbing construction activities. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects.

If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 1.

In accordance with EO 13175, Presidential Memorandum dated April 29, 1994, DoD American Indian and Alaska Native Policy, and Section 106 of the NHPA, the Navy has initiated consultation for this project with the federally recognized tribes and bands and Inter-Tribal Council of Nevada listed in Section 3.11.1.2 (Regulatory Framework) and will continue to consult on any ongoing cultural resources surveys or other sensitive sites.

3.11.3.2.5 Fallon Range Training Complex Special Use Airspace

Aircraft noise and overflights may have indirect effects on significant cultural resources for which setting, feeling, and association are important aspects of integrity. Refer to Figure 3.11-1 for the indirect area of potential effect associated with aircraft noise and overflights. While overflights would not increase, there are proposed changes in the airspace. Noise modeling results are presented in Section 3.7 (Noise). There are known areas underlying the FRTC SUA where traditional cultural activities are practiced, and these activities may be indirectly affected. Potential noise and visual impacts associated with aircraft overflights could visually and audibly intrude upon religious, ceremonial, and other traditional Native American activities. Members of the Fallon Paiute-Shoshone Tribe have been bothered in the past by military training during ceremonies on reservation and public lands (U.S. Department of the Navy, 2013). The Navy will continue to coordinate with the tribes to lessen any potential impacts to the tribes from these events.

Supersonic overflights create sonic booms, which are caused by aircraft (or munitions) moving faster than the speed of sound (approximately 750 miles per hour at sea level). The duration of a sonic boom is brief, less than a second (100 milliseconds or 0.100 seconds), for most fighter-sized aircraft. Several factors influence sonic booms: weight, size, and shape of aircraft or vehicle; altitude; flight paths; and atmospheric conditions. A larger and heavier aircraft must displace more air and create more lift to sustain flight, compared with small, light aircraft. Therefore, larger aircraft create sonic booms that are stronger and louder than those of smaller, lighter aircraft. Increasing altitude is the most effective method of reducing sonic boom intensity. For straight and level flight, the width of the boom area

(referred to as “carpet boom”) exposed to a sonic boom beneath an aircraft is about 1 mile for each 1,000 feet of altitude. For example, an aircraft flying supersonic straight and level at 50,000 feet can produce a sonic boom carpet about 50 miles wide. Maximum intensity is directly beneath the aircraft, and decreases as the lateral distance from the flight path increases until shock waves refract away from the ground and the sonic boom attenuates.

A study of the effects of supersonic overflights was conducted (including Air Combat Maneuver flight training activities) on unconventional structures such as historic adobe, brick, masonry/stone, and wood buildings; adobe and masonry/stone prehistoric structures; caves; and rock formations. This study was conducted from 1988 to 1990 and was based on concerns related to five Supersonic Operating Areas, including the Fallon Supersonic Operating Areas (Sutherland et al., 1990). The study reviewed existing literature on damage prediction and assessment techniques for structures, provided a statistical model for sonic boom overpressures, developed an analytical model to predict probability of damage, implemented an experimental program to test the predictive model, and defined algorithms for a computer program. The study investigated probabilities of damage per day for an average of 500 sorties per month (6,000 sorties a year) by structure type were generated, and percentages of a damage event occurring on any one given day were developed (Sutherland et al., 1990). Probabilities of damage to caves, rockshelters, and rock formations containing petroglyphs ranged from 0.1 to 1 percent on any given day, while probabilities of damage to adobe walls ranged from 0.01 to 0.1 percent on any given day; damage to stone structures ranged from 0.001 to 0.01 percent on any given day (Sutherland et al., 1990) which is considered to be negligible to minor.

Based on the study conducted from 1988 to 1990 by Wyle Laboratories for the Human Systems Division, Noise and Sonic Boom Impact Technology Program at Wright-Patterson Air Force Base (Sutherland et al., 1990), at higher altitudes, such as 30,000 feet and above, creation of sonic booms in the atmosphere reaches a lateral cut-off point where refraction prevents the sonic boom from reaching the ground. These sonic booms are less likely to create overpressures that would affect unconventional structures. Therefore, vibration effects from sonic booms associated with Supersonic Area A created during operations are not included in this analysis. This same approach was taken in the 2015 Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Statement.

