

**AN ASSESSMENT OF
HISTORIC PROPERTIES AND PRESERVATION ACTIVITIES**

at the

U.S. Department of Energy

In response to requirements of

Executive Order 13287

Preserve America

October 2011

I. Background

Executive Order 13287, *Preserve America*

In March 2003, President George W. Bush signed Executive Order 13287, *Preserve America*.

The goal of the Executive Order is to enhance Federal stewardship in the areas of cultural resource management and historic preservation. The Executive Order directs Federal agencies to include cultural resource and historic preservation considerations in their day-to-day decision making and encourages Federal agencies to seek partnerships with communities, nonprofits, and other interested parties to incorporate “heritage tourism” into local economic development strategies.

This report updates the December 2004, November 2005, and November 2008 assessments provided to the President’s Advisory Council on Historic Preservation (ACHP) and fulfills the requirements of Executive Order 13287 (Sections 3a and 3b) that agencies with real property management responsibilities describe the general conditions and management needs of their historic properties and review their regulations, management policies, and operating procedures for compliance with Sections 110 and 111 of the National Historic Preservation Act.

This report was prepared by the Department of Energy’s Office of History and Heritage Resources, with the assistance of the cultural resources offices and contacts at the Department’s field sites. Questions or comments should be directed to Terry Fehner, the Department’s Chief Historian and Federal Preservation Officer, at (301) 903-4107.

U.S. Department of Energy

The Department of Energy was activated on October 1, 1977, as the twelfth cabinet-level department. It brought together for the first time within one agency two programmatic traditions that had long coexisted within the Federal establishment:

- a loosely knit amalgamation of energy-related programs scattered throughout the Federal government dealing with various aspects of non-nuclear Federal energy policy, research and development, regulation, pricing, and conservation; and
- defense responsibilities that included the design, construction, and testing of nuclear weapons dating from the World War II Manhattan Project effort to build the atomic bomb that subsequently evolved into the Cold War nuclear weapons complex.

Departmental Assets

From a historical and historic preservation perspective, many, though not all, of the Department’s most significant assets are associated with the Manhattan Project and how it helped end World War II, the building of the nuclear weapons that helped win the Cold War,

and the pursuit of world-class science and technology, most notably through the national laboratories. The Manhattan Project's role in helping end World War II is regarded as one of the most important events of the 20th century, while the advent of nuclear weapons ushered in the nuclear age and determined how the next war—the Cold War—would be fought. For its part, DOE and its predecessors' nearly seventy years of support for science—and Nobel prizewinning scientists—in such diverse fields as physics, genomics, climate change, and nanotechnology has helped revolutionize the modern scientific enterprise.

A small sample of the best known historical physical assets for which the Department has stewardship responsibilities includes the B Reactor at Hanford (Manhattan Project); V-Site and Gun Site at Los Alamos (Manhattan Project); the Graphite Reactor, Beta 3 Calutron Facility, and the K-25 Gaseous Diffusion Plant Process Building at Oak Ridge (Manhattan Project); Experimental Breeder Reactor-1 (EBR-1) at the Idaho National Laboratory (Atoms for Peace); the Nevada Test Site (Cold War); and the nuclear weapons rail cars at the Pantex Plant (Cold War).

Some of DOE's historical physical assets are open to the public on an intermittent or controlled basis. These assets include the B Reactor at Hanford, EBR-I at the Idaho National Laboratory, the Graphite Reactor at the Oak Ridge National Laboratory, and the weapons effects areas at the Nevada Test Site.

DOE and its Departmental elements own and are responsible for lands that contain prehistoric archeological sites. The Department's Los Alamos National Laboratory, for example, contains close to 1900 known archaeological sites, many of them Ancestral Pueblo resources rivaling or even exceeding those of adjacent Bandelier National Monument—a well known park—in terms of quality or uniqueness. Other examples include the Savannah River Site archeological sites and the Nevada Test Site and Bonneville Power Administration petroglyphs.

The Department also is responsible for historic assets that predate Federal ownership of a site. Oak Ridge, for example, maintains several church buildings and cemeteries left in place when the Manhattan Engineer District took over the site during World War II. Hanford has the remains of a high school, an agricultural warehouse, and a bank building. The Nevada Test Site has cabins, corrals, and mine sites, and remnants of homesteads, stage stations, and historic trails dot the Idaho National Laboratory landscape.

Among the Department's most significant textual assets are documents, photographs, and oral histories. Notable examples are the Atomic Energy Commission (AEC) Secretariat records, headquarters and field photograph collections, and special collections like the Nuclear Testing Archive co-located with the Atomic Testing Museum in Las Vegas, Nevada. DOE owns oral histories associated with some of the most renowned figures in recent American history, including Enrico Fermi, Edward Teller, and J. Robert Oppenheimer. In addition to oral histories that capture the words and deeds of well-known scientists, the Department's knowledge preservation efforts have documented important aspects of the decades-long, multi-billion-dollar investment in science, engineering, and process-knowledge through interviews with current and former employees.

The Department of Energy also is associated with five major museums located at or near DOE field sites: the American Museum of Science and Energy, Oak Ridge, Tennessee; the National Museum of Nuclear Science and History (formerly the National Atomic Museum),

Albuquerque, New Mexico; Bradbury Science Museum, Los Alamos, New Mexico; the Columbia River Exhibition of History, Science and Technology, Richland, Washington; and the Atomic Testing Museum, Las Vegas, Nevada. Each museum is idiosyncratic, arising from particular local needs and with varying funding and management relationships with the Department. Some sites have exhibits at local museums. Idaho National Laboratory, for example, has a major permanent exhibit in the Museum of Idaho in Idaho Falls.

Many DOE field sites also maintain visitor centers. Their primary focus is presenting the science and technology related to a particular DOE national laboratory or facility. Departmental visitor centers include the Science Learning Center at Brookhaven National Laboratory, the Lawrence Livermore National Laboratory Discovery Center, the Leon Lederman Science Education Center at Fermi National Accelerator Laboratory (Fermilab), the National Renewable Energy Laboratory Visitors Center, and the SLAC National Accelerator Laboratory Visitor Center. The Pantex Visitor Center officially opened with a dedication ceremony in 2010.

Two DOE visitor centers are located at former weapons complex sites that were closed, went through remedial action and environmental restoration, and opened to the public. At the Office of Legacy Management's Weldon Spring, Missouri, and Fernald, Ohio, sites, the visitor centers document the history of the site and facility, clean-up efforts, and ongoing maintenance and surveillance. Both sites maintain nature preserves with trails for hiking, biking, and bird watching. An online tour of the Weldon Spring Interpretive Center is at <http://www.lm.doe.gov/default.aspx?id=1917>. The Fernald Visitor Center opened in October 2008. The website is at http://www.lm.doe.gov/Fernald/Visitors_Center/Visitors_Center.pdf.

The Department opened a headquarters visitor center in the lobby of the Forrestal Building at a ceremony marking DOE's 30th anniversary in October 2007. The headquarters visitor center includes a Manhattan Project exhibit and a timeline documenting DOE's history.

Several DOE weapons complex sites have local community groups that are seeking to establish museums or visitor centers highlighting activities at the site. Sites with potential or nascent museum/visitor centers include Mound, Ohio; Rocky Flats, Colorado; Savannah River Site, South Carolina; and Pantex, Texas. The Mound Museum is currently located in a small, temporary facility. The Department is working with local community groups to varying degrees.

Developing a Department-Wide Program: 2011 Update

Descended for the most part from the Manhattan Engineer District, with its use of contractors and strict compartmentalization, and/or the AEC, with its policy of decentralization that devolved substantial power and authority to field offices, DOE field sites developed their own unique and individual Cultural Resources/Historic Preservation programs. Compliance activities associated with the National Historic Preservation Act (NHPA) and other relevant laws have been performed primarily by contractors under the direction of DOE field officials. The history of the development of a Department-wide program up to October 2008 can be found in DOE's 2008 Executive Order report.

In the last three years, the Department's program to manage its history and heritage resources has made significant strides, both at headquarters and in the field. The upgrade and advancement of the program has brought greater visibility, enhanced recognition of the

importance of the Department's historic assets, and genuine progress toward preservation and interpretation. Highlights for the past three years include:

