

3.11 CULTURAL RESOURCES

USAG-HI, through an active cultural resource management program, has identified, evaluated, monitored, and protected numerous cultural resources on all Army lands throughout Hawai'i.

3.11.1 Introduction/Region of Influence

Cultural resources are defined as historic properties, cultural items, archaeological resources, sacred sites, or collections subject to protection under the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), EO 13007, and the guidelines on Curation of Federally Owned and Administered Collections (36 CFR Part 79). These and other acts and executive orders pertaining to the protection of cultural resources are presented in Appendix N.

The ROI for cultural resources would include the areas of construction of SBCT facilities, the ranges and training areas to be constructed or used under SBCT, those off-road areas to be used by Strykers, areas adjacent to road alignments affected by SBCT activities (Dillingham Trail, Drum and Helemanō roads, and PTA Trail), and the WPAA and SRAA.

3.11.2 Resource Overview

Native Hawaiian Culture and Landscapes

Archaeological and linguistic evidence indicates that the original settlers of Hawai'i brought with them from the islands of east Polynesia seeds, roots, and cuttings of a variety of plants. These were plants of Southeast Asian and New Guinea origin, which, during the millennia of settlement of the Pacific Islands, had proven capable of surviving long distance voyages and adapting well to the environmental conditions on the volcanic islands of the South Pacific. These included taro (kalo), the staple of the Hawaiian diet, and other plants that were important elements in the Hawaiian diet or useful for medicinal, ceremonial, or utilitarian purposes, such as coconut (niu), breadfruit ('ulu), gourd (ipu), banana (mai'a), sugarcane (kō), kava ('awa), ti (lā'i), and noni. Sweet potato ('uala), a native of South America, was brought to Hawai'i by later Polynesian voyagers and became the primary crop in dryland areas.

More than a matter of subsistence, agriculture, horticulture, fishing, limited hunting, and other uses of natural resources were an integral and focused part of Native Hawaiian culture and played a large part in their religious system. Native Hawaiian belief states that natural objects such as rocks, plants, and animals are kinolau (body forms) of the gods (Abbott 1992, 15). Kāne, the great life giver, for example, is said to be present in kō (sugarcane) and 'ohe (bamboo); Kanaloa, the master of the sea, is present in mai'a (bananas), and many other sea creatures; Kū, associated with building and war, is present in niu (coconut), some marine animals, and trees; and Lono, the god of peace, planting, and fertility, is present in rain clouds, 'uala, and ipu (gourds) (Abbott 1992).

The land was divided into areas called ahupua'a, then into smaller divisions called 'ili 'āina that were worked by individuals or families, with areas set aside and worked for the chiefs and ali'i (Abbott 1992, 11). An ahupua'a included all the resources necessary for subsistence,

creating a system that maximized natural resources. In nearly all cases, an ahupua'a would have sufficient water to irrigate crops, enough upland (or mauka) resources for building material and hunting, and coastal (or makai) access for marine resource use. It is estimated that for every family that fished and lived along the shore, many more inland families were involved in farming and agriculture (Abbott 1992). Trading between those who farmed the sea and those who farmed the land was developed by the time the Europeans came and ensured that all resources were available to all Hawaiians.

Certain archaeological sites appear to reflect this evolved system of resource use. For example, historic irrigation ditches or auwai would carry water from mountain sources to irrigate the pondfields or lo'i of several families, while stone walls or earthen berms would be built around agricultural plots.

According to tradition, Native Hawaiians feel a spiritual and even genetic connection to plants, specifically kalo or taro, as they play a large role in their creation traditions (the Kumulipo). One version of this story describes how Wākea, the sky god, coupled with his daughter, resulting in a stillborn and misshapen male fetus that was buried in the earth on the east side of their house (Enos 1998, 36). From out of the ground where the baby was buried the kalo grew, nourished by the tears of his mother. When Wākea's daughter became pregnant again, she bore the first male human, named Hāloa. All future Hawaiians would be related to him, and consequently related to the kalo, the plant that grew out of Hāloa's stillborn brother.

