

# “Dam Good Archeology”—We’re Glad It Got Done!

## The Historical Importance of Reservoir Archeology

---

**T**he articles in this issue of *CRM* cover a very broad range of topics and issues. The history of archeology is here, so are discussions of a series of substantive archeological interpretations, as well as developments of archeological methods and techniques. The examples presented encompass topics and issues of importance to American archeology for the past five decades. Several articles address current resource management issues including dissemination of technical and popular information, how to deal with traditional cultural properties, and the curation of collections and data.

This collection of articles begins by focusing on the historical development of reservoir salvage in the United States from 1945 into the 1960s. This topic, however, merits a longer historic perspective. The earliest systematic “Dam Good Archeology” that we are aware of was along the Nile River in southern Egypt between 1911 and 1915 in concert with the first enlargement of the Aswan Dam. There was a systematic archeological survey of the reservoir area, followed by excavation of many Pharonic age sites and graveyards (see Brew 1961, 1962, and 1969 for details and additional references).

The development and implementation of the first sustained public archeological program in the United States merits the recognition of its importance. It should be a grand celebration for the achievements of many archeologists, historians, and others interested in archeological preservation. Only a few senior archeologists today are able to recall firsthand the days when the resources of the National Park Service (NPS) for archeology were so limited that often only a few thousand dollars could be allocated for the survey and subsequent excavation in a major reservoir. Even then, educational institutions had to be per-

suaded to “cost share” the true expenses for the project.

This initial approach made possible what we have today (e.g., see Jennings 1985; Johnson 1966). It was during that period that the battle was fought for the hearts and minds of the American people and their political representatives. The issue was to expand recognition that America’s historic heritage was important and must be protected. It was a long, hard, and often discouraging battle that lasted more than 20 years, until the National Environmental Policy Act and the effective implementation of the National Historic Preservation Act.

Those who carried out archeological work during this period often had to make hard and sometimes unprofessional compromises about what to dig and how to dig. The saving grace of their actions was that they made these choices in the context of the larger goal. Archeological surveys often disclosed far more highly important archeological resources than could be studied with the funds available. As a consequence, important sites were destroyed with a minimum of protest because it was recognized that the protest would not be supported in the courts, or by society in general, and to protest would alienate an agency or corporation which in the future might be more supportive. It was often noted that the archeological goal was to salvage a 10% sample, the reality in the field was more often only 1% or 2% of the sites were excavated.

There are also many unsung heroes of those battles, among them National Park Service officials like Ronnie Lee, Chief Historian, who risked his job in his effort to preserve our heritage, and Jesse L. Nusbaum, the first Departmental Consulting Archeologist, who defied his Washington superiors to enlist the aid of the Navajo tribe to force the first pipeline

archeology project. They were men of true courage. They include men like C. O. Erwin and W. J. Keller who began the first statewide high-way archeological project without any legal authority except the belief that it should be done. We should also recognize people like J. O. Brew and Fred Johnson, both distinguished scholars who spent much of their professional careers working for legislation to support public agency programs preserving our historical heritage. And we must not forget those citizens of Arkansas and Missouri, led by Bob McGimsey and Carl Chapman, who played a major role in the passage of the “Moss Bennett” bill, a landmark on the road to a national policy to protect our historic heritage.

In his article, Simonds reaches way back to recall that the Bureau of Reclamation, which figures prominently in the development of salvage archeology, is nearly a century old. He reminds readers that we owe a debt to President Theodore Roosevelt for the Antiquities Act of 1906 (Lee 1970; McManamon 1996; Rothman 1989). Simonds points out that the archeological research program conducted as part of the national program of dam and reservoir construction carried out by four federal agencies, the Bureau of Reclamation, the Corps of Engineers, the National Park Service, and the Smithsonian Institution, was essentially voluntary until the enactment of the Reservoir Salvage Act in 1960, 15 years after the initiation of the archeological program. We are fortunate that the proponents of the River Basin Archeological Salvage Program and their allies in the federal organizations that carried out the program were willing to interpret the Historic Sites Act of 1935 broadly enough to include salvage archeology. Today such a general authorization might not be judged legally sufficient.

