

Archaeological Curation in the U.S. Army Corps of Engineers

Mandatory Center of Expertise
for the Curation and Management
of Archaeological Collections
2013

Introduction

Since the 1906 Antiquities Act was passed by Congress, federal land-managing agencies have been responsible for curating archaeological materials removed from sites located on federally owned or managed land. Following the Antiquities Act, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966, the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979 further clarified federal cultural heritage assets responsibilities. These public laws outlined the process by which federal land-managing agencies are to identify, protect, and evaluate archaeological sites for which they are responsible.

Most archaeological research over the last 60 years has consisted of scientifically-based excavations to preserve artifacts and associated information that were in danger of being destroyed by large-scale construction activities. For the U.S. Army Corps of Engineers (USACE) in particular, large civil works projects beginning in 1947 challenged the agency to develop complex archaeological recovery programs to document and preserve our nation's archaeological heritage. Monumental efforts were made to document archaeological sites and to recover artifacts and associated documentation from the projects. Some efforts spanned decades, such as the Works Progress Administration archaeological investigations of the 1930s and the Smithsonian Institution River Basin Surveys of the 1950s and 1960s. These two programs are responsible for much of our information today about the prehistoric inhabitants of North America's major river valleys. For USACE, these investigations produced thousands of cubic feet of artifacts and hundreds of linear feet of associated documentation. These scientific data are irreplaceable and are by regulation a management responsibility of USACE.

By the late 1970s, it became apparent to many cultural resource managers in the government that federal archaeological collections (artifacts and associated documentation) were, across the nation, in poor condition and in danger of deteriorating, losing their scientific value and squandering the care and resources used to obtain them for future use and study. The collections were thought to be well managed, but in fact, most, after the initial analysis, have been ignored, with no funding or active curation oversight committed to them. Over the decades, the collections deteriorated in chemically unstable storage containers and in repositories lacking environmental controls and security or fire protection. As these collections deteriorated, so did their usefulness to Native Americans, researchers, educators, and most importantly, the American public.

In 1991, the National Park Service (NPS) published 36 CFR Part 79, *Curation of Federally-Owned and Administered Archeological Collections*, which outlined the minimal standards of care for all federal archaeological collections. Additionally, based on 36 CFR Part 79, USACE implemented its own standards for curation, first in ER 1130-2-433 (April 1991) and later in ER 1130-2-540 (November 1996).

The importance of curating federal archaeological collections is now receiving renewed attention across the federal government as we begin to understand the size, complexity, and value of our collections. Through USACE's Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX-CMAC), located in the St. Louis District, a national survey of archaeological collections was initiated to determine their location and current condition. This survey identified over 47,000 cubic feet of archaeological artifacts and over 3,200 linear feet of associated documentation in Civil Works archaeological collections from over 500 lakes, reservoirs, and levee and flood-protection projects within 44 states. Artifact collections include, but are not limited to, prehistoric stone tools, pottery, faunal material, botanical remains, bone tools, human skeletal remains, shell, and a variety of archaeological samples (e.g., flotation, soil, and charcoal), and historic metal, glass, ceramic, plastic, and leather items. Associated documentation, including, but not limited to, maps, field notes, drawings, field journals, photographs, and administrative records, make up the rest of the USACE archaeological collections.

USACE Archaeological Collections

Currently, U.S. Army Corps of Engineers collections, totaling over 47,800 cubic feet of artifacts and over 3,400 linear feet of records, are dispersed in 165 repositories in 45 states (Figure 1). There is an average of four repositories per state and two states, California and Texas, have over ten repositories housing USACE collections. Five states have no repositories housing USACE collections—Hawaii, New Hampshire, Nevada, Utah, and Wyoming.

Six districts house their collections in over ten repositories (Figure 2)—Kansas City, Mobile, Omaha, St. Paul, Tulsa, and Vicksburg. Tulsa and Vicksburg have the highest number of repositories at 17 and 18, respectively. Within divisions, Northwestern Division has the highest average number of repositories per district at nine. Pacific Ocean Division only has one repository, and the next smallest is North Atlantic Division with an average of five repositories per district (Figure 3). Many of the repositories housing USACE collections are archaeological contract firms, small local museums, and District offices, which are not equipped to properly care for the collections. In addition, many of the larger facilities are substandard in terms of infrastructure, environment, staffing, standardized policies and procedures, and public access to the collections.

