
4.11 CULTURAL RESOURCES

4.11.1 Impact Methodology

The methods for assessing potential impacts on cultural resources include identifying significant cultural resources in the areas of potential effect (APEs) under the Proposed Action to determine potential direct and indirect impacts on these resources.

To identify cultural resources in the project areas, historic and current maps and aerial photographs, cultural resources reports, and archival records were reviewed. In addition, federal, state, and local inventories of historic places, including the NRHP, were reviewed for information related to prehistoric and historic resources within the project areas. Project areas were surveyed to confirm presence or absence of previously recorded archaeological resources as well as to identify previously unrecorded cultural resources. Native Hawaiian groups were consulted in an attempt to identify and locate ATIs in the project areas.

4.11.2 Factors Considered for Impact Analysis

Factors determining significance of impacts on cultural resources are derived from federal laws and regulations regarding cultural resources protection.

Section 106 of the NHPA requires federal agencies to consider the effects of their actions on properties listed on or eligible for listing on the NRHP. Eligible properties would include properties significant for their importance to Native Hawaiian groups. Section 106 and its implementing regulations state that an undertaking has an effect on a historic property (i.e., NRHP-eligible resource) when that undertaking may alter those characteristics of the property that qualify it for inclusion on the NRHP. An undertaking is considered to have an adverse effect on a historic property when it diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects include, but are not limited to, the following:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property or alteration of the character of the property's setting when that character contributes to the property's qualifications for the NRHP;
- Introduction of visual, audible, or atmospheric elements that are out of character with the property, or changes that may alter its setting;
- Neglect of a property, resulting in its deterioration or destruction; and
- Transfer, lease, or sale of a property without adequate provisions to protect its historic integrity.

Native Hawaiian sites, including sacred sites, burials, and cultural items, whether or not they are considered eligible for the NRHP, may also be protected under AIRFA, ARPA, or NAGPRA. Factors considered in determining whether an alternative would have a significant impact on cultural resources include the extent or degree to which its implementation would result in:

- An adverse effect on a historic property or TCP as defined under Section 106 of the NHPA; or
- A violation of the provisions of AIRFA, ARPA or NAGPRA.

It should be noted that an adverse effect on an historic property as defined by NHPA is not necessarily a significant impact under NEPA. While mitigation under NHPA does not necessarily negate the adverse nature of an effect, mitigation under NEPA can reduce the significance of an impact. NHPA and NEPA compliance are separate and parallel processes, and the standards and thresholds of the two acts are not precisely the same.

It should also be noted that some mitigation measures for other resource areas, such as cultivating land to re-vegetate a plant species, might involve actions that could create adverse effects on cultural resources. Prior to implementation, these actions would also undergo Section 106 review following federal guidelines.

In addition to these factors, public concerns expressed during the scoping process were also considered in the impact analysis. These concerns included access to traditional and religious sites for ceremonial purposes, access for hunting and gathering, protection and preservation of archaeological and traditional sites, interpretation of significance based on Native Hawaiian tradition and the knowledge of elders of the community, community involvement in managing cultural resources on Army land, and compliance with federal and state laws and regulations concerning cultural resources protection.

4.11.3 Summary of Impacts

Table 4-11 lists potential cultural resource impacts associated with the Proposed Action, Reduced Land Acquisition, and No Action at the relevant installations, based on identified cultural resources. General descriptions of identified impacts are provided.

Specifically for SBCT, the Army is proposing to comply with its responsibilities under the NHPA by executing a PA with the SHPO, the ACHP, and other interested parties and Native Hawaiian organizations. The Army has provided a draft PA to these parties for review, consultation, and revision and hopes to reach agreement on its terms later this year. The draft PA provided in Appendix J (dated May 16, 2003) was current when this document was printed. Because consultation on the PA is ongoing, this draft PA may have been revised since that time. If the PA is not executed, the Army will follow the procedures at 36 CFR 800 in order to comply with the NHPA.

Proposed Action (Preferred Alternative)

Significant Impacts

There would be no significant and unmitigable impacts on cultural resources under the Proposed Action.

Significant Impacts Mitigable to Less than Significant

Impact 1: Impacts on Areas of Traditional Importance. Potentially significant impacts on ATIs may occur at SBMR, DMR, and PTA.