Much more recent was the experience with large publicly funded archeological projects in the “make work” relief efforts of the 1930s. This must have helped pave the way to support the new proposed program for the river basin investigations. The New Deal archeological programs provided an important precedent.

The River Basin Surveys Program developed out of the realization that important archeological sites were going to be destroyed by the construction of dam and reservoir projects planned for the post-war years. In the article by Snyder, Hull-Walski, Thiessen, and Giesen, the

beginning of this program and its relationship to earlier public programs in American archeology is described in some detail. They mention the various public archeology programs associated with the work relief programs of the 1930s, the CCC, CWA, and WPA. The experiences of those archeologists who took part in the Depression era archeological program also influenced how the River Basin Surveys was organized. As a consequence, efforts were made to avoid the most serious defects of the earlier public programs: inadequate funding, lack of central direction, insufficient archeological supervision, lack of consistent administration, delay in the publication of results, and the scattering and loss of data and collections.

To provide a “guiding force” for the archeological salvage program, the archeological and scientific organizations that originally proposed the program established a Committee for the Recovery of Archeological Remains. The work on the River Basin Surveys provided a model for public archeology during the 1950s and 1960s. Others, in particular Jesse Nusbaum of the NPS and Fred Wendorf, then at the Museum of New Mexico (e.g., 1962, 1963), initiated similar archeological survey and data recovery programs in conjunction with pipeline and public highway projects (McGimsey 1998). By the 1960s, the National Park Service was referring to its extensive activities in this variety of public archeology projects as the Interagency Archeological Salvage Program. This became the model for public archeology into the 1970s, and provided the framework for the “Moss Bennett” act and the Public Archeology approach advocated by McGimsey (1972, 1985, 1989) and Davis (1972).

The articles in this issue can be read as summaries of the substantive, methodological, technical, and administrative history of the developing public archeology program in our recent history. For example, Blasing’s article describes archeological investigations at Medicine Creek, Nebraska, where the initial River Basin Surveys work occurred between 1946 and 1948. The Glen Canyon Project described by Lindsay was conducted between 1956 and 1963. [Editors’ note: The full text version of Lindsay’s paper can be found at the Reclamation cultural resources web site.]

Button and Ferguson discuss archeological investigations undertaken by the Bureau of

Construction crews lining the CAP Aqueduct with concrete. Photo courtesy Bureau of Reclamation.



Reclamation Southwest Regional Office between 1975 and 1985. [Editors' note: The full text version of the Button-Ferguson paper can be found at the Reclamation cultural resources web site.] They summarize the impressive extent of reservoir archeology projects in Texas, Oklahoma, and New Mexico. One problem they discuss is the limited use made of the data from those projects by archeologists. They suggest those are just not very "sexy," and they use this to defend a policy of not requiring the publication of the major results of their projects in regional and national journals. While not a problem unique to this region or era, nevertheless, we feel that merely filing these reports with a few other public repositories does not fulfill the requirement of appropriate dissemination of the information acquired at such public expense. Button and Ferguson also believe that the collections and data they summarize have not stirred up much interest because they are perceived to have come from "peripheral" areas. We are reminded of a statement by Kidder, who once said that the archeology in the Southwest was important because that's where the archeologists were. Every area is important in helping us understand the past. One has to study it and report on it for it to be integrated into our

existing body of knowledge. Strong publications arouse the interest of other archeologists and stimulate intellectual exchange.

Other interesting papers include those by Lipe who summarizes the many scientific contributions of the Dolores Archaeological Project conducted between 1978 and 1985, and Hurley who discusses the archeology done for the irrigation projects related to the McPhee Reservoir from 1983–1997. Among the interesting results noted by Hurley were a stockaded Basket Maker III site that indicated the nature of the Anasazi northern frontier then, and the evidence for cannibalism at an early Pueblo III site in the area. The New Melones Project (1977 to late 1980s) described by West generated substantial controversy over how much archeological work should be done. Teague describes aspects of the Salt-Gila Aqueduct Project (1980–1984) and suggests that the Hohokam were not significantly affected by climactic change, because they had the knowledge and technology to cope with non-catastrophic natural climactic fluctuations.

