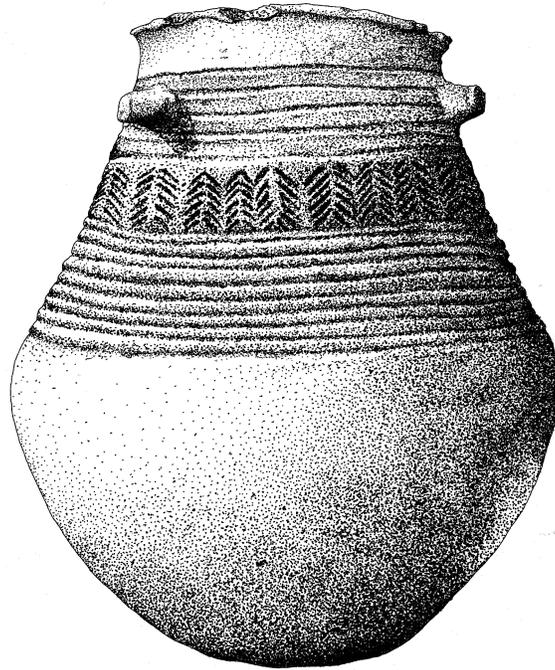


Addressing the Curation Crisis in Colorado:



**An Assessment for the Executive Committee of the
Colorado Council of Professional Archaeologists**

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Executive Summary

Thousands of archaeological artifacts and their associated records have been recovered from both public and private lands throughout the state of Colorado as a result of federal, state, and local laws established to protect the state's fragile historical legacy. Currently, most professional archaeologists in the state conduct or oversee survey and excavation projects for private clients or public agencies. Artifacts and other archaeological materials collected during these investigations are deposited in state and local museums around Colorado and the region and are accessible to scholars, students and the public, as mandated by federal law.

However, many museums cannot accept new collections because of a lack of proper storage space and a general lack of funds to maintain current collections. With a few notable exceptions, the curation of these materials has received insufficient attention or funds to keep pace with the archaeological

work of the past few decades.

Many archaeological collections within Colorado do not begin to meet minimum

For the past twenty years, the quantity of archaeological materials housed in museums has increased dramatically throughout the United States.

federal standards, some are stored improperly, others are at risk of irreparable damage from various agents of deterioration, and others have simply been lost. More importantly, many collections have never been completely inventoried, studied, or reported.

A huge amount of valuable data relevant to Colorado's history and prehistory remains unknown and unattended to because of mounting curation problems. The improper care and subsequent deterioration of many of these collections not only violates the laws under which they were recovered but also prevents their use by Native Americans, educators, and scientists. These objects are a significant and nonrenewable cultural resource; however, the curation of these materials is in peril. A feasibility and planning study is needed to determine the scope and extent of this problem, form alliances, and explore solutions to a statewide curation crisis.

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About the Colorado Council of Professional Archaeologists

The Council is a non-profit, voluntary association dedicated to promoting the goals of professional archaeology in the State of Colorado. These goals include:

- promoting high standards of archaeological research, reporting and management
- establishing and promoting a mechanism to represent professional archaeological interests in political and public forums
- establishing and promoting a mechanism for communication within the archaeological community
- promoting public education and interest in the fields of archaeology and cultural resources management
- providing Council input to the Office of the State Archaeologist of Colorado
- promoting open communication and cooperation between archaeologists and the living descendants of groups subject to archaeological research in Colorado

To learn more, please visit the Council’s website at <http://www.coloradoarchaeologists.org/>.

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Cover illustration by Bill Tate. Twelfth century Taos Incised vessel recovered near Trinidad, Colorado.

Introduction

For the past twenty years, the quantity of archaeological materials housed in museums has increased dramatically throughout the United States. Additionally, in the last decade the standards for such curated materials and curation facilities have been raised well beyond what was the norm in the 1980s. Within the state of Colorado this has resulted in a decreasing availability of both storage space and, increasingly, the threat of disruption of on-going cultural resource management (CRM) work.

In March 2001, an informal committee, composed of museum, preservation, and archaeological professionals, was convened to consider the problem at the annual meeting of the Colorado Council of Professional Archaeologists (CCPA). The committee consisted of Richard Wilshusen, moderator (Univ. of Colorado Museum), Deborah Confer (Univ. of Colorado Museum), Melissa Stoltz (Univ. of Colorado Museum), Jan Bernstein (Univ. of Denver Museum of Anthropology), Kevin Black (Office of Archaeology & Historic Preservation), Kae McDonald (Metcalf Archaeology; Frontier Museum), Anne McKibbin (Metcalf Archaeology), Nancy Russell (Bent's Old Fort, NPS), Angela Rayne (Hiwan House Museum, Jefferson Co.), and Terry Murphy (Colorado Archaeological Society). These individuals helped define the issues of the curation crisis while meeting at CCPA.