**Table 4-11
Summary of Potential Cultural Resource Impacts**

Impact Issues	SBMR			DMR			KTA			PTA			Project-wide Impacts		
	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA
Impacts on historic buildings	⊗	⊗	○	○	○	○	⊗	⊗	○	⊗	⊗	○	⊗	⊗	○
Impacts on archaeological resources from range and facility construction	⊗	⊗	○	○	○	○	⊗	⊗	○	⊗	⊗	○	⊗	⊗	○
Impacts on archaeological resources from training activities	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗	⊗
Impacts on archaeological sites from construction of FTI	⊗	⊗	○	⊗	⊗	○	○	○	○	⊗	⊗	○	⊗	⊗	○
Impacts on ATIs	⊗*	⊗*	○	⊗*	⊗*	○	⊗	⊗	○	⊗*	⊗*	○	⊗*	⊗*	○
Impacts on undiscovered archaeological sites in areas of low potential	⊗	⊗	○	○	○	○	N/A	N/A	N/A	⊗	⊗	○	⊗	⊗	○
Impacts from installation information infrastructure architecture construction	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	⊗	⊗	○	⊗	⊗	○
Impacts on archaeological sites from road or trail construction	⊗	⊗	○	⊗	⊗	○	N/A	N/A	N/A	⊗	⊗	○	⊗	⊗	○
Impacts on archaeological sites from road use	○	○	N/A	⊗	⊗	○	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗	○

This table summarizes project-wide impacts. For installation-specific impacts see Chapters 5 – 8. In cases when there would be both beneficial and adverse impacts, both are shown on this table. Mitigation measures would only apply to adverse impacts.

* Impacts may be mitigable to less than significant.

LEGEND:

- ⊗ = Significant
- ⊗ = Significant but mitigable to less than significant
- ⊗ = Less than significant
- = No impact
- + = Beneficial impact
- N/A = Not applicable
- PA = Proposed Action
- RLA = Reduced Land Acquisition
- NA = No Action

Potential impacts related to construction of training facilities could include destroying or damaging ATIs, including shrines, archaeological sites, burials, or elements of Native Hawaiian cultural landscapes. Purchasing the SRAA at SBMR and the WPAA at PTA, and then using them for military training, could limit Native Hawaiian access to and use of sites on these parcels for traditional or religious purposes. Mitigation may reduce the impact to less than significant.

Construction of FTI antennas at SBMR, including on Mount Ka‘ala and at PTA may result in visual impacts on cultural landscapes. Because some sites would require construction, they could have an adverse effect on the nature of the cultural landscape.

Activities relating to the construction of Dillingham Trail from DMR to SBMR could also result in significant impacts on such cultural properties; however identified mitigations, including identification and avoidance, may reduce the impact to less than significant.

Regulatory and Administrative Mitigation 1. Facility construction or training area uses would be designed to avoid ATIs and limit visual impacts on traditional cultural landscapes by site location, design, and orientation where feasible. Mitigation for impacts on the cultural landscape could include consulting with the Native Hawaiian community to determine the extent of such impacts and possible means of avoiding or limiting them.

If identified TCPs, as defined in Section 3.11.2, could not be avoided because of interference with the military mission or risk to public safety, USARHAW would reopen consultation to identify impacts and to develop appropriate mitigation measures. Such mitigation would be developed in consultation with the SHPO and the Native Hawaiian community, in accordance with the provisions of the PA, a draft of which is provided in Appendix J. Documentation of ongoing consultation with interested parties is also provided in Appendix J.

The Army has previously identified Native Hawaiian burial sites in the SBCT ROI. The Army completed notification and consultation for these burial sites in accordance with NAGPRA and, for the most part, left these human remains in place. To address identified impacts on any burial sites, or an inadvertent discovery of Native Hawaiian human remains or funerary objects, the Army will abide by all notification and consultation requirements as outlined in Section 3 of NAGPRA.

Additional Mitigation. None identified.

Impact 2: Impacts on archaeological resources from range and facility construction. The greatest number and intensity of impacts from the Proposed Action would occur at SBMR and PTA. These two areas have the most proposed transformation related ground-disturbing activities and may have the most impacts on archeological resources. The tactical vehicle wash at SBER, the motor pool at SRAA, and the BAX are located in areas that have not been previously surveyed for archaeological sites. The UAC will be located on or near an old traditional trail; however, the location and condition of the trail are unknown. At KTA, part of the CACTF area has been extensively surveyed for cultural resources, but the remainder has not.