Section 2.3.2.5 (Special Use Airspace Modifications) provides detailed, specific airspace modifications under Alternative 1, including the extension of Supersonic Operating Area B to the east (see Figure 3.11-1). Airspace activities within the FRTC Special Use Airspace that could produce vibrations include supersonic aircraft overflights in Supersonic Operating Area B. Most supersonic flights occur during adversarial training simulating air-to-air combat situations during Air Warfare and Large Force Exercises.

The current level of supersonic events (458 during busiest month) would not change under Alternative 1. The level of events is within the parameters (500 supersonic sorties per month or 6,000 sorties per year) defined by Sutherland et al. (1990) as creating negligible-to-minor damage to caves, rockshelters, or rock formations containing petroglyphs. In addition, supersonic flight activity would be distributed over a larger area, thus decreasing the amount of exposure to any one site. Although vibrations from sonic booms have the potential to cause structural instability in sensitive natural features associated with archaeological sites located under the Supersonic Operating Area B (e.g., caves, rockshelters, and rock faces containing petroglyphs and pictographs), procedures are in place for identifying, evaluating, and protecting such resources as defined in the PA (Naval Air Station Fallon, 2011). NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources.

Archaeological sites would continue to be managed in accordance with current federal law, Navy policy, the PA, and the ICRMP (U.S. Department of the Navy, 2013).

3.11.3.2.6 Summary of Effects and Conclusions

Under Alternative 1, implementation of protective measures for NRHP-eligible cultural resources in accordance with the PA and the ICRMP would occur; therefore, there would be no significant impacts on cultural resources associated with physical disturbance. 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 negligible-to-minor damage to caves, rock shelters, or rock formations containing petroglyphs and result in negligible damage to adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and procedures are in place for identifying, evaluating, and protecting such resources as defined in the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013). The Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP under Alternative 1. In addition, no significant impacts on cultural resources would occur under NEPA.

3.11.3.3 Alternative 2: Modernization of Fallon Range Training Complex and Managed Access

The only difference between Alternative 1 and Alternative 2 are the allowable land use activities on the ranges and in the DVTA. Under Alternative 2, though withdrawn, a small portion south of Simpson Road and the lands south of Simpson Road at B-16 would remain open for public use. Under Alternative 2, access for certain land use activities would be allowed within B-16, B-17, and B-20 when the ranges are not in use (i.e., typically weekends, holidays, and when closed for scheduled maintenance) (see Table 2-5). The Navy and BLM or departments from the State of Nevada would manage the controlled access to the B-16, B-17, and B-20 ranges jointly as applicable. Under Alternative 2, allowable land uses within the DVTA would remain unchanged, with the exception of the addition of salable mineral and geothermal exploration and development following Navy-provided required design features through the BLM as managed under the Geothermal Steam Act of 1970. Under Alternative 2, State Route 839 and the Paiute Pipeline would still potentially be relocated.

3.11.3.3.1 Bravo-16

Land Withdrawal and Acquisition

Alternative 2 would have the same withdrawals and acquisitions as requested and proposed in Alternative 1. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 2.

Training Activities

Under Alternative 2, there would be no change to training activities at B-16 as proposed under Alternative 1. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 2.

Public Accessibility

Under Alternative 2, impacts on cultural resources would be the same as those described for B-16 under Alternative 1. With the exception of Simpson Road and that portion of B-16 south of Simpson Road, the perimeter of B-16 would be fenced in its entirety and closed for public safety. The closed portion of the

B-16 range would allow access for Navy-authorized activities such as ceremonial, cultural, or academic site visits; regulatory or management activities; and special events (races). The Navy would continue to allow these activities, dependent on its approval. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 2.

Construction

Construction proposed under Alternative 2 would be the same as proposed under Alternative 1. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 2.