By the early 1970s, the original paradigm of salvage, or emergency, or rescue archeology increasingly was criticized and replaced by Cultural Resource Management (e.g., see King

1978; Lipe and Lindsay 1974; Wilson 1978). Although emergency archeology resulted in the excavation of sites and the preservation of some data and remains, critics justifiably pointed out that too frequently thorough description, analysis, and synthesis of the investigation results did not follow the excavations. We also know now that the collections and records from many salvage projects were poorly cared for after the investigation ended and, along with the lack of attention to curation associated with more recent work, these failings contribute to the contemporary problems of archeological curation and collections management. The articles by Snyder, *et al.*, and Lincoln point out these problems with the salvage archeology approach and identify them as a major reason the approach was modified in the early 1970s.

Perhaps because of the limited support in law in the period prior to the mid-1970s, salvage archeology in general rarely attempted to modify development projects to conserve rather than just excavate and thus destroy threatened sites. Under Cultural Resource Management, conservation of archeological sites has become much more common, yet some have carried this approach too far, arguing that no sites should be excavated.

Jennings (1985) in his informative history of the River Basin Surveys notes this as an important criticism of Cultural Resource Management. Lipe (1996) also recently argued that a restrictive conservation approach would be detrimental to archeology as a scientific discipline.

One result of the heightened concern about environmental issues during the late 1960s and the 1970s was the enactment of laws to protect important aspects of the cultural and natural environment. Prominent among these laws was the National Environmental Policy Act of 1969. This law required that federal agencies consider cultural resources as agencies reviewed or undertook projects. This law, plus the 1971 Executive Order 11593, also required federal agencies to identify and protect cultural resources on land for which they had jurisdiction or control. These new requirements led to the employment of many professional archeologists in public agencies and private firms to do the required archeological work. This new climate of public archeology is well illustrated in these articles about projects that post date the 1970s (e.g., Fowler 1986; Green and Doershuk 1998; Knudson 1986; McManamon, in press; McManamon and Hatton 1999).

Construction on  
Salt Gila  
Aqueduct.  
Photo courtesy  
Bureau of  
Reclamation.



### ***What We have Learned from Dam Archeology***

All of the articles present interesting, useful information. Two projects in particular stand out as examples of how far we have come in our efforts to protect and preserve our cultural heritage. They are the Central Arizona Project (described in articles by Teague and Lincoln), in particular the Salt-Gila Aqueduct portion of this large, multi-year project, and the Dolores Archaeological Program in southwest Colorado (described in articles by Lipe and Hurley). The excavations and publications on both of these projects represent the highest standards of archeological scholarship to be found anywhere in the world. They have set standards against which any future project must be measured. Both were appropriately funded, well led, tightly organized, and properly executed. Public education and impressive, on-going public outreach programs have been integral parts of both projects. The resultant collections and data have not been neglected either; curation facilities for the collections and records of those projects also have been provided for as part of long-term planning for the projects. These two projects have shown what can be done where there are appropriate resources and intelligent leadership.

At the same time, we must note that a great deal remains to be done (e.g., see Haas 1998, 1999). One of the strongest criticisms of archeology today is the failure to recognize the basic responsibility to make available to the wider archeological community, and ultimately to the general public, the data and interpretations from the investigations required by law and regulation. Many of the reports in modern public archeology are often criticized for the use of repetitive boilerplate, shallow interpretations, and exorbitant costs. Much of this is a result of an absence of an ethic to publish the results of that work so that it becomes easily available to the world at large through an appropriate journal article or book. Rumors develop when the process is not open and the results are not available for comment and criticism. This particular problem can be addressed easily by those in charge if they would adopt the policy of the Bureau of Reclamation Phoenix Area Office, described in the article by Lincoln, which requires that the results of all projects be published as a condition of the contract.

Three contemporary CRM issues also are addressed in several of these collected articles.