Only about fifteen percent of Corps artifact collections and about four percent of records collections are housed according to federal standards as outlined in 36 CFR Part 79 (Figure 4). Collections conditions are such that many collections are in danger of being lost forever due to neglect and deterioration. In addition, many repositories housing Corps collections are not up to the standards set forth in 36 CFR Part 79, further endangering the collections.

In recent years, several large repositories have closed their curation facilities, requiring USACE to move their collections elsewhere. This has often occurred with very short notice and has forced the affected districts to find temporary, and usually substandard, housing until better arrangements, and additional funding, can be secured.

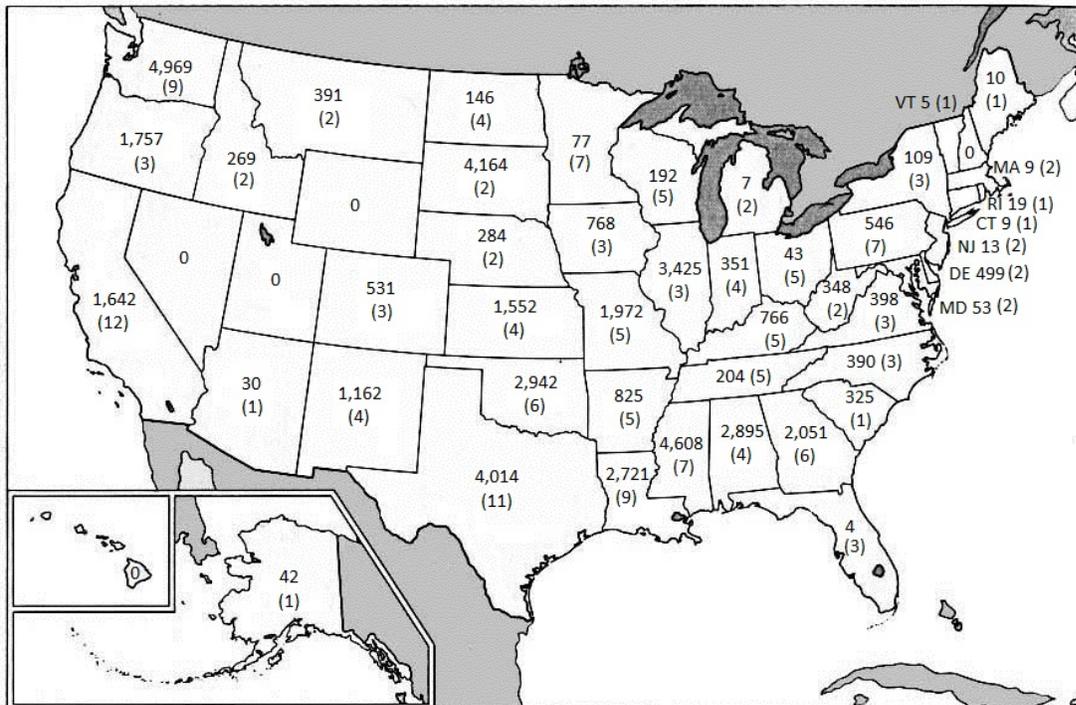


Figure 1. Cubic feet of artifacts and number of USACE archaeological repositories per state.



Figure 2. Number of archaeological repositories per district.