3.11.3.3.2 Bravo-17

Land Withdrawal and Acquisition

Alternative 2 would have the same withdrawals and acquisitions as requested and proposed in Alternative 1. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 2.

Training Activities

Under Alternative 2, there would be no change to training activities at B-17. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 2.

Public Accessibility

Under Alternative 2, impacts on cultural resources would be the same as those described for B-17 under Alternative 1. The Navy would close and restrict the entire B-17 range except for Navy-authorized activities such as bighorn sheep hunting, ceremonial or cultural site visits, academic visits, regulatory or management activities, and special events (races). The Navy would continue to allow these activities, dependent on its approval. The Navy and the BLM would coordinate the permitting and scheduling of these events. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 2.

Construction

Construction proposed under Alternative 2 would be the same as proposed under Alternative 1. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 2.

Road and Infrastructure Improvements to Support Alternative 2

The additional infrastructure improvements potentially under Alternative 2 would be the same as proposed under Alternative 1. Prior to any implementation of any potential action involving relocation of State Route 839 or relocation of the Paiute Pipeline, the Navy would coordinate with BLM to perform additional site-specific NEPA documentation.

3.11.3.3.3 Bravo-20

Land Withdrawal and Acquisition

Alternative 2 would have the same withdrawals and acquisitions as requested and proposed in Alternative 1. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 2.

Training Activities

Under Alternative 2, there would be no change to training activities at B-20. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 2.

Public Accessibility

Under Alternative 2, impacts on cultural resources would be the same as those described for B-20 under Alternative 1. The Navy would close and restrict the entire B-20 range except for Navy-authorized activities such as ceremonial or cultural site visits, academic visits, regulatory or management activities, and special events (races). The Navy would continue to allow these activities, dependent on its approval. The Navy and the BLM would coordinate the permitting and scheduling of these events. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 2.

Construction

Construction proposed under Alternative 2 would be the same as proposed under Alternative 1. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 2.

3.11.3.3.4 Dixie Valley Training Area

Land Withdrawal and Acquisition

Alternative 2 would have the same withdrawals and acquisitions as requested and proposed in Alternative 1. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 2.

Training Activities

Under Alternative 2, there would be no change to training activities at the DVTA. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 2.

Public Accessibility

Under Alternative 2, impacts on cultural resources would be the same as those described for the DVTA under Alternative 1. There would be no restrictions on access for ceremonial or cultural activities and procedures for site visits. Therefore, there would be no significant impact on cultural resources in terms of public accessibility under Alternative 2.

Construction

Construction proposed under Alternative 2 would be the same as proposed under Alternative 1. Therefore, there would be no significant impact on cultural resources as a result of construction activities under Alternative 2.

3.11.3.3.5 Fallon Range Training Complex Special Use Airspace

Under Alternative 2, impacts on cultural resources would be the same as those described for the FRTC SUA under Alternative 1.

3.11.3.3.6 Summary of Effects and Conclusions

Under Alternative 2, implementation of protective measures for NRHP-eligible cultural resources in accordance with the PA and the ICRMP would occur; therefore, there would be no significant impacts on

cultural resources associated with physical disturbance. 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 negligible-to-minor damage to caves, rock shelters, or rock formations containing petroglyphs and negligible damage to adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and, procedures are in place for identifying, evaluating, and protecting such resources as defined in the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013). The Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP under Alternative 2. In addition, no significant impacts on cultural resources would occur under NEPA.