A smaller working group at the University of Colorado (the authors of this report) worked on three different aspects that emerged from the CCPA meeting. First, the CCPA meeting made the committee aware that not all archaeologists actually understand the standards required for curation and many still do not realize the severity of the present situation. In order to address this, we briefly review the curation crisis at national and state levels in the initial section of this report. It is important to understand the fundamentals of our present situation nationally before examining Colorado's specific problems.

The second part of our report examines some of the specific problems confronting Colorado's curation facilities. The CCPA meeting made clear that most of the curation facilities face a common set of challenges that have emerged in the last decade. By summarizing these

difficulties for several institutions, we hope to clarify that there must be a statewide solution to the curation crisis. No one facility or institution can solve it. We have created our curation problems over the last two decades, but we must begin to address this crisis in the next year, or otherwise it is likely that CRM work in Colorado will be significantly affected.

The final section of the report provides several recommendations for actions that the CCPA Executive Committee might take. These actions include assessing the capabilities of existing museums, examining several possible alternative solutions, and offering a long-term plan for addressing the many curation issues we now face.

This report is being submitted to the CCPA Executive Committee and circulated to a variety of museum and historic preservation professionals. Comments or inquiries can be directed to the Executive Committee at P.O. Box 40727, Denver, Colorado 80204. While no single individual or group can solve this problem, a unified group of archaeological, museum, and historic preservation professionals should be able to address the problem. An organization such as CCPA may be one of the most effective vehicles to focus our collective energies on this problem.

Federal and State Mandates for Curation: An Overview _____

Federal Legislation

Federal involvement in curation began with the Antiquities Act of 1906, which mandated that artifacts should be “properly cared for” after excavation (Thompson 2000). Although this act was significant, it has been the more recent federal legislation, such as the Reservoir Salvage Act of 1960, the National Historic Preservation Act (NHPA) of 1966, and the National Environmental Policy Act (NEPA) of 1969, that has had the most substantial impact on repositories. This legislation drastically increased the amount of archaeological research conducted in the United States, and large-scale archaeological projects were undertaken with the sole purpose of mitigating development activities. As a result, the number of artifacts that

needed to be protected grew exponentially. Yet while those laws minimized many of the immediate threats to archaeological sites, they simultaneously failed to provide effective procedures for protecting the artifacts and documents associated with archaeological projects (King 2000).

Ostensibly with the passage of the Archaeological Data Preservation Act (ADPA) in 1974 the federal government addressed concerns regarding the protection of archaeological collections. The ADPA stated that the Secretary of the Interior must consult with groups with the goal of determining the ownership of and the most appropriate repository for artifacts recovered as a result of any federal work. Although it didn't occur at that time, the law also called for the Secretary of the Interior to issue regulations concerning the curation of federal archaeological collections (NPS 2000).

The Archaeological Resources Protection Act (ARPA) was enacted in 1979 and strengthened the procedures required for obtaining permits necessary to conduct archaeological fieldwork on federal lands. In terms of archaeological collections, ARPA was significant because it acknowledged federal ownership of artifacts excavated from federal lands and required that archaeological collections and associated records be deposited in federally compliant repositories. An ARPA permit also required a written agreement between federal agencies and a repository to curate the artifacts recovered from federal projects. Like the ADPA, NHPA, and the Reservoir Salvage legislation, the ARPA law also permitted the Secretary of the Interior to issue regulations on the care and management of archaeological collections (Carnett 1991; Cheek 1991; NPS 2000).

In 1987, the General Accounting Office (GAO) released a report entitled *Cultural Resources: Problems Protecting and Preserving Federal Archaeological Resources*. The report detailed the results of a questionnaire sent to numerous non-federal repositories housing federal collections. The findings published by the GAO revealed serious problems. Many of the repositories had no collection inventories, had lost or destroyed records, and had never inspected their collections for conservation needs. Most of the repositories had a cataloging backlog of several million artifacts. About thirty percent of the facilities had already run out of storage

space (Childs 1995).

In response to the GAO report, Code of Federal Regulations Title 36 Part 79 (36 CFR 79), *Curation of Federally-Owned and Administered Archaeological Collections*, was released in 1990. These regulations provided guidelines for preserving and handling archaeological materials and associated documentation, for determining the capabilities of curation facilities for long-term storage, for accessioning archaeological collections, for providing access to collections, and for conducting inspections of collections.