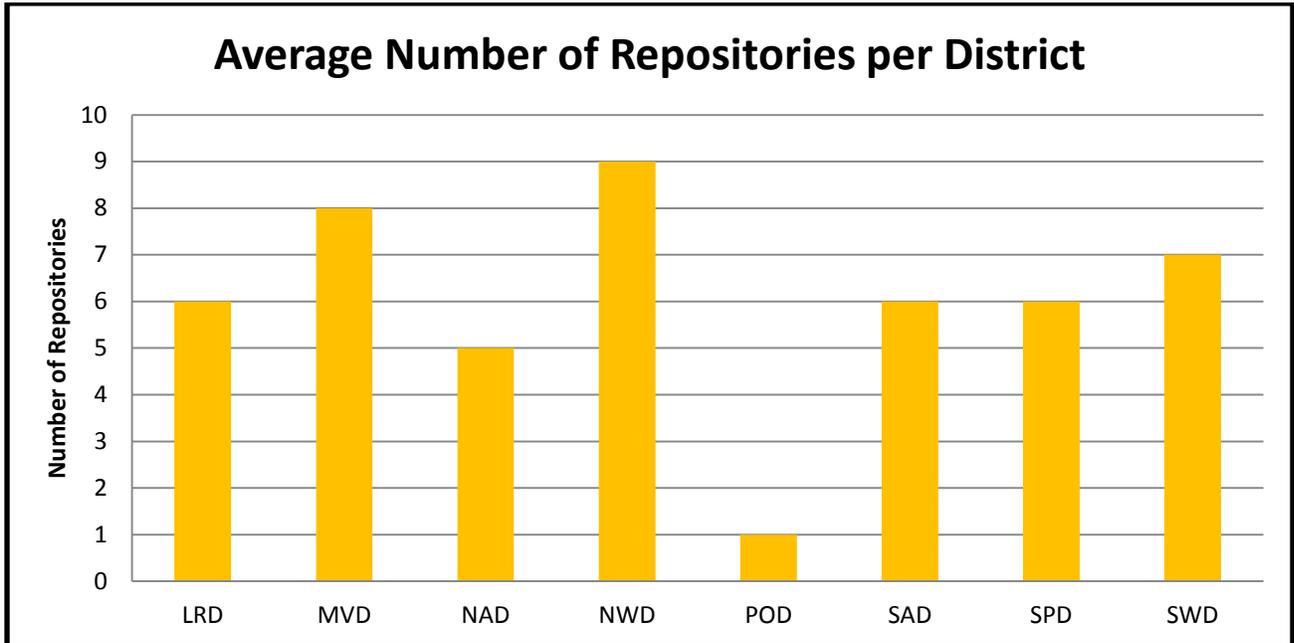


Figure 3. Average number of district repositories for each division.

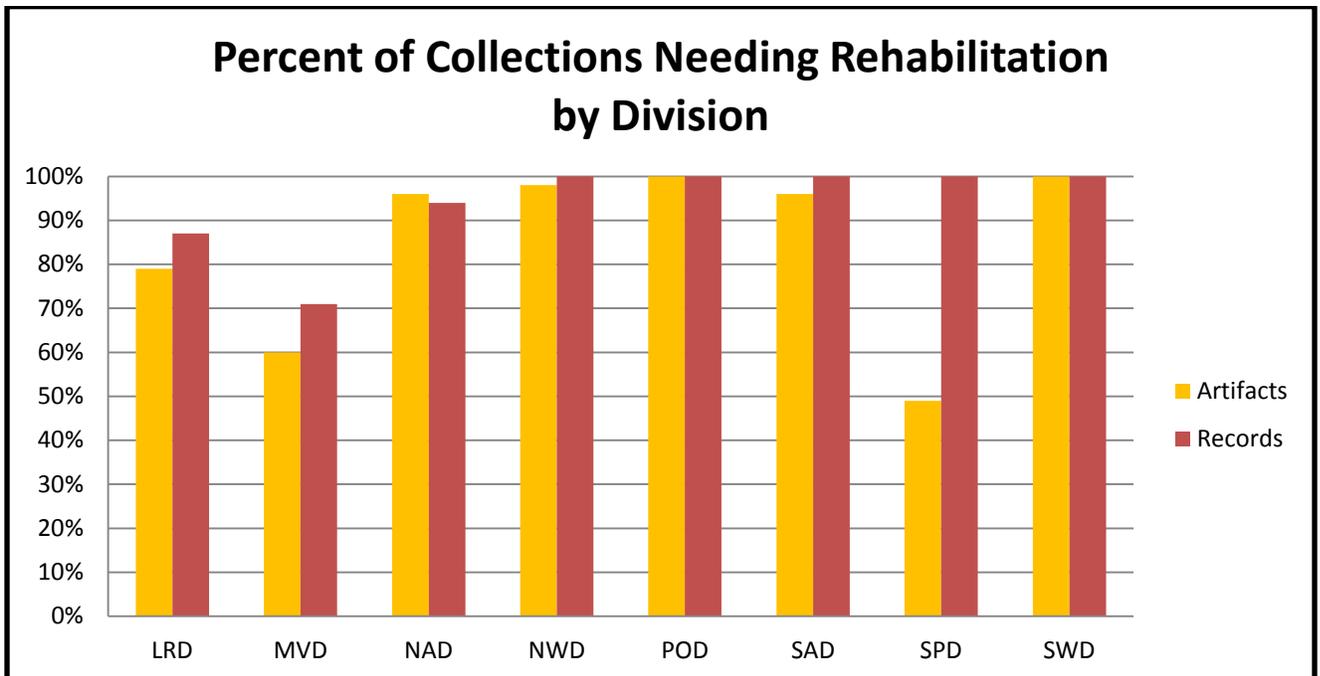


Figure 4. Percent of artifact and record collections needing rehabilitation to meet standards in 36 CFR Part 79.