These are: curation of collections and records; relationships with Native Americans; and the effective and broad dissemination of technical and popular archeological information derived from the investigations. Lipe notes that the creation of the Anasazi Cultural Heritage Center is one of the primary achievements of the Dolores Archaeological Project. The care for archeological collections and records provided by this facility means these data are available for continued scientific research and to inform the general public in the future. Many of the authors mention the importance of curation and long-term use of the collections and records from the projects they describe. Snyder *et al.*, Lincoln, and West in particular focus attention in this area. Many public agencies have focused new efforts on the “curation problem,” both by examining current collection policies related to new archeological field work and by taking steps to improve the care and curation of existing collections (e.g., Childs 1995).

At present, the relationships between those who study ancient American history and the descendants of ancient Americans are complex, varying from cordial and cooperative to hostile. There are a number of laws that address the rights of American Indian tribes regarding archeological resources and other kinds of historic properties. In their article, Banks, Giesen, and Pearson describe these laws and executive orders. They note that great care is needed in interpreting the meaning of these laws and other expressions of public policy. For example, the requirements of the Native American Graves Protection and Repatriation Act frequently are misunderstood. This law does not require direct involvement of Indian tribes in the excavation of Native American human remains, funerary objects, sacred objects, or items of cultural patrimony, nor do tribes have to consent or agree to the excavation and analysis plan except on tribal land. The Native American Graves Protection and Repatriation Act relates only to archeological excavations or inadvertent discoveries of Native American human remains and funerary objects on federal or tribal land, and the legal definitions of these lands are specific in the law and regulations. Except within the boundaries of formal Indian reservations, the law does not apply on private or other kinds of public land. In addition, federal land managing agencies are required to **consult** Indian **tribes** concerning new excavations or when remains are inadvertently discovered on

A 1999 Pawnee re-burial. The grave was inadvertently discovered on Reclamation land. Photo courtesy Nebraska-Kansas Area Office, Bureau of Reclamation.



federal land. “Consultation” is defined specifically in the regulations. The result of consultation is not necessarily **consent** by the Indian tribe for any excavation, scientific recording, description or analysis of the remains or objects. In other words, discussing any proposed archeological investigation or treatment is required, but the agreement of the tribe is not required.

The last general issue that we highlight from the articles in this collection is the importance of effective dissemination of archeological technical and popular information. In their articles, Lipe and Lincoln review what has been done in the past and reflect upon what we have learned from it. Lipe suggests that more project resources should be devoted to synthesis of data to produce interpretations that are more accessible to both professional archeologists and the general public. Lincoln describes how the Phoenix Area Office cultural resource program has taken special steps to insure dissemination of information, both professionally and for the general public. He also describes a new approach to providing technical data in a CD-ROM format that can be utilized easily for new and comparative analyses. Archeology is about information, almost always archeological interpretations require professional analysis; they are not readily apparent without this kind of filter. Effective dissemination and use

of data are key components of project completion. To be useful, information must be available.

#### References

- Brew, J. O.  
1961 *Emergency Archaeology: Salvage in Advance of Technological Progress*. Proceedings of the American Philosophical Society 105(1):1-10.
- 1962 Introduction. In *A Guide to Salvage Archaeology*, by Fred Wendorf, pp. 7-32. Museum of New Mexico Press, Santa Fe, NM.
- 1969 Salvage Archaeology and Historic Preservation. *Museum News* 48(2):20-26.
- Childs, S. Terry  
1995 The Curation Crisis: What's Being Done? *Federal Archeology* 7(4):11-15.
- Davis, Hester A.  
1972 The Crisis in American Archeology. *Science* 175:267-272.
- Fowler, Don D.  
1986 Conserving American Archaeological Resources. In *American Archaeology Past and Future: A Celebration of the Society for American Archaeology, 1935-1985*, edited by D. J. Meltzer, D. D. Fowler, and J. A. Sabloff, pp. 135-162. Smithsonian Institution Press, Washington and London.
- Green, W. and J. F. Doershuk  
1998 Cultural Resource Management and American Archaeology. *Journal of Archaeological Research* 6(2):121-168.