In 1991, in response to 36 CFR 79, the Society for American Archaeology (SAA) established the Task Force on Curation. The task force submitted their report *Urgent Preservation Needs for the Nation's Archaeological Collections, Records, and Reports* to the SAA executive committee in 1993 (Childs 1995). In response, the SAA established an Advisory Committee on Curation in 1999, and a second symposium, entitled “The Crisis in Curation: Problems and Solutions” took place at the 65th Annual Meeting of the SAA in 2000. Topics presented during this symposium included the reuniting of divided collections, the preservation efforts of the Department of Defense, and a number of case studies (Bustard 2000).

In addition, in the March 2001 issue of the SAA *Archaeological Record*, the SAA Committee on Curation identified a number of topics related to curation that merit further attention in the future. These topics include field collection strategies, collections funding, care and maintenance, deaccessioning, accreditation of repositories, improving access and use of collections, public outreach and education through collections, associated records and their management, and “gray” literature (Childs 2001).

In that same year as the establishment of 36 CFR 79, Congress passed the Native American Graves Protection and Repatriation Act (NAGPRA). This legislation required the inventory and repatriation of many Native American human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony and covered

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objects in both federal and federally funded repositories. NAGPRA affected all public museums or repositories that had received federal funding. Unlike 36 CFR 79, however, NAGPRA specified deadlines for compliance and inventory assessments, as well as penalties for noncompliance with the law (McManamon 1992). As a result, NAGPRA forced many agencies and museums to expedite inventory evaluations. Many repositories found that their collections were in such poor condition that they were forced to seek external funding sources simply to comply with NAGPRA deadlines.

The federal mandates for curation and repatriation have increased the amount of time and money required by museums and other curation facilities to even begin to meet minimal standards. Though several important federal curation facilities—such as the Anasazi Heritage Center in Dolores, Colorado—have been built in the last fifteen years, the greater part of curated CRM materials nationally are still in state or local museums. It may be useful to review legislation across the states before turning our attention specifically to Colorado.

State Legislation

A number of state and local governments have utilized the federal National Historic Preservation Act as a guide in developing their own historic preservation laws (e.g., Clark County, Washington and Multnomah County, Oregon). While the scope of state and local laws tend to reflect the content of federal regulations (i.e., NHPA; ARPA), local governments have been able to include more detail within their historic preservation and archaeological resource protection codes (e.g., Act 480 of 1977 of the Arkansas code; for city level ordinances see Alexandria, Virginia Archaeology Collections Policy).

By 1991, nearly fifteen states had issued laws, regulations, or policies concerning the management of archaeological collections (Carnett 1991); however, by 1997 laws in 35 states mentioned curatorial issues,

such as the Connecticut statute, *C.G.S. Sec. 10-383*

ADDRESSING THE CURATION CR

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which designated the Connecticut State Museum of Natural History as state repository for all artifacts found on state lands. The statute also directed the museum to establish a detailed collections policy concerning acquisitions, collection preservation, loans and transfer of artifacts (A Summary Guide to Connecticut CRM Legislation 2001). South Dakota also has outlined legislation dealing specifically with the curation of archaeological collections. Administrative Rules of South Dakota, Chapter 24, Section 52, provides regulations for the operation of the South Dakota State Historical Society, the Archaeological Research Center's parent agency. The rules outline policies concerning museum accessions/deaccessions, curation fee schedules, and loan policies (see Administrative Rules of South Dakota 2001).

By 1999, approximately 37 states had passed laws addressing the curation of archaeological collections (Carnett 1991). One good example of such a law is the Tennessee Division of Archaeology Standards and Guidelines for Archaeological Permits (see also State of California Guidelines for the Curation of Archaeological Collections 2001; Louisiana Division of Archaeology Standards and Guidelines for Curation of Archaeological Collections 2001; Maryland Collections and Conservation Standards 2001; North Carolina State Curation Guidelines 1995). The Tennessee law outlines specific requirements for the curation of archaeological collections recovered from state land (Tennessee State Archaeological Permits 1997). According to Carnett (1995), these findings reflect a commitment by a growing number of states concerned with the long-term management of and access to state-owned archaeological collections.

Before any solutions to this crisis can be discussed it is important to understand the basic legalities of curation in the state of Colorado. According to Colorado title 24, article 80-405, the state archaeologist must “arrange for the care, use and storage of any archaeological resources collected” from the conduct of archaeological studies within the state. Furthermore, in article 80-406 section (a) regarding the permitting process, any investigation, excavation and removal of historic, prehistoric and archaeological resources shall be “conducted for permanent preservation” and “open to the public and available to qualified students.” However, within article 80-406 (d) the state archaeologist *may* require that a representative sample of materials be

delivered to the state for curation in a repository to be determined by the state archaeologist.