Funding and Contracting for USACE Archaeological Collections

Fifteen districts pay repositories to house their collections, but none of these districts pay all of their repositories except St. Louis, which only has one repository (Figure 5). Overall, only 5% of the Corps collections are currently funded. Generally, this situation grew out of the large-scale excavations that were conducted prior to the construction of USACE projects in the 1950s through 1970s. The collections generated during these projects were often considered by the institutions that excavated them to belong to them, or at least they had an interest in keeping the collections for research, education, and display. USACE may have contracted for the excavations, but long-term curation funding was not considered nor requested by the institutions at that time.

As collections are beginning to deteriorate and the import of proper curation is becoming known, many repositories that have heretofore not charged for curation are now asking USACE for funds to defray their costs for caring for the collections. These facilities recognize that the collections are aging and are in need of rehabilitation, but they lack the funding or the justification to do it with their own funds. USACE owns the collections and are responsible for their care.

Currently, recurring annual maintenance costs that are funded by districts are obtained through the normal O&M budget process. This has always been a struggle at most districts because of the fierce competition for scarce funds. Long-term curation funding will become more of an issue as operational projects age and need increased maintenance, budgets decrease, and curation funding needs reach a critical point.

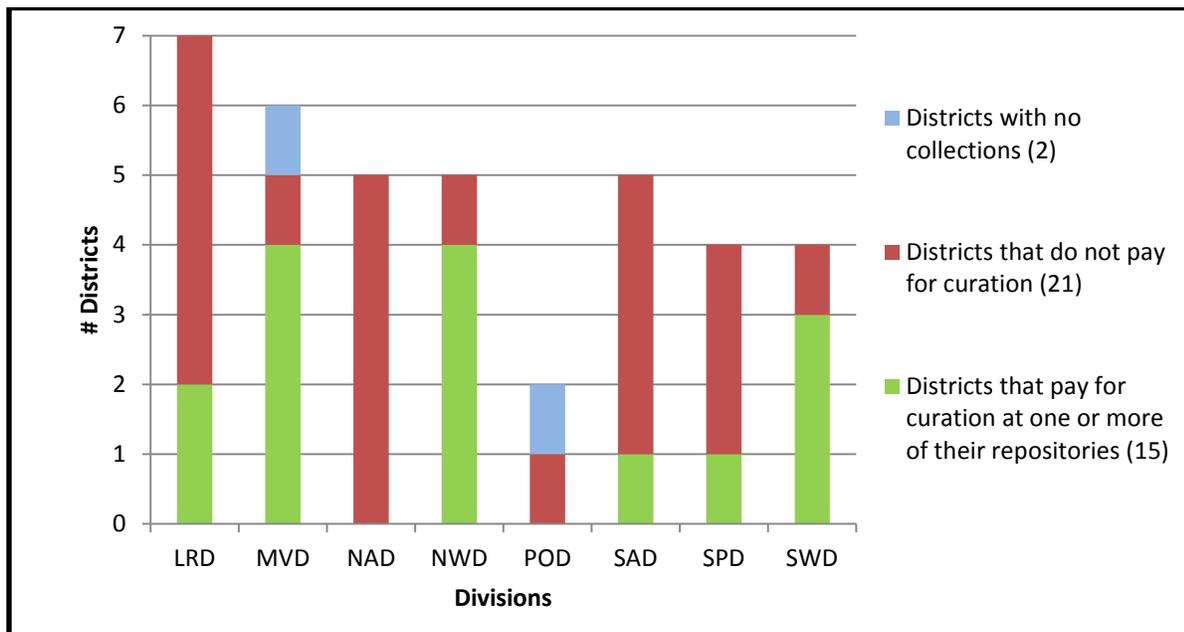


Figure 5. Number of districts that pay for curation at one or more of their repositories.