3.11.3.4 Alternative 3: Bravo-17 Shift and Managed Access (Preferred Alternative)

Alternative 3 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-17, and the size of B-16, B-20, and the DVTA, and similar to Alternative 2 in terms of managed access. Alternative 3 would move B-17 farther to the southeast and rotate it slightly counter-clockwise. In conjunction with shifting B-17 in this manner, the expanded range would leave State Route 839 in its current configuration along the western boundary of B-17 and would expand eastward across State Route 361 leading to the potential relocation of a section of State Route 361. Unlike Alternative 1, the Navy would not withdraw land south of U.S. Route 50 as the DVTA. Rather, the Navy proposes that Congress categorizes this area as a Special Land Management Overlay. This Special Land Management Overlay will define two areas (one east and one west of the B-17 range) as Military Electromagnetic Spectrum Special Use Zones. These two areas, which are public lands under the jurisdiction of BLM, will not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy. Under Alternative 3, part of the Paiute Pipeline and a segment of State Route 361 would potentially be relocated, and additional site-specific environmental analysis, including cultural resource inventories, would be required prior to any ultimate implementation.

3.11.3.4.1 Bravo-16

Land Withdrawal and Acquisition

Alternative 3 areas proposed for withdrawals and acquisitions would be less than as requested and proposed in Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 3.

Training Activities

Under Alternative 3, there would be no change to training activities at B-16. Based on the cultural surveys conducted in support of this EIS (see Section 3.11.2.5.1, Studies Conducted), the proposed new training areas will be sited such that no impacts would occur to identified cultural resources. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 3.

Public Accessibility

Under Alternative 3, impacts on cultural resources would be the same as those described for B-16 under Alternative 2. The Navy would close and restrict the entire B-16 range, except for Navy-authorized activities such as ceremonial, cultural, or academic site visits; regulatory or management activities; and

special events (races). The Navy would continue to allow these activities, dependent on its approval. Therefore, there would be no significant impact on cultural resources as a result of public accessibility under Alternative 2.

Construction

Construction proposed under Alternative 3 would be the same as proposed under Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources as a result of construction under Alternative 3.

3.11.3.4.2 Bravo-17

Additional data will be presented upon completion of on-going cultural resource studies associated with Alternative 3.

Land Withdrawal and Acquisition

Under Alternative 3, impacts on cultural resources would be the same as those described for the B-17 range under Alternative 2 with the exception of the proposed road relocation. Under Alternative 3, B-17 would expand to the southeast by approximately 212,661 acres and be “tilted” (see Figure 2-12). This tilt of the proposed withdrawal would eliminate the overlap of State Route 839 (under Alternatives 1 and 2). Approximately 4,000 acres would support convoy routes, military vehicle training routes, or ground target areas (see Figure 2-12). Under Alternative 3, in addition to new targets and target areas, the Navy would continue to use existing targets and target areas.

Training Activities

All training activities would be located within the proposed boundary of B-17, and the public would not be able to access B-17 during training activities. As with Alternative 1, the public may observe and hear aircraft, munitions, and support vehicles during training activities. Based on the cultural surveys conducted in support of this EIS (see Section 3.11.2.5.1, Studies Conducted), when possible, the proposed new training areas would be sited such that no impacts would occur to identified cultural resources.

Ground-disturbing training activities would be relocated to the location of the new targets that would be constructed (created) within the B-17 range expansion area. Per Navy standard operating procedures, when possible, targets and convoys would be placed away from eligible or unevaluated sites. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects. Primary sources of vibrations would include live bombs with greater (than current) net explosive weights (e.g., GBU-12, GBU-13, GBU-16, GBU-32, MK-82, MK-83, MK-84, and BLU-111), AGM-114 Hellfire Missiles, EOD, and Land Demolitions. New target areas would be located away from historic mines sites in B-17, and there would be no effect on historic mine sites because intervening topographic features would disrupt any vibration from munitions detonation. These activities are currently occurring within B-17 and would not increase in frequency under Alternative 3. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 1.

Noise contours of 65 decibel Day Night Level would be mostly contained on the B-17 range under Alternative 3, with the exception of a 65 decibel Day Night Level contour that would extend north of the B-17 boundary over the U.S. Route 50, approximately in the same way it extends on the current B-17 range during training activities (see Section 3.7, Noise, section 3.7.3.4.2 [B-17, under Alternative 3:

Bravo-17 Shift and Managed Access {Preferred Alternative})). This would not be expected to significantly impact cultural resources, as it overlaps with U.S. Route 50, which is a highway that also produces noise.