- Field sites have moved forward with inventories and, where applicable, toward completion of Cultural Resource Management Plans (CRMPs).
- The Office of History and Heritage Resources (OHHR) continued to partner with the President's Advisory Council on Historic Preservation in identifying ways in which DOE's historical assets could contribute to local economic development strategies.
- OHHR continued to partner with the National Park Service in implementing the Manhattan Project National Historical Park Study Act (S. 1687, P.L. 108-340). The joint National Park Service/DOE study team looked at whether the historic properties at the Department's three major Manhattan Project sites—Oak Ridge, Hanford, and Los Alamos—should be made part of the National Park Service. In November 2009, a draft of the study (actually an environmental assessment) was released to the public. In July 2011, the Secretary of the Interior, with DOE concurrence, in a letter to Congress recommended the establishment of a three-site Manhattan Project National Historical Park. The Secretary recommended that the park be managed as a partnership between the National Park Service and the Department of Energy.
- OHHR continued efforts to implement the Executive Order, especially in identifying potential heritage tourism opportunities across the DOE complex.
- OHHR assisted in the effort to rapidly distribute stimulus/American Recovery and Reinvestment Act (ARRA) funds. In July 2009, the Chief Historian/Federal Preservation Officer joined with DOE's Office of Energy Efficiency and Renewable Energy (EERE) in a task force established to determine how best to combine rapid distribution of stimulus/ARRA funding with compliance with the National Historic Preservation Act (NHPA). To ensure a combination of speed and compliance, the Chief Historian/FPO suggested that the Department work with the President's Advisory Council on Historic Preservation to put in place a delegation of authority that would require grant recipients to fulfill their NHPA Section 106 responsibilities in partnership with their State Historic Preservation Offices. The resulting delegation ensured that buildings on the National Register of Historic Places or eligible for listing on the National Register would be protected from applications of energy-saving or weatherization technologies that would compromise or eliminate their historic character while allowing all other projects to move speedily forward. The Department's ability to distribute stimulus/ARRA funding rapidly while protecting historic properties was well-received in the local and state preservation communities.
- Consultations continued on the disposition of the K-25 Gaseous Diffusion Plant Process Building at Oak Ridge. In 2005 DOE's Oak Ridge Office and the consulting parties in a Memorandum of Agreement (MOA) determined that the north-end (footprint of approximately 135,000 sq ft) of the "U"-shaped K-25 Building should be retained. In May 2009, however, DOE/ORO recommended—and the other consulting parties accepted—that the entirety of the K-25 plant be dismantled due to greater than anticipated deterioration of the building. The consultation process then moved into the mitigation phase, with the need to develop a new MOA as to what should be done

to commemorate/document the site. In October 2010, a “bridge” MOA was put in place that keeps DOE in compliance pending a final agreement. DOE/ORO contracted with an outside heritage tourism consultant in an effort to determine how to appropriately commemorate the site in the absence of the K-25 plant. In addition, a nationally-recognized structural engineering firm conducted a study of the feasibility and cost of various options involving retention of some part of the original building. DOE/ORO is expected to propose a preferred alternative to the consulting parties in fall 2011.

- The Pantex Visitor Center officially opened with a dedication ceremony in 2010. The history presented at the visitor center includes a timeline of world events impacting the history of the Pantex Plant. Incoming visitors, cleared and uncleared, are able to understand the events known as the Cold War and experience the Pantex site, providing a framework and a starting point for conveying a broad interpretive story. This includes careful integration of site design elements, interpretive multimedia exhibits, the landscape, and cultural and natural components. In 2011, an extension of the visitor center was completed. The extension focuses on DOE/NNSA and the relationship with the different Management and Operating Contractors at Pantex. Also at Pantex, an outdoor exhibit was completed in 2009, concentrating on early transportation of weapons to and from Pantex with unique railcars.
- The National Museum of Nuclear Science and History (formerly the National Atomic Museum) in Albuquerque, New Mexico, reopened in a new facility in April 2009. The museum previously had been located on the Kirtland Air Force Base, but the terrorist attacks on September 11, 2001, and the Base closure that followed prompted the Museum to relocate to temporary quarters in Old Town Albuquerque. With a larger facility and more spacious grounds, the museum in fall 2009 was able to move to the new site several airplanes and other large artifacts that had remained at the old site on the base.
- The Advisory Council on Historic Preservation, in August 2011, gave its Chairman’s Award for Achievement in Historic Preservation to the Department’s Richland Operations Office for the B Reactor Preservation Project. “The B Reactor Project spared an endangered National Historic Landmark from destruction and converted what had been a public problem into a publically accessible national treasure,” said Advisory Council Chairman Milford Wayne Donaldson. “The B Reactor is likely to become part of a new Manhattan Project National Historical Park that will teach millions about the amazing but true cliffhanger story of the race to develop the atomic bomb before America’s enemies could do so during World War II.”

II. Inventory and Assessment of Historic Properties

Field Site Inventories and Assessments

The Department of Energy owns numerous historic properties located primarily at field sites across the country. Historically, field sites have been responsible for the identification and evaluation of historic properties. This continues to be DOE policy. Each field site is expected to develop a site-wide program to identify, evaluate, and manage historic properties.

These programs will include a survey and inventory of historic properties (buildings, structures, sites, artifacts, objects, and records), development of narrative contexts within which to evaluate their eligibility for inclusion in the National Register, determinations of eligibility, and development of plans for the management of eligible properties. These programs also will include regular consultation with the FPO, the State Historic Preservation Officer (SHPO), and the interested public, as appropriate. In the development of narratives, sites will place special emphasis on development of local or regional level contexts. Archaeological resources and Native American consultation are significant historic preservation issues, especially at sites in the West with large tracts of land and numerous affiliated Native American Tribes.

Inventory methods used at DOE field sites are appropriate for the specific cultural resource inventory conditions associated with the facility or program area and take into account the recommendations made by consulting tribal governments. Efforts to evaluate structures and facilities for National Register of Historic Places (NRHP) eligibility use established NRHP criteria.

As with inventory methods and management, assessment, monitoring, and management of DOE historic properties is a site responsibility. Many DOE historic properties receive routine surveillance and maintenance because they play a continuing role in DOE missions. Maintenance activities performed at these properties, therefore, are carried out to maintain the functional use of the facilities rather than for the sole purposes of maintaining historical integrity. Management of historic properties that no longer have a DOE mission varies from site to site and from property to property.

The specifics of both inventory management and assessment, monitoring, and management of DOE historic properties vary from site to site. Following are updates provided by the DOE field sites for the 2011 report:

Los Alamos National Laboratory (LANL)

Los Alamos National Laboratory has both spatial (Arcview GIS) and relational (MS Access) databases with information on all historic properties and archaeological sites at LANL. A total of 1887 archaeological sites have been identified within 23,091 surveyed acres. 1784 of these sites are eligible for the National Register of Historic Places (Register). In addition, 434 Manhattan Project and Cold War era properties are located on LANL land. Of these historic buildings and structures, 160 properties are eligible for the Register and 105 have yet to be assessed for Register significance. The Arcview database includes fields on site number, site type, time period, and site eligibility that are associated with GPS locations. The Access database includes over 30 fields that also include project name, report number, New Mexico State Historic Preservation Officer (NM SHPO) review, etc.

The database is updated periodically during the year. Continual updating and data verification is conducted, which includes rechecking a sample of the original inventory forms with information in the database. A link between the spatial (GIS) and relational (Access) databases has been developed but is not yet fully functional as of September 2011. Data verification is still being conducted.

Post-Cerro Grande Fire Monitoring of Historic Properties

During the summers of 2008, 2009, 2010, and 2011, cultural resources staff from the LANL

Resources Management Team (RMT) continued the annual evaluation of post-Cerro Grande Fire risks from flooding, soil erosion, and other threats to Ancestral Pueblo sites, historic Homestead era sites, and Manhattan Project/Cold War historic building areas. Specific rehabilitation work conducted during the 2008-2011 update period included hazard tree removal and erosion control work. Additionally, cultural resources staff continued the recording of archaeological sites discovered during tree-thinning operations related to post-Cerro Grande Fire recovery work.

Las Conchas Fire – Summer 2011

The Las Conchas Fire burned only a small area of DOE land at Los Alamos. However, post-fire flooding events have impacted and continue to impact archaeological sites at LANL, and Las Conchas Fire damage assessments are ongoing in these areas. Some of the site areas were also affected by the Cerro Grande Fire (May 2000) and related post-fire flooding events.

Land Conveyance and Transfer Project (LC&T)

During 2008-2011, LANL continued its multiyear cultural resource program in support of the LC&T, which is a DOE/NNSA project to convey or transfer Laboratory lands to the Incorporated County of Los Alamos or the BIA in Trust for the Pueblo de San Ildefonso. Thirty-nine archaeological sites were excavated during the initial years of the project, and several historic DOE-owned buildings were located in the LC&T tracts. During FY 2008, the final archaeological report was submitted to the NM SHPO. In FY 2009, artifacts collected during the excavations were transferred to the Museum of New Mexico in compliance with Federal curation legislation (36 CFR Part 79). In FY 2010, the final historic buildings report was submitted to the NM SHPO. In FY 2011, a history of homesteading on the Pajarito Plateau was completed and outdoor interpretive panels were produced for installation in downtown Los Alamos, near the historic Romero Cabin. These final tasks were also part of the LC&T's cultural resource requirements.

Archaeological Survey and Documentation

During 2008-2011, LANL conducted archaeological survey work in support of proposed Laboratory undertakings. New sites were recorded and evaluated for Register eligibility. The results of these surveys were submitted by the DOE, NNSA, Los Alamos Site Office (LASO) to the NM SHPO in compliance with Section 106 of the NHPA. Special surveys were also conducted in support of the LANL Trails Management Program, including archaeological survey and LIDAR documentation at the Mortandad Cave Kiva Complex and archaeological surveys on DOE land in Technical Areas 70 and 71 near the community of White Rock.

Historic Building Survey and Documentation

In support of LANL's decontamination and decommissioning (D&D) and square foot reduction programs, cultural resources staff conducted historic building assessments and documentation work (both HABS and HAER) as required under the provisions of the NHPA. This work included field visits to historic properties (including interior and exterior inspections), digital and archival photography, historical and architectural documentation, oral interviews, and artifact salvage. LIDAR documentation was conducted at several building locations and two major engineering documentation projects (HAER) were carried out at Cold War-era facilities.