The Colorado state law may have reflected traditional museum practice when it was approved in May of 1990, but changes in accepted standards and increasing responsibilities for all curation facilities over the last twelve years have made arrangements for the care, use, and storage of collected archaeological resources much more difficult in 2002 than in 1990. The federal regulations and guidelines of 36 CFR 79 and NAGPRA have both led to significant reevaluations by museums of their ability to responsibly store new accessions. The costs as well as the requirements for basic curation have increased dramatically over the last fifteen years, while traditional sources of funding for museums have decreased.

Although we can assume that the standards of 36 CFR 79 for the curation of federal archaeological collections are the baseline for the federal collections spread all through the state, it is not explicitly stated that the same regulations are in force for state, local and private collections. This is an important distinction since Colorado's curation dilemma is in part due to the fact that only a few collections and repositories are up to federal standards. Bringing collections into compliance is a very expensive task. While it is in everyone's best interest to meet federal collection requirements, it is not an explicit state mandate. As Colorado museums have struggled to bring their facilities up to nationwide standards, they have been unable to accept new collections resulting from archaeology permitted by the state or federal government. Yet, archaeologists, who need state permits to do day-to-day archaeological work in Colorado, need to have agreements with an approved state curation facility in order to obtain a permit in the first place.

The Curation Crisis – Funding and Space

Bustard (2000) notes that the most serious problem facing museums and other repositories is a lack of funding. While 36 CFR 79 provided standards for the curation of archaeological materials, it did not arrange for secure sources of federal funding that could be used to assist facilities in implementing the regulations. Unfortunately, the costs associated with

the long-term conservation of archaeological collections are considerable (Kodack 1998). It takes money to pay the staff who keep records updated, return artifacts to the appropriate storage area, and process loan requests. It takes money to pay for archival quality boxes, polyethylene zippered bags, and acid-free paper. It takes money to purchase computers, software, and to keep computer databases in current formats. And finally, it takes money to pay for additional storage space, and to control the environment of that space so that potential hazards such as extremes in humidity and temperature or pest infestations do not threaten the collections or associated records.

Many repositories have instituted fee-based curation services while others have secured public and private funding to sustain collections and develop programs to deal with the worsening conditions of archaeological materials. Several programs have been quite successful at developing programs to secure funding (i.e., Maryland Archaeological Conservation Lab; David L. DeJarnette Archaeological Research Center in Alabama). The Alabama research center is recognized as one of the better centers in the country and is the designated repository for all collections from a number of agencies throughout the Southeast and the Caribbean (OAS Curation Program 2000).

Recent federal mandates, such as 36 CFR 79 and NAGPRA, have simply made obvious the inadequacy of many of our previous collections “standards” and practices. In order to comply with these new mandates, collections managers have been required to examine and process entire collections

only to find missing documentation, misplaced artifacts, and inadequate storage conditions. These

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conditions coupled with a lack of funding have forced many state/federal curation facilities in the state of Colorado to stop accepting CRM collections for curation. There are at least a dozen institutions in the state with major CRM collections, and yet as of February 1, 2001 there were

no major repositories that still accepted statewide collections. Those institutions that still accept regional collections increasingly are placing provisions on what collections they can accept. To understand why many facilities have had to limit or stop accepting CRM collections, it is necessary to illustrate some of the specific difficulties facing almost all Colorado curation facilities.

Archaeological CRM Collections in Colorado: The Present Curation Crisis

Many of the major Colorado museums first began accepting statewide archaeological survey collections in the late 1950s and 1960s. At that time professional archaeologists at universities or museums with anthropology departments commonly worked with local avocational archaeologists in various parts of the state and made “representative” collections of archaeological sites from across the state. For many years if someone paid the cost of a new storage container and a small processing fee (typically less than \$10/cubic foot of storage), a museum would take their survey or excavation materials. Other than a 5-by-7 inch state site registration card, there was usually not detailed documentation of the materials. Of course, computer databases as we now know them did not exist. Most museums had lax standards and low fees.

Few museums planned to be central players in the management of Colorado CRM collections, yet by the late 1990s almost a dozen museums in the state had substantial CRM collections. Hardly any of these institutions have annual budgets that allow them to maintain and upgrade existing collections, much less deal with the ever-increasing need for new storage space.