Reporting and monitoring measures for NRHP-eligible cultural resources located in the existing B-17 training area have been previously implemented in accordance with the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013) and would be implemented for the proposed B-17 land withdrawal expansion area. NAS Fallon employs one full-time cultural resource manager who regularly monitors the condition of such resources. There are no known NRHP-eligible architectural resources within the B-17 range; therefore, for architectural resources, Alternative 3 would have no significant impact on any structures eligible for or listed in the NRHP.

Public Accessibility

The Navy would close and restrict the entire B-17 range, except for Navy-authorized activities such as bighorn sheep game hunting; ceremonial, cultural, or academic site visits; regulatory or management activities; and special events (races). The Navy would give approval to allow these activities. Therefore, there would be no significant impact on cultural resources as a result of public accessibility under Alternative 3.

Construction

Construction (with the exception of road and infrastructure improvements to support Alternative 3) proposed under Alternative 3 would be the same as proposed under Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources as a result of construction under Alternative 3.

Road and Infrastructure Improvements to Support Alternative 3

State Route 361

Under Alternative 3, the Navy would potentially relocate and develop a portion of State Route 361 (approximately 12 miles) on undisturbed land. Site-specific environmental analysis, appropriate cultural resource inventories, and pre-construction surveys would be conducted in the future in order to relocate State Route 361. Whenever possible, ground-disturbing activities associated with the relocation would be sited to avoid impacting NRHP-listed and NRHP-eligible sites. However, if sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects.

If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements.

Paiute Pipeline

Under Alternative 3, the Navy would potentially re-route approximately 18 miles of the existing Paiute Pipeline south of the B-17 expansion area. At this time, the Navy has not determined a suitable re-location route. Site-specific environmental analysis, appropriate cultural resource inventories, and pre-construction surveys would be conducted in the future in order to reroute the pipeline. While any potential relocation could occur, the Navy would not utilize any portion of the expanded B-17 range (if implemented) that would overlap the existing pipeline unless and until any such re-routing has been completed and made available for use. However, to the greatest extent practicable, the pipeline would

be sited away from sensitive cultural resources. If sites cannot be avoided, the Navy would consult with the SHPO in accordance with 36 CFR 800.6 for resolution of adverse effects.

If cultural resources are encountered during construction activities, then construction would be suspended until an archaeologist or historian could determine the significance of the encountered resource(s) as well as any appropriate actions to be taken in accordance with applicable legal requirements. Site-specific environmental analysis would be required in the future once any ultimate proposed location has been identified.

3.11.3.4.3 Bravo-20

Land Withdrawal and Acquisition

Alternative 3 areas proposed for withdrawals and acquisitions would be less than as requested and proposed in Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources because of the withdrawal and acquisition under Alternative 3.

Training Activities

Under Alternative 3, there would be no change to training activities at B-20. Therefore, there would be no significant impact on cultural resources as a result of training activities under Alternative 3.

Public Accessibility

Under Alternative 3, impacts on cultural resources would be the same as those described for B-20 under Alternative 2. The Navy would close and restrict the entire B-20 range from public use, except for Navy-authorized activities such as ceremonial, cultural, or academic site visits; regulatory or management activities; and special events (races). The Navy would give approval to allow these activities. East County Road and approximately 300 acres of proposed withdrawal land east of East County Road would not be withdrawn and would remain open to the public to allow for transit. Therefore, there would be no significant impact on cultural resources as a result of public accessibility under Alternative 3.

Construction

Construction proposed under Alternative 3 would be the same as proposed under Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources as a result of construction under Alternative 3.

3.11.3.4.4 Dixie Valley Training Area

Additional data will be presented upon completion of on-going cultural resource studies associated with Alternative 3.