- Haas, Daniel  
1998 *Federal Archeology Program: Secretary of the Interior's Report to Congress, 1994-1995*. Departmental Consulting Archeologist, National Park Service, Department of the Interior, Washington, D.C.
- 1999 *Federal Archeology Program: Secretary of the Interior's Report to Congress, 1996-1997*. Departmental Consulting Archeologist, National Park Service, Department of the Interior, Washington, D.C.
- King, Thomas F.  
1978 Archeology and Historic Preservation: A Case for Convergence. In *Social Archeology: Beyond Subsistence and Dating*, edited by C.L. Redman, M. J. Berman, E. V. Curtin, W. T. Langhorne, Jr., N. M. Versaggi, and J. C. Wanser, pp. 431-438. Academic Press, New York.
- Knudson, Ruthann  
1986 Contemporary Cultural Resource Management. In *American Archaeology Past and Future: A Celebration of the Society for American Archaeology, 1935-1985*, edited by D. J. Meltzer, D. D. Fowler, and J. A. Sabloff, pp. 395-413. Smithsonian Institution Press, Washington and London.
- Jennings, Jesse D.  
1985 River Basin Surveys: Origins, Operations, and Results, 1945-1969. *American Antiquity* 50(2):281-296.
- Johnson, Frederick  
1966 Archeology in an Emergency. *Science* 152(3729):1592-1597.
- Lee, Ronald F.  
1970 *The Antiquities Act of 1906*. National Park Service, Department of the Interior, Washington, DC.
- Lipe, William D.  
1996 In Defense of Digging: Archeological Preservation as a Means, not an End. *CRM* 19(7):23-27.
- Lipe, William D. and Alexander J. Lindsay, Jr. (editors)  
1974 *Proceedings of the 1974 Cultural Resource Management Conference, Federal Center, Denver, Colorado*. Museum of Northern Arizona, Technical Series No. 14. Flagstaff, AZ.
- McGimsey, Charles R., III  
1972 *Public Archeology*. Seminar Press, New York.
- 1985 "This, Too, Will Pass" Moss Bennett in Perspective. *American Antiquity* 50(2):326-331.
- 1989 Perceptions of the Past: Public Archaeology and Moss Bennett—Then and Now. *Southeastern Archaeology* 8(1):72-75.
- 1998 Headwaters: How the Post-War Boom Boosted Archeology. *Common Ground* 3(2/3):16-21.
- McManamon, Francis P.  
1996 The Antiquities Act, Setting Basic Preservation Policies. *CRM* 19(7):18-23.
- In press. Cultural Resource Management. In *An Encyclopedia of Archaeological Theory and Method*, edited by Linda Ellis. Garland Publishing Company, New York.
- McManamon, Francis P. and Alf Hatton  
1999 Considering Cultural Resource Management in Modern Society. In *Cultural Resource Management in Modern Society*, edited by F. P. McManamon and A. Hatton. Routledge Publishers, London.
- Rothman, Hal  
1989 *Preserving Different Pasts: The American National Monuments*. University of Illinois Press, Urbana and Chicago.
- Thiessen, Thomas D.  
1999 *Emergency Archeology in the Missouri River Basin: The Role of the Missouri Basin Project and the Midwest Archeological Center in the Interagency Archeological Salvage Program, 1946-1975*. Special Report No. 2, Midwest Archeological Center, National Park Service, Lincoln, Nebraska.
- Wendorf, Fred  
1962 *A Guide to Salvage Archaeology*. Museum of New Mexico Press, Santa Fe, NM.
- 1963 Archeology and Private Enterprise: A Need for Action. *American Antiquity* 28(3):286-288.
- Wilson, Rex L.  
1978 Changing Directions in the Federal Archeology Programs. In *Social Archeology: Beyond Subsistence and Dating*, edited by C.L. Redman, M. J. Berman, E. V. Curtin, W. T. Langhorne, Jr., N. M. Versaggi, and J. C. Wanser, pp. 439-448. Academic Press, New York.
- Francis P. McManamon is Chief, Archeology and Ethnography Program, and Departmental Consulting Archeologist, National Park Service.*
- Fred Wendorf is Henderson-Morrison Professor of Prehistory, Department of Anthropology, Southern Methodist University.*