

7.3 Cultural Resources

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The DOE Richland Operations Office established a cultural resource program in 1987 that has been managed by the Hanford Cultural Resources Laboratory as part of Pacific Northwest National Laboratory (PNL-6942). Pacific Northwest National Laboratory, Bechtel Hanford, Inc., and CH2M Hill Hanford, Inc., provided support to DOE Richland Operations Office for the cultural resource program on the Hanford Site throughout 1997. Thus, management of archaeological, historical, and traditional cultural resources at the Hanford Site is provided in a manner consistent with the National Historic Preservation Act, Native American Graves Protection and Repatriation Act, Archaeological Resources Protection Act, and American Indian Religious Freedom Act.

7.3.1 Native American Involvement

Members of the Confederated Tribes of the Umatilla Indian Reservation, Yakama Indian Nation, Nez Perce Tribe, and Wanapum Band were actively involved in the cultural resource program during 1997. Monthly cultural resource issues meetings provided a venue for the exchange of information between DOE, tribal staff members, and site contractors about projects and activities on the Hanford Site. Tribal staff and site contractors worked together during the completion of several field surveys and monitoring activities during the year. In addition, two Wanapum tribal members were hired by Pacific Northwest National Laboratory and trained to work as archaeological technicians and assist DOE Richland Operations Office with cultural resource management activities.

Other activities involving tribal expertise included 1) a tour of the Hanford Site, led by a Wanapum elder, to provide information to Wanapum families about the meaning and importance of locations, ranging from the shores of the Columbia River to the top of Rattlesnake Mountain and 2) a tribal and professional workshop to discuss

the development of geophysical studies at the Hazardous Materials Management Emergency Response Training and Education Center.

7.3.2 Public Involvement

The cultural resources staff of the Pacific Northwest National Laboratory, Bechtel Hanford, Inc., and CH2M Hill Hanford, Inc., assisted DOE in organizing and conducting two public meetings for reviewing the implementation of DOE's building mitigation activities and the sitewide treatment plan (DOE/RL-97-56, Rev. 1), including a discussion of the future uses of historic buildings at the Hanford Site. Additional meetings focusing on the preservation of historic buildings for interpretive/museum purposes continued through 1997.

Two DOE-sponsored public meetings were held in 1997 for the purpose of identifying and evaluating buildings and structures in the 700 and 1100 Areas for listing consideration in the National Register of Historic Places (contained in the National Historic Preservation Act). A DOE-sponsored Hanford Curation Workshop of invited experts and a public meeting were held to develop a sitewide curation strategy for Manhattan Project and Cold War era artifacts.

7.3.3 Section 106 Activities

Pursuant to Section 106 of the National Historic Preservation Act, cultural resource reviews must be conducted before each proposed ground disturbance or building alteration/demolition project can take place. Cultural resource reviews are required to identify properties that may be eligible for or listed in the National Register of Historic Places within the proposed project area and evaluate the effect the proposed project may have on any such property.

During 1997, 151 cultural resource reviews were requested. A majority of the reviews involved project areas that had been previously surveyed or were located in previously disturbed ground. Of the projects reviewed, 9 were also monitored during the construction phase, 12 required archaeological surveys, and 47 involved building modification or demolition (Figure 7.3.1). The surveys covered a total of 98 ha (242 acres) and resulted in the discovery of 1 isolated find and 5 archaeological sites (Figure 7.3.2).