Land Withdrawal and Acquisition

Under Alternative 3, the land requested for withdrawal north of U.S. Route 50 would remain the same as in Alternative 1. Unlike Alternative 1, the Navy would not withdraw land south of U.S. Route 50 as the DVTa. Rather, the Navy proposes that Congress categorize this area as a Special Land Management Overlay. This Special Land Management Overlay will define two areas (one east and one west of the B-17 range) as Military Electromagnetic Spectrum Special Use Zones. These two areas, which are public lands under the jurisdiction of BLM, will not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy. The requested withdrawal and proposed acquisition for the DVTa would total approximately 256,440 acres (see Figure 2-12) and would increase the total range size to 325,277 acres under Alternative 3.

Training Activities

Training activities would expand within the proposed DVTA into areas where they have not previously occurred. The public may observe and hear aircraft and support vehicles during training activities within these areas. Noise from training exercises could startle or disturb the Tribes in the area. However, these activities are currently occurring within the DVTA and would not increase in frequency under Alternative 3.

Noise contours from training activities would not extend outside of the DVTA and would not change in intensity as the training activities at the DVTA would not change. Therefore, training activities at the DVTA would not significantly impact cultural resources under Alternative 3.

Public Accessibility

Under Alternative 3, impacts on cultural resources would be the same as those described for the DVTA North of U.S. Highway 50 under Alternative 2. Access for ceremonial or cultural activities and procedures for site visits would not be restricted in any way by the Navy. Therefore, there would be no significant impact on cultural resources as a result of public accessibility under Alternative 3.

Construction

Under Alternative 3, construction would be the same as proposed under Alternatives 1 and 2. Therefore, there would be no significant impact on cultural resources as a result of construction under Alternative 3.

3.11.3.4.5 Fallon Range Training Complex Special Use Airspace

Under Alternative 3, impacts on cultural resources would be the same as those described for the FRTC SUA under Alternative 2.

3.11.3.4.6 Summary of Effects and Conclusions

Under Alternative 3, implementation of protective measures for NRHP-eligible cultural resources in accordance with the PA and the ICRMP would occur; therefore, there would be no significant impacts on cultural resources associated with physical disturbance. 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 negligible-to-minor damage to caves, rock shelters, or rock formations containing petroglyphs and negligible damage to adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and procedures are in place for identifying, evaluating, and protecting such resources as defined in the PA (Naval Air Station Fallon, 2011) and the ICRMP (U.S. Department of the Navy, 2013). The Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP under Alternative 3. In addition, no significant impacts on cultural resources would occur under NEPA.

3.11.3.5 Proposed Management Practices, Monitoring, and Mitigation

3.11.3.5.1 Proposed Management Practices

Management Practices discussed in Section 3.11.1.2 (Regulatory Framework) would continue to be implemented under any Alternative, if selected. Cultural resources would continue to be managed in accordance with the National Historic Preservation Act, the Archaeological Resources Protection Act, the

American Indian Religious Freedom Act, NAGPRA, and appropriate Navy Instructions. The PA with the Nevada SHPO, the BLM, and the Advisory Council on Historic Preservation and the ICRMP would continue to be implemented on existing withdrawn lands and lands requested for withdrawal or proposed for acquisition. 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, then the procedures established under the NAGPRA and Chief of Naval Operations Instruction 11170.2 series, Navy Responsibilities Regarding Undocumented Human Burials, would be followed. If deemed necessary based on the proposed undertaking, a new PA may be developed to govern the management of the proposed land withdrawal expansion area. Development of the PA would be coordinated with the Nevada SHPO, the BLM, and the Advisory Council on Historic Preservation.

3.11.3.5.2 Proposed Monitoring

With current management practices of avoidance of cultural sites and management practices for inadvertent discovery, there are no new proposed monitoring programs.

3.11.3.5.3 Proposed Mitigation

In cases where avoidance of historic properties is not possible, the appropriate process outlined in 36 CFR 800.6 (resolution of adverse effects) will be followed. With current management practices of avoidance of cultural sites and management practices for inadvertent discovery, there are no new proposed mitigation programs. However, 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.