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To the best of our knowledge, there were only two repositories that were still accepting collections from all over the state as of January 1, 2001. When one of these institutions stopped accepting collections early in 2001, it was clear that the difficult problem of curating CRM collections had become a crisis. Archaeologists are now faced not only with the problem of finding a repository to take their collections but additionally with the threat that statewide archaeological permits cannot be renewed until new curation agreements are in place.

The dozen or so curation facilities in the state with major CRM collections have their own unique histories and their own particular strengths and weaknesses. However, there are a common set of costs, concerns, and issues facing almost all of these repositories that is at the heart of the present crisis in curating Colorado's archaeological collections.

The Costs of Rehabilitating Collections

Several of the major CRM collections in Colorado hold at least 1200 cubic feet of CRM-like materials. They are listed as 'CRM-like' because some of the collections in these facilities are highly problematic at this point: we don't have detailed inventories of what they contain, and we don't know enough about their histories. Many of the collections were deposited in museums many years ago, before the CRM industry and federal agencies had regularly enforced standards about the curation of archaeological materials (note that curation regulations were only finalized in 1990, though many federal cultural resource management acts were passed in the 1970s). Similarly, most museums lacked sufficient guidelines prior to the 1990s on how these collections should be treated and charged curation fees so low that they in no way covered future care of the collections.

At this point, there are large amounts of state and federal material in museums from agencies such as the U.S. Forest Service, the Bureau of Reclamation, the Bureau of Land Management, and the Colorado Department of Transportation. In some cases, museums have collections that need to be researched, as these collections were deposited by CRM contractors as a result of federal or state-permitted projects, but it is not clear who is actually responsible for the

collections. This may seem incredible, but museums have only in the last years realized that for some projects the ownership of the materials is still in dispute. Though a project may have been conducted under federal and state permits, in some cases agencies are now disputing whether whole collections—especially collections from sites on private lands that were affected by a federal undertaking—should have been deposited by contractors. Among federal agencies there is not a unified opinion about what an agency’s curation responsibilities actually are.

Museum curators and collections managers have had the good fortune in some cases to learn a great deal about their CRM collections as federal and state agencies have begun to upgrade and inventory collections that were made in the 1970s and early 1980s. For example, the Bureau of Reclamation has worked with the University of Colorado Museum (UCM) to investigate collections and records made in the 1970s during the Fryingpan-Arkansas, or Crest of the Continent, project (e.g., Buckles 1973, 1975). This collection consists of approximately 175 cubic feet of materials including artifacts and archival materials. The Bureau of Reclamation has worked closely with the UCM over the last three years to bring this collection up to federal standards. They have provided summer interns and full-time employees to help upgrade this collection. This project is a good starting point for the museum and has provided the UCM with much insight into what needs to be done with the rest of its collections. It is necessary to point out, however, that this is a small portion of total CRM materials at this particular museum.

The Bureau of Reclamation paid for this project based on research that showed they did own substantial portions of the Fryingpan-Arkansas collections at the University of Colorado Museum. Many of the collections at the UCM, and undoubtedly at other repositories, have convoluted histories that make it difficult to know who the owners of the material are. Agencies such as the Bureau of Reclamation have been proactive in researching their collections. There are, however, many agencies that lack the resources to research where their collections are housed. Other agencies might contend they are not responsible for bringing their collections up to standards. Rehousing the Bureau of Reclamation materials has allowed UCM staff to estimate what it would cost per cubic foot to inventory, rehouse, and create electronic databases for the rest of their collections. For the Fryingpan-Arkansas materials, the cost was about \$200 per

record storage box (approximately 1 cubic foot). Multiply this by the volume of material left to be rehabilitated in the UCM collections, and the figure is staggering to the museum staff:

$$(1025 \text{ cubic feet}) \times (\$200/\text{cubic foot}) = \mathbf{\$205,000}.$$

We must emphasize that not all collections of CRM materials in the state are in need of total rehabilitation, but the estimate remains valid because some collections in state CRM repositories are in far worse shape than the Bureau of Reclamation materials were in 1988 and will require far more work to bring up to current standards. Also, the above estimate in no way addresses the failure of many museums to meet the heating, ventilation, and air-conditioning requirements of 36 CFR 79. The above estimate is simply the cost of rebagging, reboxing, and reinventorying the collections to meet current minimum standards.

Because not all agencies are actively locating and claiming their collections, it appears that much of this burden may fall directly onto the museum. The prospect of trying to track down the responsible agencies

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and to get them to aid in upgrading the collections is a daunting task for which most museums have few resources. Federal facilities such as the Anasazi Heritage Center, which are much closer to meeting the 36 CFR 79 standards than most state CRM repositories, still regularly apply for grants to raise hundreds of thousands of dollars to rehabilitate collections that they have acquired.