Facility construction involves ground softening at the PTA BAX, and grubbing vegetation, grading site surfaces, excavating the subsurface, and moving heavy construction equipment at all construction sites. All of these activities could result in direct destruction of or damage to archaeological resources, or indirect damage by contributing to soil erosion.

Regulatory and Administrative Mitigation 2. Before construction, the Army would conduct surveys to identify and evaluate archaeological sites within areas subject to range and facility construction. Sites determined to be eligible for the NRHP would be flagged for avoidance. The projects would be designed to avoid all recorded archaeological sites. If identified archaeological sites or newly discovered sites could not be avoided, USARHAW would mitigate the damage to the sites through data recovery or other mitigation measures determined through consultation, in accordance with the PA. To address the accidental discovery of archaeological sites, human remains, or cultural items, an inadvertent discovery plan (IDP) would be developed, accordance with the PA.

Impact 3: Impacts on archaeological resources from training activities. Potentially significant impacts on archaeological sites would occur at SBMR and PTA. Less than significant impacts would occur at DMR and KTA.

Potential impacts from the proposed training activities include damage to sites from subsurface excavations related to troop training (e.g., field fortifications, emplacement of obstacles), increased access by ground troops into the ranges, off-road vehicular movement, possible damage from live fire where resources are in the line of fire, and cleanup of unexploded ordnance within or adjacent to historic properties. Off-road mounted maneuvers with Strykers could result in greater impacts on archaeological sites in all of the training areas, or in greater indirect impacts through factors contributing to erosion. Activities such as revegetation could also cause impacts through ground disturbance. The presence of large numbers of personnel could affect resources through vandalism or accidental damage.

The Army would conduct surveys to identify and evaluate archaeological sites within training areas related to SBCT. Sites determined to be eligible for the NRHP would be identified and avoided through protective measures.

Regulatory and Administrative Mitigation 3. The Army would conduct surveys to identify and evaluate archaeological sites within training areas related to SBCT. Sites determined to be eligible for the NRHP would be identified and avoided through protective measures. If avoidance of identified archaeological sites or newly discovered sites is not feasible, USARHAW would mitigate the damage to the sites through data recovery or other measures. To address the accidental discovery of archaeological sites, human remains, or cultural items, an inadvertent discovery plan would be developed in accordance with the PA.

Impact 4: Impacts on archaeological sites from road or trail construction. Construction of Dillingham Trail and PTA Trail would result in a potentially significant impact on archaeological resources. Trail construction would involve vegetation removal and grading soil, as well as the regular use of heavy equipment. Some trail or road construction is projected to go through areas with a high potential for archaeological resources and areas that have not been surveyed for cultural resources. Cultural resources in the trail corridor and in construction staging areas may be adversely affected during construction and use of the trail. The PTA Trail route as established avoids all archaeological and historic sites in the Kawaihae area, but any alteration in the alignment could easily result in impacts on historic properties.

Either of these activities could result in direct destruction or damage of archaeological resources or indirect damage by contributing to soil erosion. Additionally, construction activities could expose or disturb previously undiscovered cultural resources.

Regulatory and Administrative Mitigation 4. The PA consultation process would address mitigation measures for archeological resources and would include surveys to identify cultural properties, resources, or sites; evaluation of NRHP eligibility; avoidance or data recovery of eligible sites; and IDPs. To address the accidental discovery of archaeological sites, human remains, or cultural items an IDP would be developed in accordance with the PA.

Impact 5: Impacts on historic buildings. Potential significant impacts on historic buildings would occur at KTA and PTA. Constructing the CACTF could have significant impacts on historic buildings at KTA. Among the properties to be renovated are the Nike Missile Site and other buildings that may be eligible for the NRHP as Cold War-era properties. Construction of the Range Maintenance Facility at PTA would require demolishing Cold War-era buildings, and the BAAF runway scheduled for upgrade may be a Cold War-era historic property as well. The Ke‘āmuku Village Complex within the WPAA may be eligible for listing on the NRHP. This site may be put at risk from military use, particularly as a result of training exercises. The construction of the Range Control Facility at SBMR would require demolishing buildings that are or will soon be 50 years of age and therefore may be eligible for the NRHP.

Regulatory and Administrative Mitigation 5. The Army has committed to preserving the Nike Missile Site complex and will conduct renovations in compliance with the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The Army would require avoidance of the WPAA buildings by way of range management protocols, which could require the area around the buildings to be off-limits to military training activities. This limitation might not entirely prevent vandalism from unauthorized activities, but it would limit damage directly resulting from military training.