3.11.3.6 Summary of Effects and Conclusions

The Navy anticipates that the project would have no adverse effect on Historic Properties under Section 106 of the NHPA. The Navy is consulting with the Nevada SHPO and federally recognized tribes on this determination. Copies of the Section 106 correspondence are provided in Appendix C (Tribal Correspondence). The Final EIS will be updated with information regarding Navy Section 106 consultation with the Nevada SHPO and with appropriate federally recognized tribes, including the development of a Programmatic Agreement establishing protocols for the future management of historic properties in association with the proposed action. In addition, the BLM has reviewed the Section 106 finding presented here as a cooperating agency to this EIS. It is anticipated that none of the alternatives would have a significant impact on cultural resources, as indicated in Table 3.11-11.

Table 3.11-11: Summary of Effects and Conclusions for Cultural Resources

Summary of Effects and National Environmental Policy Act Determinations	
No Action Alternative	
Summary	<ul style="list-style-type: none"> Decommissioning, decontamination, and reuse of the closed range could potentially affect cultural resources present in the FRTC. A decision to allow the FRTC land withdrawal to expire would have no direct effects on cultural resources because federal management of the area would continue.
Impact Conclusion	The No Action Alternative would not result in significant impacts on cultural resources.

Table 3.11-11: Summary of Effects and Conclusions for Cultural Resources (continued)

Summary of Effects and National Environmental Policy Act Determinations	
Alternative 1	
Summary	<ul style="list-style-type: none"> • The Navy would implement protective measures for ground-disturbing activities for NRHP-eligible cultural resources in accordance with the PA and the ICRMP. • Access for ceremonial, cultural, and academic activities and procedures for site visits would be allowed, dependent on the Navy's approval. • Noise and vibration associated with sonic booms have the potential to result in negligible-to-minor damage to caves, rockshelters, or rock formations containing petroglyphs as well as adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and procedures are in place for identifying, evaluating, and protecting such resources as defined by the PA.
Impact Conclusion	Under Alternative 1, the Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP. In addition, no significant impacts on cultural resources would occur under NEPA.
Alternative 2	
Summary	<ul style="list-style-type: none"> • As with Alternative 1, the Navy would implement protective measures for ground-disturbing activities for NRHP-eligible cultural resources in accordance with the PA and the ICRMP. • Access for ceremonial, cultural, and academic activities and procedures for site visits would be allowed, dependent on the Navy's approval. In comparison with Alternative 1, there is no difference in cultural resource access associated under Alternative 2. • Noise and vibration associated with sonic booms have the potential to result in negligible to minor damage to caves, rockshelters, or rock formations containing petroglyphs as well as adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and procedures are in place for identifying, evaluating, and protecting such resources as defined by the PA. Impacts are the same as compared to Alternative 1.
Impact Conclusion	Under Alternative 2, the Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP. In addition, no significant impacts on cultural resources would occur under NEPA.

Table 3.11-11: Summary of Effects and Conclusions for Cultural Resources (continued)

Summary of Effects and National Environmental Policy Act Determinations	
Alternative 3	
Summary	<ul style="list-style-type: none"> • As with Alternatives 1 and 2, the Navy would implement protective measures for ground-disturbing activities for NRHP-eligible cultural resources in accordance with the PA and the ICRMP. • Access for ceremonial, cultural, and academic activities and procedures for site visits would be allowed, dependent on the Navy's approval. In comparison with Alternatives 1 and 2, there is no difference in cultural resource access associated under Alternative 3. • Noise and vibration associated with sonic booms have the potential to result in negligible to minor damage to caves, rockshelters, or rock formations containing petroglyphs as well as adobe walls and stone structures. However, noise and vibration studies demonstrate that those potential effects will not alter the characteristics that contribute to the eligibility of those properties to the National Register of Historic Places, and procedures are in place for identifying, evaluating, and protecting such resources as defined by the PA. Impacts are the same as compared to Alternative 1 and Alternative 2.
Impact Conclusion	Under Alternative 3, the Navy anticipates no adverse effect on historic properties under Section 106 of the NRHP. In addition, no significant impacts on cultural resources would occur under NEPA.