Effects of Improper Curation and Funding Shortfalls

Unfortunately, for the last 50 or more years, proper care of Corps archaeological materials has been insufficient and/or ignored. Many collections have been lost or destroyed, and many have been damaged, leading to loss of irretrievable information. Very few repositories meet the requirements outlined in 36 CFR Part 79, and few collections are stored in a manner that will preserve them for the long term. Many collections remain in their original field packaging and the actual contents of the collections have never been detailed, organized, or inventoried. Losses of materials and information will continue unless the Corps changes its approach to caring for its collections being held in the public trust.

Because the above mentioned conditions affect the collections and their physical and intellectual control, access to materials for research, education, and public outreach is severely limited. The “customer” for these federal collections is the public—researchers, teachers, students, tribes, and the general public—and without knowledge and control of these collections, USACE is not serving its most important customers.

Finally, the manner in which the customers access information has changed significantly in the digital age, and storing the collections in a manner that will enable digitization and remote access must be considered—this is going to require USACE to gain physical and intellectual control over the collections, rehabilitate collections, and develop standardized processes and procedures for multi-format access.

A Viable Solution—Consolidation

Status Quo Curation vs. Consolidation

If the Corps were to choose “Status Quo” Curation—that is, properly funding curation within their current repositories, the long term costs are staggering. As mentioned above, only 5% of the Corps collections are housed in repositories that receive the proper funds from the Corps for maintenance, and district reporting shows that the current costs are \$670,000 of O&M funds. If the Corps chose to fund the remaining 95% of the collections properly in the current locations, the costs would be upwards of \$13,000,000 annually.

An example of curation consolidation into 10 repositories shows the significant cost savings over the status quo, due to the economy of scale achieved. The St. Louis District curates 2,370+ cubic feet of archaeological materials at the Illinois State Museum Society in Springfield for the cost of \$46,304 annually. Based on this volume of materials and cost, the MCX-CMAC believes it is possible that the annual maintenance costs for approximately 5,000 cubic feet of archaeological materials could be about \$100,000. Ten curation centers across the United States, therefore, would require a total of approximately \$1,000,000 for annual maintenance. Consolidation will provide a cost savings estimated to be nearly \$100,000,000 over 15–20 years (Figure 6).

If a phased approach to consolidation was taken, yearly savings are shown in the chart below with status quo costs assuming that an additional 10% of the Corps collections are covered annually, until 100% are covered and a regional center being established each year.

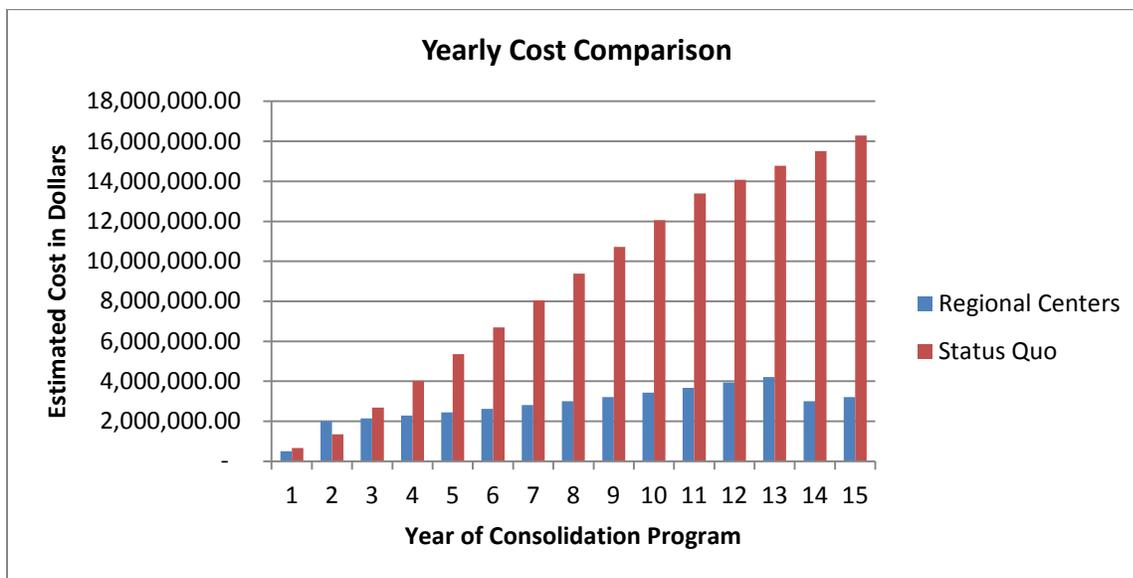


Figure 6. Cost comparison of status quo and regional centers.