Many of the plants had multiple uses and were also used as offerings, again bridging the gap between sustenance and religion. Since nearly all plant species were considered kinolau, their use and consumption were directed by the kapu system, which covered religion, social activities, exchanges, and interactions. It was this system that the Europeans encountered when they first arrived.

With such direct links to plant life, much of Hawaiian religion and ceremony is centered around traditions regarding when to plant, fish, harvest, or process natural resources. This focus, and the belief that "Native Hawaiian" extends beyond the human form, encompassing the natural landscape and the physical forms of their gods held within earth, water, plants, and animals, implies that the definition of "ancestor" to Native Hawaiians includes every water source, geological characteristic, plant, insect, and animal that exists in any given area.

Native Hawaiian Resources Regulatory Framework

Native Hawaiian resources, which are included in the cultural landscape section discussed above, consist of properties of traditional religious and cultural importance to a Native Hawaiian group: traditional cultural properties (TCPs); prehistoric and historic archaeological sites, which may include heiau (temple complexes) and burial sites, traditional gathering places and traditional use sites, and plants and animals used for subsistence and other cultural purposes.

The National Park Service defines TCPs as places that at a minimum are "eligible for their inclusion in the [National Register of Historic Places] because of [their] association with

cultural practices or beliefs of a living community that (a) are rooted in the community's history and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1990). TCP studies have been conducted and are ongoing throughout the SBCT ROI. These studies have identified a number of areas of traditional importance (ATIs). The process for determining if identified ATIs are eligible as TCPs includes consultation among USARHAW, the SHPO, and other interested groups. At this time, there are no formal TCPs within the SBCT project areas.

Executive Order (EO) 13007 protects Indian and Native Alaskan sacred sites on federal lands; AR 200-4 extends these protections to Native Hawaiian sacred sites as follows: "Installation commanders will avoid adversely affecting the physical integrity of sacred sites and shall establish procedures to ensure reasonable notice is provided to... Native Hawaiian organizations when Proposed Actions or land management policies or practices may restrict future access to, ceremonial use of, or adversely affect the physical integrity of sacred sites". These sacred sites may be considered ATIs; they may not necessarily be the same as TCPs and may or may not be eligible for the National Register of Historic Places (NRHP).

As a general rule, access to Army land is restricted to DOD personnel, but USARHAW staff work regularly with the Native Hawaiian community and Range Control to provide access to specific ATIs at SBMR, DMR, and PTA on request, subject to missions requirements and public safety concerns and via scheduled tours at PTA. KLOA is on Kamehameha Schools lands, and the Kamehameha Schools control access themselves, subject to military scheduling. USARHAW provides Native Hawaiian groups with ties to the training lands copies of cultural resources reports produced for the cultural resource management program.

Regulatory Framework for Native Hawaiian Cultural Landscapes

Federal guidelines recognize four cultural landscape categories, two of which are most relevant for this discussion: historic vernacular landscapes that illustrate peoples' values and attitudes toward the land and reflect patterns of settlement, use, and development over time, and ethnographic landscapes associated with contemporary groups that are typically used or valued in traditional ways (Stoffle, Halmo, and Austin 1997).

National Park Service Cultural Resource Management Guidelines describe cultural landscapes as complex resources that range from rural tracts to formal gardens, further defined by the way the land is organized and divided, settled, and used, including the types of structures that are built on it (Stoffle, Halmo, and Austin 1997). Natural features, such as landforms, soils, and vegetation, provide the framework within which the cultural landscape evolves, and in its broadest sense, a cultural landscape is a reflection of human adaptation to and use of natural resources (Stoffle, Halmo, and Austin 1997).

It is difficult to define in Euro-American terms what cultural landscapes mean to Native Hawaiians, and it has become evident that labeling and evaluating geographic units that are usually loosely defined and based upon interdependent and intermingled cultural traditions presents only a part of the overall picture. Although a number of different terms may be used to describe these cultural areas, the term "cultural landscape" is used because it is widely understood and has official standing in federal cultural resources law and regulation.