Native American Consultation and the Native American Graves Protection and Repatriation Act (NAGPRA)

LASO continues to consult with nearby Pueblos to identify and protect traditional cultural properties, human remains, and sacred objects in compliance with NHPA and NAGPRA. One of the most important Ancestral Pueblo sites at LANL is Nake'muu Pueblo, which was built during the 13th century and rebuilt during the Pueblo revolt. It is the only Ancestral Pueblo site at the Laboratory that retains some of its original standing walls. The Pueblo de San Ildefonso continues to make periodic visits to Nake'muu, and LANL RMT staff monitors the general site condition on an annual basis.

Other Potential NHL Buildings

LANL staff conducted hazard characterization and clean out work at TA-22-1 (the "Fat Man" Quonset Hut) during 2009 and 2010. In September 2011, a report outlining Phase I of a plan to restore the building to its Manhattan Project period of significance (1945) was submitted to the NM SHPO for concurrence with a determination of "no adverse effect." The proposed Phase I work will involve the demolition of two, non-contributing, post-World War II additions, currently located on the Quonset Hut's east and west ends.

TA-14-6 is a Manhattan Project building that is currently in active use at a LANL firing site, but is in need of rehabilitation. A historic preservation consultant assessed the building and identified a list of specific repair tasks. The LANL estimate for repair costs was completed at the end of FY 2011.

TA-73-15, the East Gate Guard Tower, is an early Cold War building located at the entrance to the town of Los Alamos on DOE land. The tower was inspected during the update period, and a LANL repair and site landscaping estimate was prepared.

Cold War Signature Properties

At the request of the DOE FPO, LANL submitted a list of potential Cold War Signature Properties in FY 2011. Most of the properties listed had already been identified in the LANL CRMP as "candidates for preservation."

LANL Executive Order "Heritage Sites" Inventory

The LANL Heritage Sites inventory has been submitted to the DOE and closely mirrors the list of exceptionally significant properties (potential NHL properties) discussed in the LANL CRMP. This list includes the remaining Manhattan Project properties that are being considered for inclusion in the expanded NHL District and also in the proposed Manhattan Project National Historical Park. In addition to the World War II and Cold War buildings and structures identified in the CRMP as candidates for preservation, the inventory list includes LANL's most significant Ancestral Pueblo and Homestead-era sites. Nake'muu Pueblo, discussed above, is included in the inventory, along with Tsirege Pueblo, which was primarily occupied during the 15th and 16th centuries and contains several hundred ground floor rooms, approximately 10 kivas, numerous cavates, a defensive wall, a reservoir, and rock art. The Gomez Homestead, an early 20th century Hispanic homestead, is also listed in the inventory. The site consists of stone corrals and structures, a stone *horno*, a cabin foundation, and associated artifacts.

Fermi National Accelerator Laboratory:

Inventory Methods and Management:

Phase I archaeological surveys have been completed for the entire facility. Forty-seven archaeological sites have been identified. Of these, one has been determined eligible for inclusion on the NRHP, eighteen are not eligible, twenty-seven are as yet undetermined, and one is a cemetery. All of the standing structures on the 6,800 acres purchased for construction of Fermilab were evaluated in 1967. With few exceptions (a number of farmsteads now used as private residences or support facilities, and several twentieth century barns), mid-nineteenth and early twentieth century buildings in relatively good condition were moved to the Fermilab Village and are now used primarily as dormitories and laboratories. With the exception of a recently discovered late nineteenth to early twentieth century farmstead, all of the archaeological sites are included on maps in the Cultural Resources Management Plan (September 2002). Additionally, Fermilab's Facilities Engineering Services Section maintains a FIMS database that includes all buildings and infrastructure, and has developed a GIS that includes the archaeological site locations with limited historical information. To date none of the buildings and other structures constructed since 1967 have been examined for potential historical significance.

Assessment, Monitoring, and Management:

Maintenance involves routine activities to keep the structures functioning properly and to support DOE missions. These structures are, for the most part, active research facilities less than 50 years old with machines and other equipment that are continually upgraded. Assessment and monitoring of Fermilab cultural assets are addressed in the site Cultural Resources Management Plan. Artifacts recovered during Fermilab archaeological investigations are curated at the Illinois State Museum in Springfield, Illinois. Fermilab cultural resource records and reports are curated at Fermilab by the Environment, Safety and Health Section and at the Illinois State Museum.

Idaho National Laboratory (INL)

Within the 890 square mile Idaho National Laboratory, nearly 3,000 prehistoric and historic archaeological sites have been identified and recorded and are maintained in Arcview GIS. A Predictive Model estimates the existence of over 75,000 prehistoric sites within the INL boundaries and nearly 300 historic structures have been identified within appropriate historic contexts that are associated with World War II, post war, and the nation's early nuclear era. The inventories are updated once per year and included in an appendix to the CRMP. When deemed necessary, the properties and resources are reevaluated every 10 years.

The INL Cultural Resources Management Office maintains an ongoing monitoring program. A baseline is established via site inventory forms, photographs, and/or artifact drawings and maps. Random sites, and those that are threatened by projects and/or are near public access routes, are chosen for monitoring annually. Monitoring forms are completed and an annual monitoring report compiled, as per the INL Monitoring Plan, an appendix to the CRMP.

During monitoring in late FY 2008, INL CRM staff observed new graffiti in the furthest underground reaches of Middle Butte Cave, approximately 0.38 miles from the surface entrance in a wide round chamber at the end of the lava tube. This chamber has been vandalized many times over the years, but no ancient pictographs have been observed there. The new graffiti included a date of "5/2/08" and several names. In a joint investigation with

the Bingham County Sheriff's Office, INL Security was able to identify and locate the teenaged vandals. In order to avoid charges for trespassing and vandalism to sensitive archaeological materials, the culprits were escorted to the Cave by the county law enforcement officials and INL security guards to cleanup their graffiti. Fortunately, none of the sensitive archaeological paintings in the cave were impacted by the thoughtless actions of these young people.

In FY 2009, increased vigilance by INL Security resulted in the apprehension of three trespassers who used four-wheelers to access an INL cave illegally. After additional investigation, these individuals were charged with trespass violations, including jail time (suspended) for one culprit.

In FY 2010, an unauthorized hunting camp was established near Middle Butte Cave. Trespassing charges were not filed because there were no "No Trespassing" signs posted on the road they used to access the location. Also during the summer of FY 2010, two wildfires burned through the INL, the Jefferson Fire and the Middle Butte Fire. Collectively, they burned 92,347 acres on INL and 30,647 acres off INL. Fire suppression activities included over 100 miles of firebreaks, some through sensitive cultural areas. Pedestrian surveys are ongoing to identify and assess damage to impacted sites.

Brookhaven National Laboratory (BNL)

Brookhaven National Laboratory maintains a listing of historic properties and archaeological resources. Culturally significant buildings are identified in FIMS. The Cultural Resource Coordinator reviews and updates the listing annually (minimum) or as additional items are identified.

Currently conditions of properties are monitored through informal observations and periodic (typically annual) monitoring. Historically significant artifacts are identified and when necessary moved to permanent storage for protection. Development of a more formal monitoring program is a task identified in the CRMP.

Lawrence Berkeley National Laboratory (LBNL)

Lawrence Berkeley National Laboratory maintains a listing of historic and/or eligible and non-historic and/or non-eligible properties. That list is augmented as all the Lab's buildings undergo a historic assessment by a qualified historian in a multi-year process. The Lab's Environmental Planner reviews and updates the list as additional items are identified through this process. This process will become formalized in the Lab's forthcoming CRMP.

Pantex site

Archeological sites have been mapped. Only two of 69 sites are considered potentially eligible for inclusion on the National Register and are protected through effective monthly monitoring methods. The DOE's Facility Information Management System (FIMS) database serves as the inventory of historic buildings. The database has been uploaded to indicate those buildings eligible for inclusion on the National Register. The FIMS database is updated and managed by the Site Planning Department. Buildings will not be re-evaluated unless a

new historic context is identified. Usage of historical facilities is encouraged and standard maintenance activities continue, which is the strongest and most effective preservation method possible at Pantex.

All historic buildings at Pantex are in use to support the Plant's DOE/NNSA mission and are maintained by the Infrastructure, Maintenance, and RTBF Divisions. The cultural resource staff is consulted to ensure procedures are followed for proper protection of historical facilities. All plant projects are reviewed and identified through the NEPA process. In the cultural resource review, the properties and archeological sites being impacted are identified and then compared to the Programmatic Agreement to determine if documentation or additional consultations will be required. Usually, properties and archeological sites are surveyed informally before and after a project due to the NEPA process, identifying any adverse effects that might impact properties or sites. If properties or activities involved are exempted under the Programmatic Agreement, the project is approved as is.

Oak Ridge Reservation (ORR), which includes three separate facilities—the Y-12 plant, the Oak Ridge National Laboratory, and the East Tennessee Technology Park (formerly the K-25 site)

Cultural resource surveys have been completed for three separate facilities—the Y-12 National Security Complex (formerly Y-12 Plant), the Oak Ridge National Laboratory (ORNL), and the East Tennessee Technology Park (ETTP) (formerly the K-25 site)—and all properties have been inventoried on the ORR. Inventories are updated and re-evaluated as proposed undertakings impacting the historic properties and archeological resources are being planned. Since 2008, Phase I and II archaeological surveys have been completed for the Parcel ED-3 and Happy Valley Worker Camp areas located near ETTP.

Properties at Y-12 and ORNL have been assessed, and programmatic agreement documents are in place to ensure historic properties are maintained and protected accordingly. The properties at the K-25 Site also have been assessed, and the future of historical properties at the site are documented in Memoranda of Agreements with the State

Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP), with input from other interested parties including members of the public.