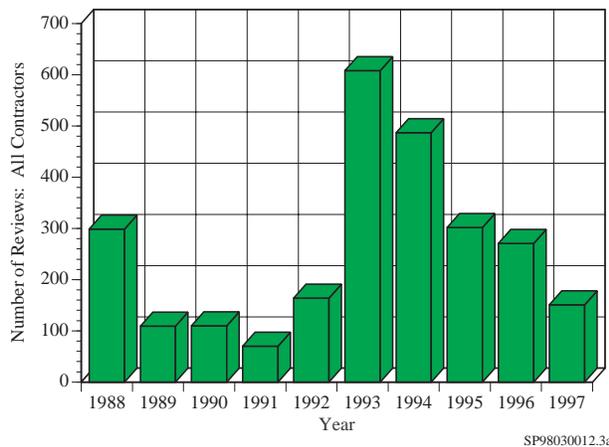


Figure 7.3.1. Cultural Resource Reviews Requested Each Calendar Year



Figure 7.3.2. Historic Sites are Commonly Found During Surveys Conducted at the Hanford Site

7.3.4 Section 110 Activities

Section 110 of the National Historic Preservation Act requires that federal agencies undertake a program to identify, evaluate, and nominate historic properties and consider the use and reuse of historic properties. Agencies are also required to maintain and manage historic properties in a way that considers preservation of their values and ensures that preservation-related activities are completed in consultation with other agencies, tribes, and the general public.

In 1997, management activities conducted to fulfill Section 110 requirements included implementation of the programmatic agreement for the built environment (DOE/RL-96-77), development of a Hanford Site curation strategy for the purpose of identifying and preserving Manhattan Project and Cold War era artifacts (DOE/RL-97-71), and publication of a Multiple Property Documentation form (DOE/RL-97-02) to assist with the identification and evaluation of historic properties for listing in the National Register of Historic Places. Since the initiation of Section 110 activities, 465 buildings/structures have been documented on historic property inventory forms and are on file at the Hanford Cultural Resources Laboratory (Figure 7.3.3). National Register sites were also monitored to assess impacts caused by erosion associated with high water levels along the Columbia River.

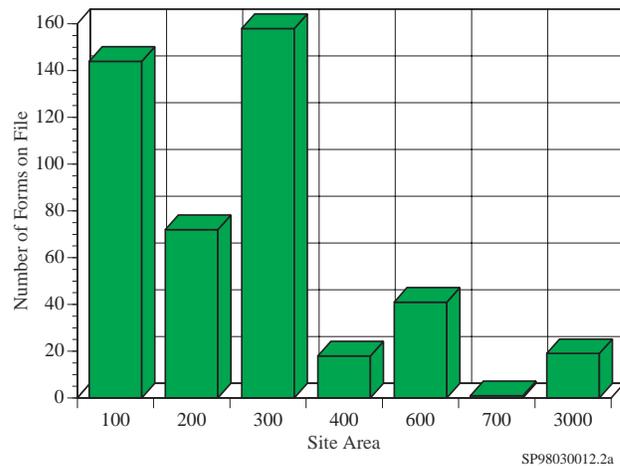


Figure 7.3.3. Hanford Buildings Documented with a Washington State Historic Property Inventory Form

7.3.4.1 Historic District

During 1997, the buildings mitigation project was implemented to carry out work under the programmatic agreement for the built environment (DOE/RL-96-77) and outlined in the Hanford Site Manhattan Project and Cold War Era Historic District Treatment Plan (DOE/RL-97-56, Rev. 1). The plan, required under Stipulation IV of the programmatic agreement, directs the production of a mitigation document chronicle the history of the Hanford Site during the Manhattan Project and Cold War era.

During 1996, the Hanford Site Manhattan Project and Cold War Era Historic District was established and approximately 185 buildings, structures, and complexes were identified as contributing properties within the district recommended for mitigation. Buildings in the 700 and 1100 Areas were not included in this evaluation. Two public meetings were held during 1997 to evaluate these buildings and as a result, 7 buildings were identified as contributing properties within the district recommended

for mitigation (Figure 7.3.4). The Hanford railroad was also added to the list of properties recommended for mitigation. Of the 185 buildings, structures, and complexes selected as contributing properties within the historic district recommended for mitigation, 79 have been documented according to mitigation standards identified in the sitewide treatment plan (DOE/RL-97-56, Rev. 1). Three historic properties have been documented at the Historic American Engineering Record level, 18 have been documented with Expanded Historic Property Inventory Forms, while standard Historic Property Inventory Forms have been prepared for the remaining 58 buildings/structures.