To apply federal guidelines to Native Hawaiian cultural landscapes, a culturally specific set of components reflecting Native Hawaiian spiritual, religious, and cultural values has been identified. In “Kalo Kanu o Ka ‘Āina,” a report on the cultural landscape for Ke‘ānae and Wailua Nui, five somewhat overlapping types of sites were identified (McGregor 1998). These categories necessarily reflect the importance of culturally significant natural resources, in addition to human-made resources, such as archaeological sites; they are as follows:

- 1) Areas of naturally occurring or cultivated resources used for food, shelter, or medicine.
- 2) Areas that contain resources used for expression and perpetuation of Hawaiian culture, religion and language.
- 3) Places where known historical and contemporary religious beliefs or customs are practiced.
- 4) Areas where natural or cultivated endangered terrestrial or marine flora and fauna used in Native Hawaiian ceremonies are located, or where materials for ceremonial art and crafts are found.
- 5) Areas that provide natural and cultural community resources for the perpetuation of language and culture, including place names and natural, cultural, and community resources for art, crafts, music, and dance.

Research Methods

The Army has used the NEPA scoping process described in Appendix B to begin collecting information from Native Hawaiian groups and individuals that will help identify Native Hawaiian resources in the project areas. During this process, the Army received numerous comments regarding access to and protection of sacred sites and sacred landscapes. In response to these comments and as part of the Army’s compliance with Section 106 of the NHPA, Army staff are consulting with the ACHP, Hawai‘i State Historic Preservation Office (SHPO), OHA, Hui Mālama I Nā Kūpuna O Hawai‘i Nei, the Royal Order of Kamehameha, Mālama Mākua, Native Hawaiian community organizations and civic clubs, and elders in the Native Hawaiian community to further identify Native Hawaiian resources in SBCT project areas. The public involvement discussion in Appendix B and the Section 106 compliance process both address consultation to identify Native Hawaiian resources.

Draft TCP surveys as defined above have been completed at PTA and SBMR, and others are under way at KTA and KLOA. Summaries of data compiled through these surveys will be provided when available and will include a discussion of the findings of local informant interviews, as they relate to traditional uses and knowledge of the lands within the project areas.

Archival research to identify Native Hawaiian resources not recorded in previous cultural resource studies of USAG-HI lands was also conducted. The information from the previous studies has been categorized by place name, clarifying the extent of the information in each project area section. Oral histories collected for projects in areas near or associated with SBCT installations, such as the Saddle Road project (Langlas et al. 1997), the associated Palila

mitigation project (Tomonari-Tuggle and Paraso 2002), and the Mauna Kea Science Reserve (Maly 1999), were reviewed for additional information. Sources from the 19th and early 20th century record Hawaiian myths, legends, genealogies, and oral histories and have been re-inspected for references to places and traditional practices on SBCT installations (Kamakau 1961, 1964; Beckwith 1940; Fornander 1880, 1917; Malo 1951, Thrum 1976).

Land grant records collected by previous researchers were inspected for references to traditional uses and practices in the SBCT project areas. Additional archival research has been conducted, and historians and archivists were consulted including consultation with SHPD historian Holly McEldowney, Hawai'i State Archives, Bishop Museum library and archives, Hawai'i State library, University of Hawai'i Hamilton Library Hawaiian and Pacific Collection, the University of Hawai'i Center for Oral History, Hawai'i Mission Children's Society library, and the Hawaiian Historical Society library. Other referenced resources include cultural impact assessments prepared for the state of Hawai'i and filed at the OEQC, as well as numerous oral histories referenced in the catalog of the Oral History Program and the Bishop Museum Archives.

In addition to consultation and archival research, field surveys are underway to locate previously recorded cultural resources and identify new cultural resources in SBCT project areas. These identification surveys are slated for completion in the summer of 2003 in order for identification data to be included in the FEIS. In compliance with the NHPA, more detailed surveys are being or will be conducted as appropriate for the sites prior to construction.

Historic Overview

This section provides a general overview of regional history with an emphasis on military history in Hawai'i. More specific discussions can be found in later sections concerning each project area.