Paducah Gaseous Diffusion Plant

A Cultural Resources Management Plan for the Paducah Site was approved in 2006 which contains plans for the management of historic properties. The Cultural Resources Management Plan along with accompanying Cultural Resources Survey also fulfills the requirement in the Programmatic Agreement. The Programmatic Agreement had been finalized in 2004 with the Kentucky State Historic Preservation Officer and the Advisory Council on Historic Preservation.

Portsmouth Gaseous Diffusion Plant

Since 2008 the Portsmouth Gaseous Diffusion Plant (PORTS) has completed the Phase I Archaeological Survey of the site and released this report to the Ohio Historic Preservation Office, consulting parties and the general public.

The OHPO identified 13 farmsteads warranting Phase II archaeological surveys.

As of July 2011, PORTS completed the Phase II surveys of the 13 farmsteads identified by the Ohio Historic Preservation Office. Documentation of the survey results is underway.

In January 2011, Portsmouth completed a “National Historic Preservation Act Section 110 Survey of Architectural Properties at the Portsmouth Gaseous Diffusion Plant”. The inventory report was accepted by the Ohio Historic Preservation Office in March 2011.

In support of Section 110, DOE has conducted Phase I and Phase II Archaeological Surveys of the X-605 well field and waterline located in off-site easements. Results are pending and are planned for use in a Section 106 consultation for a potential easement assignment.

In approximately 1995, a professional group conducted an onsite survey of archaeological and architectural resources. Draft survey reports were written. The architectural survey report remains draft.

Southwestern Power Administration

All maintenance, radio tower, and electrical substation facilities have undergone a Section 110 evaluation to determine the possible presence of historical properties. The examinations and evaluations of these properties, during the Section 110 evaluation, revealed no evidence of archeological sites or historic properties. In 2010, a Class I NRHP evaluation was conducted to identify listed or eligible NRHP recorded sites or properties within a one mile corridor of Southwestern's transmission lines, electrical substations, and stand-alone facilities, however, no sites identified in the report are owned or managed by Southwestern Power Administration.

Prior to land disturbance activities, a thorough Section 106 review is conducted in efforts to avert any possible negative effects to cultural resource artifacts or historic properties.

Western Area Power Administration

All Western's new construction, maintenance, radio tower, and electrical substation work have undergone a Section 106 evaluation to determine the possible presence of historical properties.

Western's Rocky Mountain Region, Desert Southwest Region and Sierra Nevada regions have existing Programmatic Agreements (PA) for routine maintenance with State Historic Preservation Offices and the Advisory Council on Historic Preservation. These PA's are in the process of being updated to reflect any changes in technology and standard agency practices. Western is not a land managing agency but does put cultural resource stewardship as a top priority under NEPA and in accordance with NHPA and Section 106. As required to adhere to these goals, prior to any activities Western may undertake that would impact these goals, a thorough Section 106 review and consultation process is followed to avoid any possible negative effects to any eligible or potentially-eligible historic properties.

Ames Laboratory

Ames Laboratory completed a Historical and Archeological Survey Evaluation in 2009 to determine the possible presence of historical properties and to comply with Section 110 of the National Historic Preservation Act. The examinations and evaluations of these properties resulted in the identification of three buildings (Spedding Hall, Wilhelm Hall, and Metals Development) that are eligible for the National Register of Historic Places. Ames Laboratory will continue to monitor their cultural assets and will engage in the Section 106 consultation process when historic issues arise.

National Renewable Energy Laboratory (NREL)

DOE opened the Solar Energy Research Institute as a federal facility in 1977. In 1991, it achieved national laboratory status and was renamed NREL. Due to the age of the facility, there are no historic federal buildings over 50 years old or otherwise eligible for inclusion to the National Register of Historic Places. Cultural resource surveys have been completed for the entire NREL South Table Mountain (STM) campus as well as the National Wind Technology Center (NWTC). There are no known cultural resources present at the NWTC. As a result of the STM surveys, three historical sites were recognized as significant cultural resources that should be preserved, including an open-air amphitheater, a stone bridge spanning a natural drainage channel adjacent to the amphitheater, and a stone and concrete ammunition bunker below the amphitheater site. The three structures were constructed during the Works Progress Administration (WPA) era in the 1930s. Through NREL's efforts, these sites were added to the National Register of Historic Places in 1992, with the amphitheater and stone footbridge listed together as a single site. In 2003 additional surveys were conducted on a recently acquired 25-acre parcel that is part of the Camp George West Historic District. Three contributing features of the district including two concrete rifle firing lines and a low rock wall were identified. In 2010 and 2011 two additional Class III surveys were conducted for the right-of-way of a proposed new southern access road to the NREL STM campus. The surveys identified six features, two of which were previously documented and contributing features to the Camp George West Historic District, and four features that were determined to be ineligible for inclusion into the National Register under any criteria. The two previously documented features are an additional two firing lines located off NREL property.

Pacific Northwest Site Office

To comply with Section 106 and other regulatory authorities, activities to ensure the protection of cultural resources on the Pacific Northwest National Laboratory (PNNL) Site are conducted. Although the PNNL Site is only 350 acres, the property encloses a number of archaeological sites, several of which are listed on the National Register of Historic Places. Between 2008 and 2011, nine cultural reviews were conducted on the PNNL Site and no new archaeological sites were recorded. As part of the stewardship responsibilities outlined in the DOE Pacific Northwest Site Office Cultural and Biological Resources Management Plan, three historic properties are monitored annually: a tribal pre-contact cemetery with historic component (45BN1426), pre-contact village site with historic component (45BN028/104), and a pre-contact open camp/village site (45BN105). Monitoring ensures continued review of the condition of these properties and documents any impacts caused by natural processes. With the assistance of local tribal representatives, site boundaries are identified and detailed notes and photographs are taken during monitoring trips.

This information is compiled into a monitoring report which is used to assess changes from previous years.

Office of Legacy Management

The Department of Energy's Office of Legacy Management (LM) is responsible for long-term management of properties (legacy sites) that formerly contained radioactive and chemical waste, environmental contamination, and hazardous materials. LM has stewardship responsibilities for 87 legacy sites. LM's report can be found at Appendix II.

Most major DOE field sites now have active, site-wide programs that assure that historic properties are identified, managed, and, where appropriate, documented. Field sites have been particularly successful in managing archaeological resources, as well as pre-DOE history properties. Most large sites have teams of archaeologists and historians that labor to protect and preserve the site's archaeological and historical heritage. These cultural resources professionals meet the qualification standards set forth in *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Cultural resources professionals are essential to the Department for working on cultural resources issues and ensuring compliance with Federal cultural resources management laws, regulations, and guidance. As highly qualified professionals, they take all necessary training required for the tasks at hand. DOE managers in the cultural resources area, as well, take the necessary training and classes to perform their jobs at a high level of competence.

Department-Wide Inventories: FIMS

As stewards of national resources, DOE uses the Facilities Information Management System (FIMS) as a tool to assist in managing corporate physical assets, including historical assets. FIMS is the Department's corporate real property database for real property as required by DOE Order 430.1B Real Property Asset Management order. The system provides DOE with an accurate inventory and management tool that assists with planning and managing all real property assets. Real property includes land and anything permanently affixed to it, such as buildings, fences, and building fixtures (lights, plumbing, heating and air conditioning, etc). Complete and accurate information on real property holdings is critical to the Department for managing facilities and reporting to the General Services Administration (GSA), Office of Management and Budget (OMB), Congress, and the taxpayers.

The data elements within FIMS are sponsored by various DOE headquarters program offices. As a data element sponsor, the program offices are responsible for defining the data element, providing guidance, and justifying the need to collect the data within FIMS. Information is tracked on an individual asset basis. The data is organized by ownership which includes DOE Owned, DOE Leased, DOE Ingrant, Contractor Leased, Contractor License, Institutional Control, Permit, GSA Owned and GSA Leased.

One of the data elements in FIMS is historical designation. Sites provide the historical designation for properties under their control. Each property is designated as one of the following:

- Not Evaluated
- Not Eligible
- Eligible

- Listed on Historic Register
- Listed as National Historic Landmark
- Non-Contributing Element of NHL/NRL District (NHL = National Historic List; NRL = National Register List)

As cultural resources officials complete their inventories at their sites, the historical information is added to FIMS.

The Facilities Information Management System is a useful tool in that it identifies and categorizes historic properties across the DOE complex. FIMS does not, however, assess or prioritize historic properties in terms of their relative historical significance either at a given site or across the DOE complex. Assessing and prioritizing historic properties at the site level is the responsibility of site cultural resources managers. Assessing and prioritizing historic properties department-wide, across the DOE complex and as part of a departmental historic preservation strategy, is the responsibility of the DOE Chief Historian/Federal Preservations Officer.

Manhattan Project Signature Facilities and Cold War-Era Properties

The Department's initial efforts in the late 1990s to assess and prioritize historical properties complex-wide focused on the Manhattan Project. The eight most significant surviving Manhattan Project properties were termed Signature Facilities. The Manhattan Project Signature Facilities list of properties consists of the Metallurgical Laboratory at the University of Chicago; the X-I 0 Graphite Reactor, the K-25 Gaseous Diffusion Process Building, and the Y-12 Beta-3 Racetracks at Oak Ridge; the B Reactor and T Plant Chemical Separation Building at Hanford; V-Site Assembly Building (and subsequently also the Gun Site) at Los Alamos; and the Trinity Site on what is now the White Sands Missile Range. The Manhattan Project Signature Facilities properties, approved by DOE's Corporate Board on Historic Preservation and validated by the panel of experts convened by the Department and the Advisory Council on Historic Preservation, have been at the center of DOE's historic preservation efforts over the past decade.