Curation Fees

The curation fees at two major facilities, the University of Colorado Museum and the

University of Denver's Museum of Anthropology illustrate the high costs of upgrading and maintaining current collections. The University of Colorado Museum's fee for the curation of materials is presently \$300 per records storage box (approximately one cubic foot), and yet this institution has recently estimated the cost of housing these materials at \$480 per box. These fees would cover the cost of space (assuming depreciation of the storage space of 50 years), \$12 per square foot yearly rental, and the costs of incorporating computer files into their main databases. Yet these estimates do not factor in long-term maintenance, care, and upgrade of collections or computer files. If anything, a comparison with the fee structures of other major institutions such as the University of Denver's Museum of Anthropology suggests that UCM's estimate of \$480 per record storage box is an absolute minimum. DU's Museum of Anthropology curation fees include a one-time deposit fee of \$455 per box, with \$707 charged for rehabilitation of boxes that do not meet their minimum standards (7/22/99). Though these fees seem high in comparison to the past experience of many archaeologists, they actually are rapidly becoming the national norm.

Museums typically receive their curation fees from the contracting archaeologist or agency up front as a lump sum of money. This money should be saved for future use on the collection and CRM facility in general, but all too often it must be used right away to rehabilitate an old collection, research associated records issues, or upgrade the limited CRM computer databases. This is creating a cycle that CRM repositories will find hard to break: as a collection comes in, the fees collected are used on other materials so that when the original collection needs work, money must be borrowed from a more recent acquisition.

To some extent, the high curation fees that are needed by most museums reflect the high costs of older facilities located in large metropolitan areas. While not all repositories are located in metropolitan areas such as Boulder, Ft. Collins, or Denver, many are on campuses where available space is disappearing and rising in price. All over Colorado land and building prices are on the rise, making it more difficult for museums and other repositories to simply acquire more space as a means to address the current curation crisis. In order to expand their present facilities most museums would have to raise their curation fees beyond what contractors and

agencies generally could afford. Universities are increasingly under pressure to function in a business-like manner, and this leaves few options for additional space that do not carry hefty rental fees.

Assessing the Future of CRM Curation

Though many museum curators have traditionally supported the use of their institutions as CRM repositories, they are increasingly aware that there are many drawbacks to staying in this business. There is

also the fact that the little space still available for CRM materials is already reserved for projects for which the

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fieldwork is completed, but for which the collections have not been delivered for curation. Good will can no longer cover up the fact that there is a lack of new storage space and money for upgrading existing collections to present standards. There must be some changes made in the way CRM materials are handled in Colorado if we are to truly address the present problems.

At a meeting last year, one museum staff brainstormed the pros and cons of being a CRM repository. While the issues and concerns may vary a bit from place to place, the following list is likely a good example of the range of attitudes towards CRM held by repositories in Colorado.

Pros of Being a CRM Repository

- Student Opportunities

The CRM collections at a museum provide many students with opportunities to learn first-hand about collection management and CRM. Students majoring in Anthropology, Museum and Field Studies, American Indian Studies, and History benefit from working or interning in a CRM facility.

- Research Possibilities

Being a CRM repository allows a museum to house many collections that could potentially attract researchers and students. Students could use the materials for class work as well as theses and dissertations. Maintaining such a facility also allows institutions a way to house collections produced by the many field projects of their own faculty or staff.

- Maintaining Federal, Private, State, and University Ties

Archaeologists are presently found in federal and state agencies, universities, museums, and private companies. A curation facility that has ties to all of these groups can offer its staff and students many opportunities, as well as boost the reputation of the museum as a state and regional archaeological center.

Cons of Being a CRM Repository

- CRM Facility Takes Staff Away from Other Collections

This is a significant concern for many existing institutions. CRM collections require staff time, taking them away from collections actually owned by the museum. All museums in the state have faced staffing crises over the last decade, and the CRM collection is only one of many general responsibilities that a museum staff will have.

- Takes up Space

This is another major concern for all older museums. CRM storage space typically is in space that was created by blocking off exhibit space or taking over office space. Any space in an existing building used for future CRM collections would be taking space away from either exhibits, research and lab space, or curation space for the museum's own collections. New space is extremely expensive and difficult to fund without significant federal or state support.

- Museum Not Up to Standards

Most museums are not currently up to the standards set by 36 CFR 79. It

would be very costly to bring existing CRM facilities up to these requirements, much less create new space that meets these standards.