The Hawaiian Islands were settled between 100 and 800 AD, most likely from the Marquesas Islands in the South Pacific. The greatest population expansion in the islands occurred between 1150 and 1400, and archaeologists believe that during the later part of this period Hawaiian culture became quite complex. During this time, powerful lineages of high chiefs of O'ahu and Hawai'i were founded. Additionally, agriculture expanded and intensified during this period. By 1700, the islands had developed the social structure that would greet Europeans on their arrival, with population centers, royal centers, temple complexes, and intensive dryland and irrigated agriculture (Tomonari-Tuggle 2002).

In the 17th and 18th centuries, political strife became common in the islands, as ruling chiefs battled for dominance. Political power became increasingly concentrated, culminating in the development of multi-island chiefdoms in the late 1700s. In 1778 Captain James Cook was the first European to arrive in Hawai'i, followed by European and American traders looking for supplies and trading opportunities. The influx of European and American trade goods, including cannons and other heavy weapons, influenced Hawaiian politics in the end of the 18th century and beginning of the 19th. By the time of his death in 1819, the legendary King Kamehameha was ruler of all the Hawaiian Islands (Tomonari-Tuggle 2002).

American and European missionaries began arriving in 1820, at the same time that the ancient *kapu* (or taboo) system collapsed. An influx of settlers, traders, and farmers brought about great changes in Hawai'i's social structure, economy, and natural environment. The Great Mahele was a land redistribution system put into place beginning in 1845, redistributing and privatizing land all through the islands. The development of commercial agriculture (ranching, sugar, and pineapple) resulted in waves of new immigrants, including Chinese, Japanese, Portuguese, and Philipinos brought in to work the plantations. A revolution in 1893 replaced the monarchy with a provisional government and then a republic, which was annexed to the United States in 1898 as a territory (Tomonari-Tuggle 2002).

War with Spain was an added incentive for the United States to annex the islands and develop military defenses there. In the last half of the 19th century, construction of multiple military installations began; these included Pearl Harbor, Schofield Barracks, and coastal defenses in southern O'ahu. While many military personnel were relocated to Europe during World War I, after the war aviation stations were developed in Hawai'i as part of the islands' defenses. During the 1930s the threat of impending war with Germany and Japan reinforced military buildup in the islands; Schofield Barracks alone supported 20,000 people (Tomonari-Tuggle 2002).

After the Japanese attack on Pearl Harbor on December 7, 1941, Hawai'i became even more important for the American war effort. Huge numbers of servicemen and women poured into the islands to support the war in the Pacific. By 1942 135,000 soldiers were serving on O'ahu, and by 1945 that number had swelled to over 250,000. Hawai'i remained under martial law until the end of the war (Tomonari-Tuggle 2002).

Hawai'i continued to support the military during the Korean War (1950-1953), when additional housing was constructed at Schofield Barracks, and Wheeler Army Air Field was brought back into active duty. Kahuku and Pōhakuloa Training Areas were established in 1956, and nuclear missile sites were constructed in various locations beginning in 1959, the year Hawai'i became a state. Hawai'i became a staging ground for the Vietnam War from 1963 to 1975, and also served as a rest and recreation retreat for battle-weary soldiers (Tomonari-Tuggle 2002).

Prehistoric and Historic Resources

Prehistoric and historic resources to be found on SBCT project areas include historic and prehistoric archaeological sites, ATIs, historic buildings, structures, and districts, Cold War properties, historic landscapes, and monuments and memorials (Tomonari-Tuggle 2002).

As of December 2002, more than 500 archaeological sites had been identified within the ROI for SBCT project activities in Hawai'i. Of these, two sites are listed on the NRHP, while the others have not yet been assessed for eligibility. These numbers are likely to change, as additional sites have been and will continue to be discovered as survey work continues (IARII 2003).

Archaeological sites on O‘ahu are diverse and may include heiau (religious structures), ko‘a (small shrines), fishponds, stone markers, fishing shrines, habitation sites, caves and rock shelters, mounds, burial platforms, earth ovens, stone walls and enclosures, agricultural terraces, canals or ditches, rock art sites, and trails. Sites on PTA include cairns, volcanic glass workshops or quarries, excavated pits, trails, surface platforms or walls, open air shelters, and lava tube sites (Tomonari-Tuggle 2002).