The Signature Facilities delineate core Manhattan Project facilities that, taken together, enable DOE to successfully interpret the Manhattan Project mission of developing atomic bombs during World War II. In addition to the Signature Facilities, sites may have other facilities that best interpret that site's Manhattan Project mission from a local, state, regional, national or international perspective. These include the Quonset Hut (used for "Fat Man" R&D and assembly) and a 200-ft diameter concrete bowl where wartime explosives experiments with plutonium were carried out at Los Alamos, the 200-North area vault at Hanford where plutonium was stored prior to shipment to Los Alamos, and the pilot plant at Y-12 on the Oak Ridge Reservation.

Use of the Signature Facility designation has been a major success story for the Department's historic preservation program. Four of the eight Signature Facilities—the X-I 0 Graphite Reactor, the Y-12 Beta-3 Racetracks, the B Reactor, and the V-Site and Gun Site—have been recommended as the core properties for inclusion in the proposed Manhattan Project National Historical Park. The K-25 building, due to its size, radioactive contamination, and structural condition and not to its lack of significance, is being demolished and will be the subject of a multi-million dollar mitigation program. The T Plant continues in use as a storage facility. Several of the buildings that made up the Met Lab on the University of Chicago campus are

still in use by the university. The Trinity Site remains under the protection of the Department of Defense.

The Los Alamos National Laboratory provided the following update on the status of the V-Site and Gun site:

V-Site Restoration and Maintenance

In October 2008, the V-Site Restoration Project received the National Trust/ACHP Award for Federal Partnerships in Historic Preservation. Continuing activities at the site during the 2008-2011 update period include the stabilization of the burned, I-beam structure at the former Radiography Building. Repairs consisted of spot welding the metal structure and reinforcing damaged footings. Additional repair tasks have been identified for FY 2012-2013, and work plans have been developed by a historic preservation consultant. Three outdoor interpretive panels were also installed at V-Site during the update period.

Gun Site Restoration Project

The Gun Site restoration plan was completed in the summer of 2008 and received NM SHPO concurrence with a finding of “no adverse effect” for Phase I (the clean-up of non-contributing, deteriorating architectural elements). This initial clean-up and demolition work was completed in November 2009. Phase II planning work continued throughout 2010 and 2011, and structural repair work will be conducted at buildings TA-8-1, TA-8-2, and TA-8-3 (the Gun Site) during FY 2012.

Building on the success of the Manhattan Project Signature Facilities designations, the DOE Federal Preservation Officer has begun discussions with field sites about significant Cold War-era properties warranting possible preservation. Many of DOE’s Cold War-era facilities are near, at, or over fifty years of age. Some structures, having performed their defense or energy-related missions, sit dormant and unused awaiting their ultimate disposition. Some sites have already moved to preserve Cold War properties. Artifacts retained at the Pantex Plant, for example, include six railcars. During the height of the Cold War, these railcars moved nuclear weapons from Pantex to a number of military weapons depots, ensuring safety and security for the nation’s borders. The railcars are preserved and displayed onsite for special tour groups. Outdoor interpretive panels have been installed describing the role of each railcar. A walkway and stairways have been added for visitors to tour safely through selected railcars.

III. Management Initiatives

Field Site Initiatives

Innovative field initiatives and consultations continued throughout the DOE complex. Following are submissions from the sites updating the 2008 report:

Oak Ridge Reservation

K-25 Gaseous Diffusion Process Building at Oak Ridge: DOE has continued to consult on historic interpretation of the K-25 Site. Additional studies were conducted which included a feasibility and structural evaluation of the K-25 Building. A final MOA for

K-25 Site interpretation is anticipated by the end of CY 2011.

Pantex Plant

In October 2004, DOE's Pantex Site Office, B&W Pantex (DOE's contractor that operates the site), the Texas State Historic Preservation Office, and the ACHP completed execution of a Programmatic Agreement and Cultural Resource Management Plan. A visitor center with a railcars exhibit fulfills a portion of the preservation activities that have been outlined in the Cultural Resource Management Plan. The unclassified visitor center, which identifies some of the heritage inventories, has generated interest, particularly through family members and friends of employees. Local community organizations, schools and other agencies have requested tours and presentations. Due to the increase of interest, controlled visits to the visitor center and railcars (heritage inventory) have been allowed and have been incorporated into some of the regular site visits from different government agencies. Educational outreach activity has sparked requests for Cold War presentations, Pantex history briefings, and archeological briefings to various groups. Future plans in 2011 and 2012 include working on identifying historical records and retention schedules with the National Archives and incorporating different media for preservation and storage space purposes.

Idaho National Laboratory

In 2011, a new exhibit was added to the EBR I Visitor's Center Annex. The interactive displays commemorate EBR II, an Argonne Laboratory West facility that is scheduled for demolition. The exhibit opened on Memorial Day and will remain as a permanent educational fixture.

Public tours continue of selected prehistoric and historic archaeological sites and efforts are ongoing to preserve the rich INL photographic, engineering drawing, and record archives for use in the preservation and continued interpretation of INL history. Such efforts include working with local and regional historical societies and other groups, the development and implementation of an archival plan, and an appropriations request for construction of an addition to the existing Records Storage Center to house the extensive INL Archive collections.

The INL Cultural Resource Management Office staff continues to partner with the INL Sustainability Program staff. In 2010, the EBR I National Historic Landmark building received a partial new "cool" roof.

Los Alamos National Laboratory

The five-year review and update of the Los Alamos CRMP was begun in 2011 and is expected to be finalized in 2012. A new programmatic agreement among LASO, the NM SHPO, and the Advisory Council on Historic Preservation implementing the revised CRMP will be developed at that time.

Lawrence Berkeley National Laboratory

Lawrence Berkeley National Laboratory has undertaken preparation of a CRMP; this is expected to be completed in 2012. The CRMP will define the roles, responsibilities,

requirements, and methods for managing cultural resources at LBNL. A site-wide programmatic agreement between DOE and the California SHPO is expected to result from this effort.

Since 2008, LBNL has completed a SHPO consultation for the construction of the Computational Research and Theory facility.

Bonneville Power Administration (BPA)

In 2008, BPA initiated an evaluation of the historic value of BPA's transmission system. In April of 2010, BPA finalized and received concurrence on the historic context statement, *Corridors of Power: The Bonneville Power Administration Transmission Network*. This document describes the history and significance the BPA transmission system located in Oregon, Washington, Idaho and portions of Montana, Wyoming, Utah and California. In this context statement, it was determined that the BPA transmission network should be considered eligible for the National Register of Historic Places under Criteria A and C.

From this document, BPA and its consultant have now undertaken the development of a National Register Multiple Property Submittal (MPS). This MPS came out in draft in May of 2010 and lays out a framework for determining the eligibility of associated property types of BPA's transmission system. Within two periods of significance, the BPA transmission system is comprised of hundreds if not thousands of individually identified elements depending on how the resource types are defined. The MPS identifies the property type (i.e. transmission line, substation, etc.) and sets the registration requirements for resource. The MPS is still currently in draft form, but BPA is committed to submitting it to the National Park Service for a Determination of Eligibility (DOE) by the end of 2011.

Once a Determination of Eligibility is agreed upon, BPA and its consultant will develop a historic property management plan in the form of a Manual of Built Resources (MBR). The MBR will be subject to concurrence from each SHPO and will create a standard for a wide variety of typical issues subject to Section 106 review.

The MBR will identify the guidelines that BPA may use on a structure or building when treatment is necessary (i.e. roof replacement, painting) that will retain the buildings integrity. In addition to this, the MBR will also identify which actions or methods that are available that would improve the property's sustainability and energy efficiency. These actions will meet the Secretary of Interior standards for the Treatment of Historic Properties.

Brookhaven National Laboratory (BNL)

BNL has seen significant construction since the 2008 report. As part of the development for both the National Synchrotron Light Source – II and the Long Island Solar Farm, Phase I archeological surveys were conducted with no significant findings. BNL also continues to document historic aspects of its reactors of which the Brookhaven Graphite Research Reactor and the High Flux Beam Reactor are each eligible for listing. Models and artifacts are archived for future interpretation.

Public outreach has largely been related to the history of the BNL site prior to its becoming a National Laboratory. BNL hosted the “Casing of the Colors” for the 77th Regional Readiness Command (77th Division). The 77th Division was born at Camp Upton (BNL Site) in 1917 and the Laboratory was asked to host their retirement in 2008. The “Casing of the Colors” included displays of Camp Upton artifacts and tours of WW I training trenches.

Lawrence Livermore National Laboratory (LLNL)

In 2005, DOE/NNSA initiated discussions with the State Historic Preservation Officer (SHPO) toward the development of a new Programmatic Agreement (PA) that would govern how National Register-eligible properties would be managed. In 2007, DOE/NNSA published the Historic Context and Building Assessments for the Lawrence Livermore National Laboratory Built Environment (Ullrich 2007) based on work that was conducted in 2002. Several buildings, selected objects, and two districts were recommended to be eligible for the National Register. Of the 31 prehistoric and historic archaeological resources recorded at Site 300, the DOE/NNSA recommended and the SHPO concurred that five qualify for listing in the National Registry of Historic Places (NRHP) because of their ability to yield information important in history and prehistory. The Draft Programmatic Agreement (PA) and treatment plans were revised in 2010 based on input from the SHPO. Until a new PA is in place, proposed projects will be reviewed through the National Historic Preservation Act’s (NHPA) Section 106 process on a case-by-case basis. A five-year review of the LLNL built environment is currently being conducted.