This page intentionally left blank.

REFERENCES

- Battis, J. C. (1988). *Effects of Low Flying Aircraft on Archaeological Structures* (AFGL-TR-88-0263). Hanscom Air Force Base, MA: Air Force Geophysics Laboratory.
- Bureau of Land Management. (2013a). *Winnemucca District Proposed Resource Management Plan and Final Environmental Impact Statement*. Winnemucca District, NV: U.S. Department of the Interior.
- Bureau of Land Management. (2013b). *Analysis of the Management Situation: Carson City District Resource Management Plan Revision and Environmental Impact Statement*. Carson City, NV: U.S. Department of the Interior.
- Bureau of Land Management. (2013c). *Areas of Critical Environmental Concern: Report on the Application of the Relevance and Importance Criteria* (Carson City District Resource Management Plan Revision). Carson City, NV: U.S. Department of the Interior.
- Bureau of Land Management. (2014). *Carson City District, Nevada Draft Resource Management Plan and Environmental Impact Statement*. Carson City, NV: U.S. Department of the Interior.
- Miller and Hanson Inc. (1991). *Aircraft Noise Effects on Cultural Resources: Review of Technical Literature*. Lexington, MA: U.S. Department of Commerce.
- National Park Service. (1998). *Guidelines for Evaluating and Documenting Traditional Cultural Properties* (National Register Bulletin). Washington, DC: U.S. Department of the Interior.
- Naval Air Station Fallon. (2011). *Programmatic Agreement Among Naval Air Station, Fallon, Nevada, The Nevada State Historic Preservation Officer and the Advisory Council on Historic Preservation Regarding the Identification, Evaluation and Treatment of Historic Properties on Lands Managed by Naval Air Station, Fallon*. Fallon, NV: U.S. Department of the Navy.
- Nevada State Historic Preservation Officer. (2014). *Programmatic Agreement Among the United States Navy and the Bureau of Reclamation, Mid-Pacific Region and the Nevada State Historic Preservation Officer Regarding the Effects of Demolition and Construction at Naval Air Station Fallon, Nevada Bombing Range Bravo-16*. Carson City, NV: State of Nevada.
- Sutherland, L. C., R. Brown, and D. Goerner. (1990). *Evaluation of Potential Damage to Unconventional Structures by Sonic Booms*. Brooks Air Force Base, TX: Noise and Sonic Boom Impact Technology.
- U.S. Department of the Navy. (2001). *Department of the Navy Cultural Resources Program (SECNAVINST 4000.35A)*. Washington, DC: Office of the Secretary. Retrieved from <http://www.secnav.navy.mil/eie/ASN%20EIE%20Policy/SECNAV%20INSTRUCTION%204000.35A.pdf>.
- U.S. Department of the Navy, and Bureau of Land Management. (2001). *Bureau of Land Management and Navy Resource Management Plan for Certain Federal Lands in Churchill County, Nevada* (Navy Integrated Natural Resource Management Plan, Amendment to the BLM Lahontan Resource Management Plan, and Environmental Assessment). Fallon, NV: U.S. Department of the Interior.
- U.S. Department of the Navy. (2006). *Policy for Environmental Protection, Natural Resources, and Cultural Resources Program (SECNAVINST 5090.8A)*. Washington, DC: Office of the Secretary. Retrieved from <http://www.doncio.navy.mil/uploads/0807XLP48884.pdf>.

- U.S. Department of the Navy. (2013). *Integrated Cultural Resources Management Plan: Naval Air Station, Fallon, Nevada*. Fallon, NV: Naval Facilities Engineering Command Southwest.
- U.S. Department of the Navy. (2015). *Military Readiness Activities at Fallon Range Training Complex Environmental Impact Statement*. Fallon, NV: Commander, U.S. Pacific Fleet.
- Wierprecht, W. E. (1981). *National Register of Historic Places Inventory -- Nomination Form for Gerlach Water Tower*. Washington, DC: U.S. Department of Interior, National Park Service.