Historic period archaeological sites include gun emplacements, concrete structures and bunkers, concrete walls, wooden structural remains, masonry platforms, concrete revetments, bermed depressions, berms and rock piles, tunnels, miscellaneous feature complexes, road beds, railroad remnants, and trash deposits.

Historic resources within the ROI for SBCT also include military housing, offices, structures, landscapes, and districts, as well as National Historic Landmarks. These historic resources can include properties that are less than 50 years old, such as Cold War properties, if they are found to be of exceptional significance. These historic resources include the Schofield Barracks Historic District, and the WAAF National Historic Landmark.

Current Management Efforts

The cultural resources management program at USARHAW has a staff that includes a Cultural Resources Manager, four Cultural Resource Specialists and an Architectural Historian. The management of the resources includes maintaining a cultural site data base, as well as GIS mapping, field survey, site evaluation, location, verification, and monitoring before, during, and after training activities, site preservation, Native Hawaiian consultation and coordination with other regulatory agencies. The cultural resources team also coordinates and facilitates public outreach actions that include site visits and tours and public education. Present efforts also include the formation of Cultural Advisory Committees on the island of Hawai‘i and O‘ahu.

Cultural resources on Army property are managed in compliance with all applicable Federal laws and regulations, DOD Directive 4715.3 on Cultural Resources Management, and AR 200-4, the Army regulation on cultural resource management. Department of the Army Pamphlet 200-4 provides more detailed guidance to installation staff on cultural resources compliance. Under these regulations, the installation commander is responsible for compliance with cultural resources laws, and cultural resources management. USARHAW has developed Cultural Resource Management Plans (CRMP) for the cantonment areas of SBMR, Fort Shafter, Kīlauea Military Camp, and WAAF. In compliance with DOD Instruction 4715.3, USARHAW is preparing an ICRMP for management of the Army’s one installation with 28 subinstallations in Hawai‘i. Preparation of this plan includes assessing the military missions, completing a detailed inventory of cultural resources on USARHAW lands, assessing the risk to such resources from Army activities, preparing and implementing management actions and standing operating procedures to protect and preserve cultural resources, monitoring the results of such plans, and adjusting the programs and policies as necessary. This document will be a component of an installation master plan and will provide an effective method of measuring and monitoring protection of cultural resources.

Compliance with Section 106 of the NHPA requires close coordination between cultural resources staff and project planners to integrate the identification and evaluation of historic properties with the planning of construction or other USARHAW projects. This compliance process includes regular consultation with the SHPO, Native Hawaiian organizations, and other interested parties. Such consultation is initiated by letter but may take place face to face. If a project is determined to have an adverse effect on historic properties, USARHAW staff will develop a memorandum of agreement (MOA) or programmatic agreement (PA) to address these effects and mitigate adverse effects. Such an agreement is usually signed by the Army, the SHPO, the ACHP, and other interested organizations or individuals.

In January 2003, USARHAW initiated consultation on a PA to address Section 106 consultation requirements under the NHPA for the proposed transformation; these consultations are ongoing. 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. The Army has provided the draft PA to the SHPO, the ACHP, other interested parties, and Native Hawaiian organizations for review, consultation, and revision and hopes to reach agreement on its terms later this year. If the PA is not executed, the Army will follow the procedures at 36 CFR 800, in order to comply with the NHPA.

USARHAW cultural resources staff conduct regular outreach to the Native Hawaiian community to facilitate the Section 106 and 110 process and other consultation efforts to fulfill its obligations under the NHPA. This outreach includes offering tours and open houses, speaking to school groups and college students, and providing cultural access.

The Army has identified Native Hawaiian burial sites within 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. Remains recovered from collections related to previous cultural resources work have been repatriated. It is USARHAW policy to leave burials in place and undisturbed whenever possible. Reburial areas are established as required after consultation with Native Hawaiian families, groups and individuals. USARHAW has developed a draft Plan of Action under NAGPRA and will be initiating consultation on it shortly.