Portsmouth Gaseous Diffusion Plant

Portsmouth Gaseous Diffusion Plant has launched the development of a “virtual museum” and on-line resource on the history of the plant in January 2011. This web site, slated to be “live” in late 2011 or early 2012, documents the construction, operations and demolition of facilities at the Portsmouth site using archival films, access to daily newsletters from the first plant operator (Goodyear Atomic Corporation), hundreds of photographs and documents, oral histories of present and retired site workers, and recent videos and photographs of plant demolition activities.

National Renewable Energy Laboratory (NREL)

By integrating cultural resource management with the National Environmental Policy Act process and other planning processes, NREL has minimized when possible or mitigated impacts that recent STM campus development projects have had on cultural resources. Site-wide NEPA documents and campus master plans for the STM specifically designate the three historical sites in a protected and non-developable zone. Indirect impacts, such as visual effects, to these features from the campus development activities were analyzed in NEPA Environmental Assessments and Section 106 consultations were conducted with the Colorado SHPO.

In 2003 NREL initiated consultation with the Colorado SHPO to mitigate impacts that development a newly acquired 25-acre southern parcel would have on three features (two firing lines and a low rock wall) that were contributing features to the Camp George West Historic District. This effort culminated in late 2005 with these features being recorded

and documented to Level II HABS/HAER standards consisting of archival quality mapping, photographs, and detailed description of the resources.

In 2011, NREL entered into a Memorandum of Agreement (MOA) with Colorado SHPO to mitigate impacts that a proposed new south access road would have on the two offsite rifle range firing lines associated with former Camp George West located at Pleasant View Park at Camp George West. The proposed project would remove approximately 75 feet of the western extent of the southernmost firing line. In lieu of recordation, NREL will construct and place an interpretative display to document this contributing resource that will be readily accessible to the general public, enrich the value of Pleasant View Park at Camp George West, and provide a linkage to the military heritage of the site.

Pacific Northwest Site Office

In September 2008, the DOE Pacific Northwest Site Office (PNSO) finalized its Cultural and Biological Resources Management Plan (CBRMP). The CBRMP describes the goals, methods, and procedures to be used by PNSO in managing cultural and biological resources on the PNNL Site; describes the biological and cultural settings of PNSO-managed lands; defines the roles and responsibilities for program participants; identifies regulatory drivers; and identifies the types of cultural reviews required for specific undertakings.

Headquarters Initiatives

Since the Department's 2008 Executive Order report, DOE Headquarters has continued efforts to assist and promote field preservation initiatives and expand history and historic preservation activities at headquarters. The front office—the Secretary, Deputy Secretary, and Under Secretaries—has been supportive throughout. The Department's program offices have become increasingly aware of the significance of DOE's historical assets and active in the promotion of public interest and involvement. The Office of Management takes the lead for headquarters' efforts, and the Office of Management's Office of History and Heritage Resources (OHHR) continues to direct and oversee broader field initiatives and activities.

In the last three years, headquarters preservation-related initiatives have included the following:

- OHHR continued to partner with the President's Advisory Council on Historic Preservation in identifying ways in which DOE's historical assets could contribute to local economic development strategies.
- OHHR continued to partner with the National Park Service in implementing the Manhattan Project National Historical Park Study Act (S. 1687, P.L. 108-340). The Department's Office of Environmental Management also played a significant role seeing the project through to completion.
- OHHR continued efforts to implement the Executive Order, especially in identifying potential heritage tourism opportunities across the DOE complex.

- OHHR worked with DOE's Office of Energy Efficiency and Renewable Energy and the President's Advisory Council on Historic Preservation to ensure the rapid distribution of stimulus/American Recovery and Reinvestment Act (ARRA) funds in compliance with the National Historic Preservation Act.
- OHHR worked with the Department's Office of Classification in initiating a pilot project to place historical records, including declassified and redacted versions of classified documents, on the web.

IV. Community Economic Development and Heritage Tourism

Community Economic Development

More than with most agencies, communities adjacent to major Department of Energy field sites have been closely tied economically to the sites, even to the point of the life and death of the community itself. As the Manhattan Project took shape during the Second World War, acquiring more than 500,000 acres of land to build production plants and research and design laboratories, entire communities, such as Hanford and White Bluffs, Washington, were bought out and disbanded. At the same time, new company towns emerged at Los Alamos, New Mexico; Oak Ridge, Tennessee; and Richland, Washington. These company towns depended entirely on the wartime effort to build the atomic bomb for their existence. The Manhattan Engineer District plotted the layout of the towns, determined the type of housing to be built, and security controlled access and egress. Not until years after the war did these communities fully open up to the outside world, and even then they remained nearly totally dependent on site activity for their economic existence.

Expansion of the nuclear weapons complex in the late 1940s and early 1950s, as the Cold War came into full swing, brought about additional land acquisitions, removals of communities from the map, and, if not the creation of entirely new company towns, at least revolutionary changes to existing nearby communities with the arrival of new jobs, an influx of outside workers, and redirected and revitalized local economies. Times, however, were not always flush. As production ultimately geared down, as it did at Oak Ridge and Hanford in the 1960s and 1970s, the community towns suffered economically, and the Atomic Energy Commission actively sought to diversify the economic base.

The end of the Cold War, in the late 1980s and early 1990s brought further economic disruption to communities located near DOE complex sites as production of uranium and plutonium ended and the nuclear weapons assembly line came to a halt. Environmental cleanup in the wake of a half century of weapons production helped buoy the economy at many sites, but the loss of mission and the closure of entire plants and sites could not be entirely overcome. Some sites have taken on new missions, replacing, reinventing, or existing alongside the old one. The Nevada Test Site, for example, now sustains a variety of largely non-related activities and, in the wake of the nuclear weapons testing moratorium, performs criticality tests and non-nuclear weapons tests. DOE also has sought to reindustrialize some of the sites, such as at the former K-25 Site and at the Mound plant in Miamisburg, Ohio, by turning over plants and warehouses to business and industry and by promoting the construction, by the private sector, of new buildings and facilities.

At the former K-25 Site, this has included transfer of approximately 180 acres of land and more than a dozen buildings totaling over 330,000 square feet to the private sector. In addition, the water treatment plant and the K-25 fire station have been transferred to the City of Oak Ridge, along with other utility distribution systems and roadways which provide public access to the transferred land/buildings. To date, two new speculative buildings have been constructed at the site, one of which has been sold. These successes were realized as a result of continuing partnerships with the local government and community organizations and provide a foundation for strong private sector economic development as the environmental cleanup moves toward completion.

Heritage Tourism

The Department has had a long-standing interest in museums—going back to the Atomic Energy Commission. The intent has been to reach out and educate the public about the Department’s mission and programs, particularly those associated with nuclear activities. The American Museum of Science and Energy in Oak Ridge, for example, was established in 1949, and, originally named the American Museum of Atomic Energy, provided guided tours that educated visitors on the peaceful uses of atomic energy.

As such, the potential for heritage tourism, with a significant contribution toward community economic development, exists across the DOE complex. The Manhattan Project, which developed, produced, and deployed the atomic bomb within three years, is one of the most significant events in world history. In a national survey at the turn of the millennium, journalists and historians ranked the dropping of the atomic bomb and the surrender of Japan to end the Second World War as the top news story of the twentieth century, ahead of walking on the moon and the Wright brothers’ first flight. The Manhattan Project Signature Facilities are first-of-a-kind or one-of-a-kind facilities that used some of the century’s most innovative and revolutionary technologies. Hanford’s B Reactor, which created the plutonium for the Trinity device, was the world’s first production reactor. Scientists and engineers designed the K-25 gaseous diffusion plant at Oak Ridge using a totally untested and unproved technology. The Y-12 Beta-3 Racetracks, the only surviving World War II-era electromagnetic isotope separations equipment in the world, still stand, complete with operator panels and telephone switchboard, almost exactly as they did during the war.

Communities are recognizing this heritage tourism potential. Oak Ridge, Tennessee, is a prime example. The Oak Ridge Convention & Visitors Bureau commissioned a study that led to the development of the “Secret City” marketing campaign, focusing on Oak Ridge’s Manhattan Project historical assets, for Oak Ridge and Anderson County. The study noted that the American Museum of Science and Energy and the Manhattan Project Sites were on the list of five primary “attractors” for Oak Ridge tourists. A draft master plan for Oak Ridge reservation interpretation of the Manhattan Project, prepared at the request of DOE Oak Ridge in late 2003, proposed that the museum be transformed into the National Manhattan Project Museum, which would serve as “the hub for interpreting the Manhattan Project in Oak Ridge, orienting visitors and serving as an access point to site-specific facilities, the City of Oak Ridge, and other sites.”

The Department is actively cooperating with the communities. Again at Oak Ridge, the Y-12 National Security Complex (Y-12) in 2007 opened its doors to one of their new facilities, the New Hope Center, Y-12’s new visitor center. The Y-12 History Exhibit Hall, located in New Hope Center, provided the public an opportunity to gain a better understanding and

appreciation of the history of Y-12. The Y-12 History Exhibit Hall displays artifacts and other memorabilia associated with significant eras and projects at Y-12. Various training classes sponsored by Y-12 and private sector conferences held at Y-12 provide an opportunity for locals and tourists to visit the Y-12 History Exhibit Hall, which is an opportunity for DOE to promote heritage tourism.