While archaeologists have their own set of concerns, it is important that any solutions to the curation problems take into account the views of all the parties involved. Even though the concerns of repositories may differ somewhat from archaeologists involved in CRM work, there are shared goals for these collections: to preserve these artifacts to the best of our abilities for future research, to encourage the use of these collections in future research, and to make these collections accessible to researchers and the public.

Where Do We Go From Here? _____

There clearly are many problems associated with our present curation crisis. Within this crisis there are the same seeds of opportunity that we saw in archaeological work in the late 1970s. Just as the pressure of federal laws of the 1960s and 1970s led to improvements in archaeological field, lab, and reporting practices in the 1980s and 1990s, it is quite likely that the pressure of the curation crisis will dramatically improve our ability to use curated collections in future research and public education.

Our study of the problem suggests that there are still a number of discussions that must take place before a long-term statewide curation solution will be evident. Present solutions range from constructing a single state facility for state and federal archaeological collections to creating a consortium of improved state and local CRM curation facilities that subscribe to a general set of standards and fees. And of course, there is the real possibility of a totally private curation facility that might meet future needs. However, there needs to be a detailed statewide survey of existing facilities, a careful examination of alternative proposals, and a long-range plan that incorporates state, federal, contractor, and museum input in addressing how we will solve this crisis. This planning effort will take at least six to ten months and will require a sizeable grant. We recommend that CCPA obtain grant funding to assess our present situation and find a

reasonable and cost effective solution (see attachment). This assessment should focus on a statewide inventory and evaluation of all facilities containing archaeological collections. This inventory should be based on the model used by the U.S. Army Corps of Engineers in their Mandatory Center for Expertise for the Curation and Management of Archaeological Collections.

There remains the need to provide for interim curation needs over the next two to three years, until a full statewide curation plan exists and facility(ies) is/are in place. Though we tried to address this problem in our initial work on this report, we simply ran out of time to find a fail-safe solution for the interim storage problem. An initial inquiry by Angela Rayne of the Hiwan House Museum to approximately 70 local museums in the region resulted in a total of zero offers of temporary space for interim curation of statewide collections. An inquiry by Nancy Russell of Bent's Old Fort, NPS, suggests that there may be some possible federal solutions for interim curation of statewide collections, but more specific proposals will need to be made to explore these possibilities. Decisions need to be made about how this and next year's state and federal cultural resource permits will be handled. It is possible that between existing regional facilities such as Anasazi Heritage Center, the Museum of Western Colorado, and the University of Denver Museum of Anthropology, it may be possible temporarily to cover the curation needs of different regions of the state. These are decisions that will have to be made by others by later this year.

We urge the CCPA Executive Board to make curation a primary issue during the coming year. We hope that the information that we have provided in this report may offer both guidance and encouragement for them to move forward to explore options and solutions.

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Importance of the Project

Hundreds of thousands of archaeological artifacts, and their associated records, have been recovered from public and private lands throughout the state as a result of federal, state and local laws established to mitigate the effects of development on these historic properties. The permitting process in the state of Colorado requires archaeologists to have a curation agreement with an approved curation facility before a permit may be issued. However, as of December 2001, there was not a single approved museum in the state that could assure anyone there would be storage space for their items in 2002.

Many museums cannot accept new collections because of a lack of proper storage space and a general lack of funds to maintain current collections. With a few notable exceptions, the curation of these materials has not received sufficient attention or funds to keep pace with the archaeological work of the past few decades. Many archaeological collections within Colorado do not begin to meet minimum federal standards, some are stored improperly, others are at risk of irreparable damage from various agents of deterioration, and others have simply been lost. Many important collections have never been completely inventoried, studied, or published.

A huge amount of valuable data relevant to Colorado's history and prehistory remains unknown and unattended to because of mounting curation problems. The improper care and subsequent deterioration of many of these collections not only violates the laws under which they were recovered but also prevents Native American, educational, and scientific use of many of these materials. These objects are a significant and nonrenewable cultural resource, however the curation of these objects (their housing, care and use) is in peril. A feasibility and planning study is needed to determine the scope and extent of this problem, form alliances, and explore solutions to a statewide curation crisis.

Description of the Goals and Objectives

There are many reasons for the current curation crisis. Some blame the problem on archaeological excavation philosophy, limited research funding, or the lack of organization between storage repositories, archaeological contractors, and federal or state agencies. These problems are endemic to the archaeological community nationally and Colorado is no exception. However, the problem has no federal solution in sight, and yet it is so severe in Colorado as to potentially shut down all archaeological work within the next two to three years. It truly has reached crisis proportions, and yet there is a great deal that needs to be first known before we can solve the problem.