Consolidation into regional repositories, along with a concerted effort toward rehabilitation of the collections, would allow for the following.

- A sustainable, effective, and efficient solution to the Corps curation crisis through the optimized use of specialized experts and resources.
- Fiscal control over costs associated with long-term care of collections, providing USACE leaders with the ability to improve workload and workforce planning and provide for out-year budgeting.
- Fifteen-to-twenty-year cost savings for curation services contracts alone are estimated to be over \$100,000,000.
- Collections moved out of substandard facilities.
- Consistent rehabilitation program for the Corps' collections.
- Continued mission to support the war fighter through VCP laboratories.
- Streamlined contracting processes.
- Potential to partner with other federal agencies in the future may further reduce federal government's long-term curation costs.

Key Components to Consolidation

Contracting Options

MCX-CMAC believes there are two viable contracting alternatives that can be implemented to support regional centers—(1) MCX-CMAC awards all regional contracts (centralized); or (2) an appointed district for each repository is chosen to award the regional contract (regional).

Funding Options

The MCX-CMAC believes there are two viable funding streams for the recurring curation costs—(1) the normal O&M process, which flows up from the relevant operational projects, with individual districts obligating funds to the regional centers; and (2) the remaining line-item for NAGPRA/Curation, with the remaining line-item funds to be obligated by MCX-CMAC directly to the regional centers.

Collections Content Review

The current content of USACE collections will lend itself to volume reductions through sampling and processing of bulk collections. In addition, districts should conduct real estate research to ensure that only those collections that were recovered from USACE fee-title lands at the time of collection are curated long term using USACE funds. Finally, in the absence of deaccessioning guidance from the Department of the Interior, USACE HQ can work towards a Corps deaccessioning policy for our collections.

Repository Selection

The ideal number of repositories has not been determined, and the type of information to be used for region and repository selection include district boundaries, volume of collections, current district curation contracts, the ability of the repository to house collections up to standards, and the ability of the repository to accept the volume of collections anticipated. Another component that should be considered in the repository selection will be the ability to partner with other Federal agencies to achieve greater long-term cost savings.

Collection Rehabilitation

It will be necessary for regional centers to accept collections that have not yet been rehabilitated to federal standards. Rehabilitation would take place over time and start in earnest after regional curation centers are contracted and collections consolidated. Currently, much of USACE's rehabilitation is being performed in the VCP labs, and a VCP-regional center model can be established.

Tribal and SHPO Coordination

While it is possible that the Corps would receive pushback from SHPO offices or Native American tribes, a well planned communication strategy will serve to mitigate that effect. Tribal input can be sought on the selection of repositories (why?? it will only slow the process and theoretically, will involve every tribe in the U.S.), collection access procedures, and any other issues of import that Tribes identify. Individual District tribal liaisons will play a key role in this effort.

Summary

The Corps currently has stewardship responsibility for one of the largest archaeological collections in the United States, with a total of 49,000 cubic feet of archeological materials and 3,300 linear feet of associated documentation that are stored in 165 repositories. Only 5% of the Corps collections are housed in repositories that receive the proper funds from the Corps for maintenance, which has resulted in the condition of the material being below federal standards for 90% of artifacts and 97% of records. The collections are a valuable asset to the Corps and our stewardship responsibility for them requires that we work to achieve a long-term viable solution for their curation.

A viable solution to effectively and efficiently manage the archaeological collections is consolidation into fewer repositories. Benefits of consolidation include, but are not limited to, gaining intellectual and physical control of the collections, moving collections out of substandard facilities to stop their deterioration, realizing economies of scale on the cost of curatorial services, streamlining the contracting processes, establishing a consistent rehabilitation program for the collections, and making the collections available to researchers, Indian tribes, educators, and the public. The Corps must examine the various components to consolidation—funding, contracting, repository selection, collection rehabilitation, and tribal and SHPO coordination—and implement a program that will transform the manner in which the collections are stored.