Public bus tours, with guided commentary, are provided to the Oak Ridge facilities by the American Museum of Science and Energy from June to September. U.S. citizens are provided an opportunity to view DOE facilities in Oak Ridge such as the Y-12 New Hope Visitor Center, the Spallation Neutron Source (the world's most intense pulsed accelerator-based neutron source), the Graphite Reactor, and the K-25 Overlook.

Heritage Tourism Initiatives

The Department of Energy is making progress in engaging in the process of making its historic properties accessible to heritage tourism. A number of the field site initiatives have strong heritage tourism components. The following is an update to the Department's 2008 Executive Order report:

"The Secret City Festival" is presented by the City of Oak Ridge, the Arts Council of Oak Ridge, and the Oak Ridge Convention & Visitors Bureau each year during the third weekend in June, in an effort to celebrate the unique history and heritage of Oak Ridge, Tennessee, and to honor those who lived and worked there during and after the Manhattan Project. The Secret City Festival hosted its ninth festival in 2011, and it has grown to become the premiere festival in the region during the summer months, drawing more than 25,000 people annually. Awards for the Secret City Festival over the past three years include: Top 100 Event by the American Bus Association (2009), Best Green Gig Kaleidoscope Award (2010), and Silver Best Festival and Best Green Component by the Southeast Tourism Society (2011). Each year the festival offers a glimpse into the lives of those who were dedicated to ending WWII. One of the regular events is the World War II re-enactment, a favorite of both festival attendees and also the re-enactors themselves. This event brings period vehicles such as WWII era tanks, jeeps, and other equipment into a living history encampment. It also features two combat re-enactments each year at Saturday's festivities. Over 250 re-enactors come to participate in the award winning event, the largest event of its kind in the Southeast.

Other tourism activities include bus tours of the historic Manhattan Project facilities, special exhibits at the American Museum of Science and Energy, and in 2008 a special "Sister Secret Cities" program that included presenters from Oak Ridge, Los Alamos, and Hanford.

In 2010, a Networking Oak Ridge Oral History (NOROH) agreement was signed by DOE Oak Ridge Office, NNSA Y-12 Site Office, Office of Science and Technical Information, and the City of Oak Ridge, with a mission to ensure the memories of those involved in the history of the Department of Energy in Oak Ridge and its predecessor agencies are preserved for future generations.

The Idaho National Laboratory has a long history—going back to 1975—of opening a historic facility, EBR-1, to the public and promoting heritage tourism. They also provide scores of presentations and tours to a variety of audiences regarding INL prehistory and history. Also, in 2011, DOE-ID contracted with professional subcontracted historians to

provide a chronicle of INL events from 2000 to 2010. It is a follow-on to “Proving the Principle: A History of the Idaho National Engineering and Environmental Laboratory, 1949-1999” that was published in 2000.

At the Hanford B Reactor, the Department in 2009 made Life Safety Code upgrades, mitigated industrial hazards to expand the tour path, and devised a new security plan that eliminated the need for tour badges and allowed for international visitors. In the same year, DOE had more than 6,300 visitors to the B Reactor. In 2010, the first 4,000 public tour seats were taken via the internet in less than 12 hours. Visitor surveys and public discussions indicate that the B Reactor will continue to be of interest to the public, particularly as DOE moves toward lowering the current age limit to enable visits by school groups and families with minor children.

DOE headquarters, as well, is increasingly aware of the importance of heritage tourism issues. In March 2011, the Department concurred with the recommendation by the National Park Service’s Special Resource Study that a three-site Manhattan Project National Historical Park be established. “The Department of Energy,” DOE Deputy Secretary Daniel Poneman wrote to National Park Service Director Jonathan Jarvis, “is proud of its Manhattan Project heritage and recognizes that this partnership with the National Park Service would bring one of the most significant events in 20th century America to a wider audience.”

Manhattan Project National Historical Park Study

No initiative has greater potential to increase heritage tourism at Department of Energy sites than the proposed creation of a Manhattan Project National Historical Park. On October 18, 2004, President George W. Bush signed Public Law 108-340 (S. 1687). The “Manhattan Project National Historical Park Study Act” directed the Secretary of the Interior in consultation with the Secretary of Energy to conduct a Special Resource Study of the Los Alamos, Hanford, and Oak Ridge sites “to assess the significance, suitability, and feasibility of designating 1 or more sites within the study area as a unit of the National Park System.” This was to be done, the National Park Service (NPS) later noted, “while maintaining the security, productivity, and management goals of the Department of Energy.” The Deputy Secretary of Energy directed the Department’s Office of History and Heritage Resources (OHHR) to coordinate DOE’s efforts in support of the study to ensure that “in consultation with the Secretary of Energy” was meaningful. The following is an update to the Department’s 2008 Executive Order report:

In September 2009, following public meetings at the sites and extensive assessments of potential park boundaries and integrity of historical resources, the Washington office of the National Park Service (NPS) approved the printing of the draft Environmental Assessment for PL 108-340. The NPS position—Alternative E in the draft EA—was to have a unit of the National Park Service at Los Alamos only (and then not to include historically significant assets located away from the town center that are critical to telling the Manhattan Project story). The draft EA contained draft comments from OHHR that non-concurred with the NPS position and stated that it was feasible to have a park consisting of assets at all three DOE sites. Printing of the draft EA in December 2009 triggered a final round of public meetings that took place at the three DOE sites in January and February 2010. Public comments at the three sites were overwhelmingly in favor of a three-site/one-park approach. Public officials from New Mexico, Tennessee, and Washington State also came out in favor of this position.

The NPS study team, with OHHR participation, held a conference call on April 8, 2010, to consider next steps. The team agreed to prepare a revised recommended Alternative E that would include all three sites in one park and delineate NPS and DOE responsibilities. In October, NPS Director Jarvis signed off on the draft EA (in the form of a FONSI—Finding of No Significant Impact), which contained the recommendation for a three-site park managed as a partnership with DOE continuing to own its properties and totally controlling access to them and the NPS stationing a small number of rangers in each of the three communities to establish a visitor center. In March 2011, Deputy Secretary Poneman concurred on the findings of the study and provided assurances to NPS that DOE would retain full access control in accordance with its missions and security requirements.

In July 2011, the Secretary of the Interior, with DOE concurrence, in a letter to Congress recommended the establishment of a three-site Manhattan Project National Historical Park. The Secretary recommended that the park be managed as a partnership between the National Park Service and the Department of Energy.

APPENDIX I: Regulations, Management Policies, and Operating Procedures

Summary of Policy and DOE Evaluation to Comply with Implementation of Section 3b of Executive Order (E.O.) 13287, *Preserve America*

Executive Order (E.O.) 13287, *Preserve America*, was signed in May 2003 and encourages public-private historic preservation partnerships, improves Federal agency planning and accountability, enhances Federal stewardship of historic properties, promotes the benefits of historic preservation, fosters recognition of historic properties as assets with economic as well as intrinsic value, and supports preservation through heritage tourism. The Executive Order directs Federal agencies to maximize their efforts to integrate the policies, procedures, and practices of the National Historic Preservation Act (NHPA) and this Executive Order into their program activities to advance historic preservation objectives in a manner that is consistent with the efficient and effective pursuit of their missions.

DOE cultural resource management (CRM) policies and practices have been and continue to be fully consistent with the Executive Order and the NHPA. DOE's CRM policy is set forth in DOE P 141.1, *Management of Cultural Resources*. This DOE policy directs DOE programs and field elements to integrate cultural resources management into their missions and activities and raises the level of awareness and accountability among DOE personnel concerning the importance of the Department's cultural resource-related legal and trust responsibilities. DOE P 141.1 helps ensure that DOE maintains a program that reflects the intent of the legislative and other mandates including compliance with NHPA.

The Department's cultural resources management program is the management tool used in the implementation of the DOE policy and E.O. 13287. DOE facilitates implementation of its CRM program in Order DOE O 450.1A, *Environmental Protection Program*, which requires all DOE elements to implement Environmental Management Systems (EMS) as part of their Integrated Safety Management Systems (ISMS). EMSs must include policies, procedures, and training to: 1) identify activities with significant environmental impacts; 2) manage, control, and mitigate the impacts of these activities; and 3) assess performance and implement corrective actions where needed.

The DOE O 450.1A, specifically notes that the protection of cultural resources should be considered in EMSs.

The goal of the cultural resources management program is to identify and consolidate compliance actions associated with a number of statutory and regulatory requirements and to reflect DOE's commitment to meet not only the letter but also the spirit of these laws, executive orders, and regulations. Thus the DOE cultural resource management program has encouraged the development of comprehensive programs which ensure compliance and promote stewardship. The program encourages a proactive approach by DOE managers and recognition of the scientific and cultural values of cultural resources. Specific goals of the program include ensuring and documenting compliance with applicable cultural resource laws, regulations, and executive orders and improving consultations, interaction, outreach and partnerships with municipal, county, state, and tribal governments and other Federal agencies and interested persons. These goals are consistent with the goals of E.O. 13287 and will facilitate the implementation of E.O. 13287 and comply with the NHPA.