The main goal of this project is to assess and, ultimately, map out a final solution to this crisis. This grant is to help the state deal with its curation problem in the long-term. This grant is not intended to offer short-term solutions or rehabilitate current collections, however, these issues must be surveyed and addressed in order to find a final solution. This program has three main phases consisting of 1) an inventory of all state repositories, regardless of size or funding, 2) the building of alliances between the acting departments (repositories, contractors and governmental agencies), and 3) a final phase to explore, assess and recommend future curation options within the state.

The first step of this program is a statewide inventory and evaluation of all facilities containing archaeological collections. This inventory is based on the model used by the U.S. Army Corps of Engineers in their Mandatory Center for Expertise for the Curation and Management of Archaeological Collections (Table 1). This program identified repositories throughout the country that would serve as potential partners in long-term curation of Army Corps of Engineers and Department of Defense (DoD) archaeological collections. The program identified museums and universities that served as potential partners and proceeded to visit, evaluate and rank each institution. While many institutions in Colorado were contacted through this program, only two repositories received a full evaluation, the University of Colorado Museum and the Anasazi Heritage Center.

The program we propose will use this same model albeit throughout all of Colorado and with a somewhat different approach. Repositories will be identified and each facility will go through an evaluation procedure consisting of 1) a review of existing architecture and curation space, 2) a review of the collections management staff, their capabilities and training, written collections management policies and practices, 3) an inventory of current collections and curation agreements, and 4) a review of title or ownership of each major collection. The architectural and collections management evaluation will be performed to determine if each repository meets the minimum requirements of 36 CFR Part 79. While it is quite possible that only a few repositories will begin to meet the requirements, a survey such as this will let us know the current state of storage repositories in Colorado.

The evaluation process of this grant should be no more than 60% of the total budget. The remaining 40% should be devoted to researching results and weighing long-term solutions. Fellow curators, archaeologists, preservationists, and agency representatives will contribute time and resources in the program evaluation that will serve as matching funds amounting to 25% of the total that we are requesting. The goal in collaborating with fellow curation colleagues is twofold. The surveys will take less time to accomplish because many can be conducted simultaneously and by matching up curators who normally do not interact with each other, new information will be exchanged and, hopefully, alliances will form.

The third and most important step in this program will be the assessment of long-term solutions to the curation crisis. Such long-term solutions vary from private facilities to a non-profit consortium of existing repositories to a single new, state sponsored central repository. In order to make informed choices about future options certain key issues have to be a part of the evaluation process, such as funding, legal title to collections, and the capacity to curate objects in perpetuity. While each option has its own appeal, they must be weighed against each other and against our current situation in Colorado.

It is highly possible that many of the answers to our questions about long-term solutions are right under our noses, and it is only through the systematic investigation, evaluation and co-

operation that these answers may come to light.

Table 1. U.S. Army Corps of Engineers Decision Support Model, Mandatory Center for Expertise for the Curation and Management of Archaeological Collections.

Architectural (20%)	Collections Management (30%)	Administration (50%)
<p>Systems (14.7%)</p> <ul style="list-style-type: none"> Fire suppression Fire detection and alarm system Building HVAC system Security system guidelines 	<p>Archaeological Collections (14.2%)</p> <ul style="list-style-type: none"> Scope of collections** Environmental controls Collections storage 	<p>Administrative Capability (32.3%)</p> <ul style="list-style-type: none"> Staff authority to contribute to partnership Staff to write/track grant proposals Staff for fund-raising % staff administrative % staff archaeological %collections management Participated in similar state, federal, DoD projects Current agreements for federal archaeological collections Willingness to contribute to partnership**
<p>Structure (4.1%)</p> <ul style="list-style-type: none"> Fire safety and building construction Hazardous building components Building structural adequacy Plumbing/drainage/waterproofing 	<p>Administrative (14.2%)</p> <ul style="list-style-type: none"> Mission statement** Composition of staff Administrative record keeping 	<p>Budget Issues (1.8%)</p> <ul style="list-style-type: none"> % budget toward administration % budget toward collections management Budget deficit in last 5 years
<p>Other (1.2%)</p> <ul style="list-style-type: none"> Building egress Handicap accessibility Regulatory and site problems 	<p>Collections Management (1.6%)</p> <ul style="list-style-type: none"> Range of support facilities Collections management policies Associated archaeological documentation Administrative records and archaeological document storage 	<p>Programs (12.8%)</p> <ul style="list-style-type: none"> Current types of outreach programs Experience working with Native Americans Programs for primary/secondary schools

		Institution Details (3.1%) Institution type (local, state, federal) Property ownership Property use restrictions
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** Showstopper - if this criterion was not met, institution was not considered.