Approximately 900 buildings and structures were identified as either contributing properties not selected for mitigation or as noncontributing buildings and structures and will be documented in a database maintained by DOE. According to the programmatic agreement (DOE/RL-97-56, Rev. 1), certain property types such as mobile trailers, modular buildings, storage tanks, towers, wells,



Figure 7.3.4. 105-C Reactor, One of Several Structures Included in the Hanford Site Manhattan Project and Cold War Era Historic District

and structures with minimal or no visible surface manifestations are exempt from the identification and evaluation requirement.

Hanford Site cultural resources staff provided a leadership role in developing a national initiative for management of DOE historic buildings based on concepts, methods, and themes developed for the Hanford Site Manhattan Project and Cold War Era Historic District. In addition, a curation strategy for artifacts associated with this time period was prepared and disseminated for public comment and review.

7.3.4.2 National Register Multiple Property Documentation

Historic properties are those cultural resources worthy of preservation that are listed or are eligible for listing in the National Register of Historic Places. To assist with the evaluation of potential historic properties, 5 historic contexts were completed in 1996 as part of the National Register Multiple Property Documentation process. These contexts were used during 1997 to determine National Register eligibility for sites and buildings on the Hanford Site associated with the prehistoric period (18,000 B.C. - 1805 A.D.), the contact period between early explorers and native peoples (Lewis and Clark 1805 - Hanford Engineer Works 1943), the pre-1943 Euroamerican settlement period (Lewis and Clark 1805 - Hanford Engineer Works 1943), and the Manhattan Project/Cold War periods (1942-1990).

7.3.4.3 Monitoring

An inventory of exposed and eroding cutbanks along all islands in, and both shorelines of, the Columbia River corridor located within the Hanford Site was initiated in response to the significant increased erosion of riverbanks as a result of abnormally high water flows. Approximately 20 km (12.4 miles) of shoreline were examined during 1997. The primary focus of the shoreline inventory was to record the nature and extent of exposed cultural features both at previously identified archaeological sites and at newly eroded cutbanks not previously available for examination. A total of 13 new archaeological sites were recorded as a result of this effort.

Locke Island, in the Hanford Reach of the Columbia River, contains some of the best preserved evidence of

prehistoric village sites extant in the Columbia Basin and is included within the Locke Island National Register Archaeological District. Field monitoring of this large island has been ongoing since 1995 to evaluate a complex fluvial erosion problem exhibited along its northeastern shoreline. Erosion along the northeastern shoreline of Locke Island and along the entire Hanford Reach was substantial as a result of sustained high waters during the spring floods of 1997. Monitoring continued during 1997 along a portion of the island's northeastern shoreline to investigate rates of erosion and associated impacts to archaeological features. During the year, approximately 0.7 ha (1.8 acres) of the island's surface land was lost and entered the river along the monitored section of shoreline. A multiagency group was formed to investigate possible solutions to this complex issue.

7.3.5 Education and Research

Educational activities associated with the cultural resources program in 1997 included presenting lectures to groups, ranging from public school classrooms to civic groups, colleges, and professional societies. Several symposia were organized throughout the Pacific Northwest region to present DOE Richland Operations Office's cultural resource management techniques to professional groups and societies. The 3rd Annual Aboriginal Lifeways, Prehistoric Artifact Recognition and Documentation Certification training sponsored by the Confederated Tribes of the Umatilla Reservation was attended by Bechtel Hanford, Inc. and CH2M Hill Hanford, Inc., staff. Pacific Northwest National Laboratory participated in the Associated Western Universities, Inc., Northwest program by hosting a student intern involved in field and laboratory work with Hanford Cultural Resources Laboratory staff.

Research activities continued as part of compliance work. Research in the field of archaeology and history focused on archaeological site preservation and protection, quantification and analysis of erosion and associated impacts to archaeological sites and features at Locke Island, use of plants significant to native American people in post-cleanup revegetation, and documentation of the built environment of the Manhattan Project and Cold War periods.