APPENDIX II: Office of Legacy Management

PRESERVE AMERICA

ASSESSMENT OF HISTORIC PROPERTIES AND PRESERVATION ACTIVITIES

U.S. DEPARTMENT OF ENERGY OFFICE OF LEGACY MANAGEMENT

Fiscal years 2008–2011

Property Characteristics

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) was established on December 15, 2003, to handle DOE's environmental legacy responsibilities primarily related to the activities of DOE and predecessor agencies, particularly during World War II and the Cold War. This legacy includes responsibilities for long-term management of properties (legacy sites) that formerly contained radioactive and chemical waste, environmental contamination, and hazardous materials. LM has stewardship responsibilities for 87 legacy sites that are located across the United States and in one territory (Puerto Rico). The majority of the sites under LM responsibility are either former uranium milling sites covered under the Uranium Mill Tailings Radiation Control Act or sites associated with the original Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The sites related to the Manhattan Project and AEC are considered part of the Formerly Utilized Sites Remedial Action Program. Other sites that are under LM responsibility include DOE Defense Decontamination and Decommissioning Program sites, underground nuclear testing activity sites (i.e., Nevada Off Sites), sites remediated under the Comprehensive Environmental Response, Compensation, and Liability Act and/or Resource Conservation and Recovery Act, and other miscellaneous remediated sites.

LM retains responsibilities to control and maintain records for approximately one-half (38) of the legacy sites. No active site disturbance occurs in association with these sites. Typical activities at the remainder of the sites include site inspections, groundwater monitoring, maintenance actions, and noxious weed control. Occasionally new monitor wells or erosion control activities are required. The majority of the sites consist of an engineered disposal cell that contains contaminated materials and is covered with an engineered earthen or rock cover and is surrounded by a buffer area of largely undisturbed land.

LM also manages uranium lease tracts. The LM uranium leasing program (ULP) involves uranium leases in three counties in western Colorado. A total of 25,000 acres that contain 31 lease tracts are located in the Uravan Mineral Belt in southwestern Colorado. Only limited maintenance activities occur on a few lease tracts at this time; reclamation of many

abandoned mines that were inherited by LM was completed between 2008 and the present. Abandoned mines and associated areas may contain structures (e.g., portals) and mining-related items that have cultural significance.

DOE Facilities

DOE owns or leases 31 buildings and 4 trailers at 12 locations, 9 of which are legacy sites. None of the buildings are eligible for the National Register of Historic Places. With two exceptions, the buildings and trailers are used as storage sheds, office buildings, records buildings, and warehouses. Two buildings are used as Visitors or Interpretive centers at the Fernald Preserve, Ohio, Site and the Weldon Spring, Missouri, Site, respectively.

Cultural Resource Protection Policy and Submittals

Legacy Sites

In January 2010, LM issued its American Indian Tribal Government Interactions and Policy Implementation Plan in which LM stated its policy on Protecting Heritage Resources as follows: *LM will manage legacy land and assets to protect heritage resources. LM will identify priority cultural, natural, and historical sites. LM will work with tribal governments and people to expand opportunities for collaborative land use and heritage resource management.*

LM also has completed a draft programmatic Cultural Resource Management Plan (CRMP) to assist in meeting requirements of the multiple cultural resource mandates and policies, including Section 106, 110, and 111 of the National Historic Preservation Act. The draft CRMP discusses LM's pursuit of surveys on all actively-managed LM properties as budget and time permits. LM currently subcontracts with qualified archaeological companies to conduct Class I or Class III site-specific cultural resource surveys on an as-needed basis.

No cultural resources were identified on LM legacy sites from 2008 to present. However, cumulatively from the start of the LM program, there have been 20 sites that were determined to be eligible for the National Register and 177 archaeological sites that were determined to be ineligible for the National Register.

DOE has a programmatic agreement with the Advisory Council on Historic Preservation and the Ohio Historic Preservation Office that requires an annual submittal of the results of cultural resource surveys at the Fernald Preserve in Ohio. No archaeological investigations were conducted from 2008 to the present.

LM also annually submits a *Report on Federal Archaeology Program Activities* to the DOE Office of Health, Safety and Security (HSS) for submittal with other DOE departmental reports to the U.S. National Park Service.

Uranium Leasing Program

The ULP has developed specific policies and partnerships related to the protection of cultural resources on its lease tracts that apply during mineral exploration, development, mining (extraction), and mine reclamation activities. These policies are stated in the *Uranium Leasing Program Mineral Leasing Procedures Manual* (LMS/PRO/S04344). The revised 2011 version of the Manual includes the following elements of the LM cultural resources policy: (1) *For all new proposed surface disturbances, the lessee is required to perform a cultural resource inventory. The inventory shall be documented in accordance with the State Historic Preservation Officer's [SHPO's] Class III inventory standards and provided to DOE and BLM [U.S. Bureau of Land Management];* and (2) *Prior to reclamation, ULP personnel shall consult with BLM to determine if historic (i.e. eligible for inclusion in the National Register of Historic Places) mine structures or features (such as trash piles, collapsed buildings, old mining equipment, other debris) are on the site and, if so, determine if BLM wants them preserved. BLM must accept ownership of the historic structures or features after the lease tract is restored to public domain.* The Manual also requires periodic site inspections and monitoring of non-lessee related activities on the lease tracts so that unauthorized activities can be identified and reported to appropriate authorities. This policy existed prior to 2008 but was very generic, and the 2011 revision added details.

BLM is the lead agency for cultural resources on all DOE lease tracts and makes all decisions related to cultural resources, although DOE can recommend actions. BLM provides a qualified archaeologist to meet with LM and state representatives in the field to evaluate proposed reclamation projects. BLM has also worked closely with LM staff to assist in identifying actions that would not result in the need for surveys.

ULP personnel conduct routine and scheduled reconnaissance of mining leases and geologic and geographic features. During these reconnaissance visits, cultural features are periodically discovered. The ULP personnel inventory the feature and identify the location using geographic positioning system software. The information is provided to the applicable BLM field office for entry into their database and is also retained in a secure location within LM. All locations are considered protected information. For items considered eligible to the National Register, BLM pursues eligibility.

From 2008 to the present, site inspections identified multiple structures of unknown historic value (log, wood, or stone cabins); metal ore bins; and dugouts. Eight sweat lodges were also identified as cultural features. LM protects the locations of the sweat lodges and does not allow lease-related activities to occur near them. Four former mining camps from the 1950s and 1960s were also discovered during routine reconnaissance trips.

In 2009, BLM contacted LM to let them know that all of the Uravan Mineral Belt was being evaluated for eligibility status; all of the DOE lease tracts occur within the Mineral Belt. This status will result in leaving any abandoned mines intact because they would be considered eligible to the national register as cultural features. Six legacy mine sites were identified as present and historically significant. These sites encompassed multiple mining-related features including head frames, hoist houses, metal and timbered ore bins, track and rail, mine-waste-rock piles, a windlass, and other building remnants and miscellaneous debris.

In 2010, the Calamity Camp, which is found on one of DOE's lease tracts, was nominated by the BLM to the national register and in June 2011 received official register status.

Prior Cultural Resource Documentation

Prior to remediation of the Fernald Preserve, Mound, Rocky Flats, and Weldon Spring Sites, Cold War Era items were recovered and placed in several facilities for long-term stewardship. The historic items are representative of cold war working scientific and industrial facilities. These collections include but are not limited to laboratory scales, Geiger counters, clothing, light bulb protectors, badges, plaques, safety signs, glove boxes used in training, a Tommy gun, document and report collections, extensive collections of photographs, and oral histories.

Some of the items recovered at the Fernald Preserve prior to remediation were retained by the site and are on display at their Visitors Center. Most of the items (thousands of prehistoric and historic items) are being kept by the Ohio Historical Society under a curation agreement between DOE and the Ohio Historical Society that was signed in 2006.

Cold War Era items that were recovered from the Rocky Flats Site prior to remediation were provided to a local community group in the Denver area and some items were also sent to the Weldon Spring Site for display. The local group has retained the materials in a storage facility. DOE-LM awarded the local community group a \$492,000 grant in 2008 for the future Rocky Flats Cold War Museum. The grant is intended to fund a museum and exhibit planning. LM retains oversight and approval of all museum plans and provides information to the museum board as requested by them. The local group has leased a building that will be used for the future museum.

The Mound, Ohio, Site was important as the nation's first post-war AEC site. Although it is technically managed by the DOE Office of Environmental Management, LM has various responsibilities and will ultimately inherit the Site for long-term management. Items recovered during the site remediation are maintained at the Mound Science and Energy Museum. The Museum was started in the late 1990s by four former workers who formed the Mound Museum Association, which subsequently became the Mound Science and Energy Museum. The Museum works with local communities and has had evening programs presented by former workers. The purpose of the museum is to preserve the history of the former Mound Site and to be a local resource for any future inquires about the

site. The Museum also provides a public reading room that contains historical and current Mound Site information. It is open to the public on a limited basis. In May 2011, DOE-LM provided a grant of \$190,000 to the Museum in part to assist in providing a Comprehensive Environmental Response, Compensation, and Liability Act reading room for a year but also to be used for cataloging and indexing materials.

The Weldon Spring, Missouri, Site has many ongoing programs that showcase the area resources, the disposal site, and materials recovered prior to its remediation. None of the Cold War Era items that are on display are currently listed on the National Register. In addition to items recovered from the site and items provided by the Rocky Flats site, area residents continue to donate family materials from the cold war era. The Interpretive center contains between 50 and 70 items, including photos. Many school groups come through the Interpretive Center and, in the past, LM has partnered with school groups.