If historic buildings at KTA, at PTA cantonment area, and at BAAF are found eligible for the NRHP, USARHAW would document the buildings in accordance with the standards of the Historic American Building Survey and the Historic American Engineering Record (HABS/HAER). Evaluation and documentation would be conducted in compliance with Section 106 of the NHPA for all project activities.

The Army is consulting with the SHPO and other interested parties and Native Hawaiian organizations on a PA that, when executed, would provide a method for the Army to comply with the NHPA. If the PA were not signed, the Army would comply with the NHPA by following the procedures in 36 CFR 800. If Ke‘āmuku Village could not be avoided or protected from damage, the Army would document the buildings in accordance with HABS/HAER standards and the NHPA.

Less than Significant Impacts

Impacts on archaeological sites from FTI construction. FTI antenna construction would have less than significant impacts at SBMR, DMR, and PTA, and no impact at KTA. Nine FTI antennas would be constructed at SBMR and outlying areas. The FTI project at DMR would construct two antennas within the installation boundary and one on Dillingham Ridge to the southwest of the installation. Eleven FTI antennas would be erected at PTA, the WPAA, and several sites off PTA. Antenna support structure locations were chosen to avoid archaeological resources. The FTI project at KTA would construct two antennas on disturbed sites and thus is considered to have no impact on archaeological resources.

Impacts on undiscovered archaeological sites in areas of low potential. Projects planned at SBMR and PTA are expected to result in less than significant impacts on archaeological resources in areas of low potential. Activities in these areas may, but are not likely to, disturb unrecorded archaeological resources. To address the accidental discovery of archaeological sites, human

remains, or cultural items, an IDP would be developed. This impact can be mitigated by complying with the provisions of the PA and by avoiding historic landscape elements whenever possible.

Impacts from I3A construction. I3A would result in less than significant impacts on archaeological resources at PTA because cabling and conduits are being placed along existing easements and roadways. The I3A project could require bringing cables and conduits into historic buildings, which would necessitate drilling holes in the buildings and possibly other more extensive modifications. This project could have an adverse effect on the historic integrity of Cold War-era buildings at PTA. Adverse effects on historic buildings would be mitigated by compliance with the Secretary of the Interior's Standards for Treatment of Historic Properties.

Impacts on archaeological sites from road use. Road use at KTA, DMR, and PTA would result in less than significant impacts on archaeological sites. The use of Dillingham Trail, Drum Road, and PTA Trail by Army forces could result in increased access by ground troops into areas containing archaeological sites, possible off-road vehicular movement, and erosion from road use and maintenance. Archaeological sites are located within the road alignments and their buffer zones. Troop movements could cause site destruction or damage to archaeological resources directly through vandalism or accidental damage, or indirectly through soil erosion. Prior to implementation of the proposed action, roads would be surveyed, and sites would be evaluated for eligibility to the NRHP. Sites near road or trail alignments would be flagged to ensure avoidance, and installation cultural resources staff would regularly monitor areas and inspect for any damage to archaeological sites. Soldiers and installation personnel would receive instruction regarding avoidance of identified sites.

Reduced Land Acquisition Alternative

Impacts under the RLA Alternative would be approximately the same as under the Proposed Action, but with less intensity of impacts at SBMR. The smaller acreage to be acquired and used for training in the SRAA means that fewer archaeological sites would be affected by Army activities in that area, and there would be less risk of inadvertent discovery of archaeological resources. Impacts at PTA would remain roughly the same as under the Proposed Action, because QTR2 at PTA would be located on land that was previously used for an impact area, and therefore there are few undisturbed archaeological resources remaining.

No Action Alternative

Existing conditions would continue under No Action. Less than significant impacts under No Action generally result from ongoing training activities or infrastructure projects. Ongoing training activities include continued off-road vehicle use. This would result in ongoing impacts on cultural resources in the training areas caused by ground troop activities, off-road vehicle movement, and subsurface excavations. Archaeological resources on the training areas are monitored following exercises to document adverse effects on the sites. Under No Action, Legacy Force training would continue, and there would be no additional impacts on cultural resources. USARHAW would continue efforts to inventory eligible historic properties in compliance with Section 110 of the NHPA, and Legacy Force-related

project planning would comply with Section 106 and its implementing regulations. Impacts on cultural resources would be mitigated in compliance with these regulatory requirements.