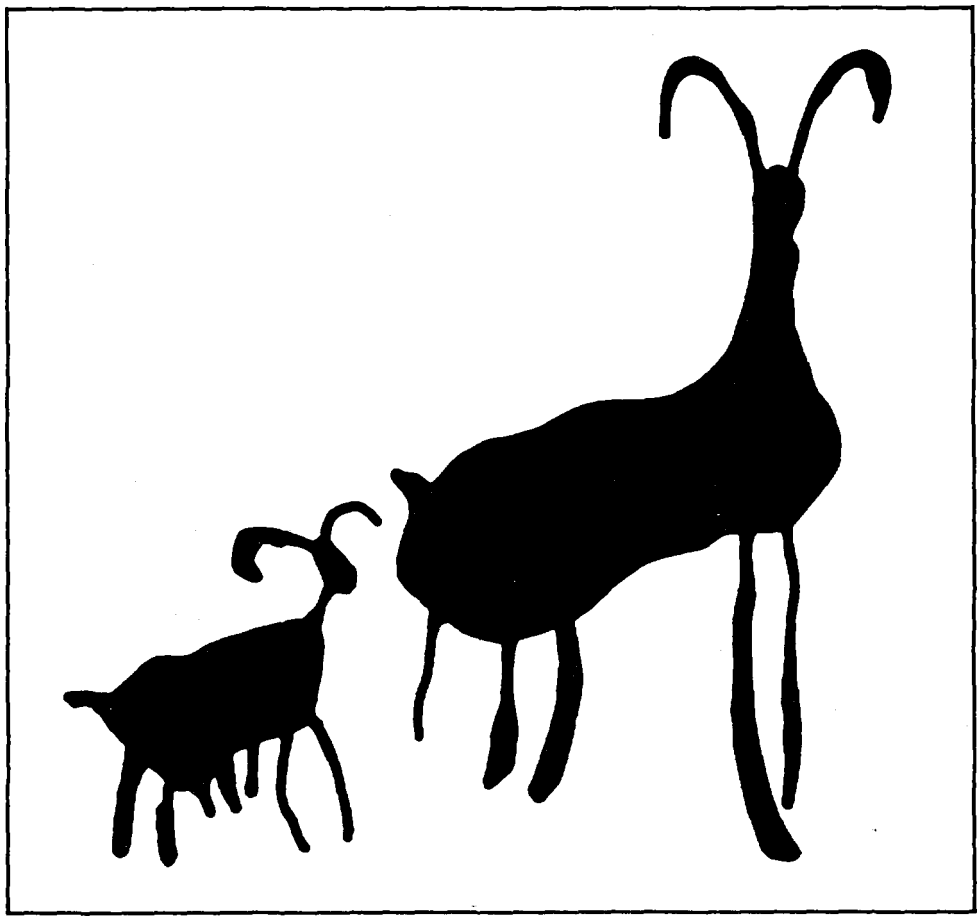

Archeological and Historic Data Recovery Program

Fiscal Year 1976

National Park Service
U.S. Department of the Interior

This report was prepared in the office of Rex L. Wilson, Departmental Consulting Archeologist, National Park Service, U.S. Department of the Interior.

Cover: Petroglyphs, San Bernardino County, California

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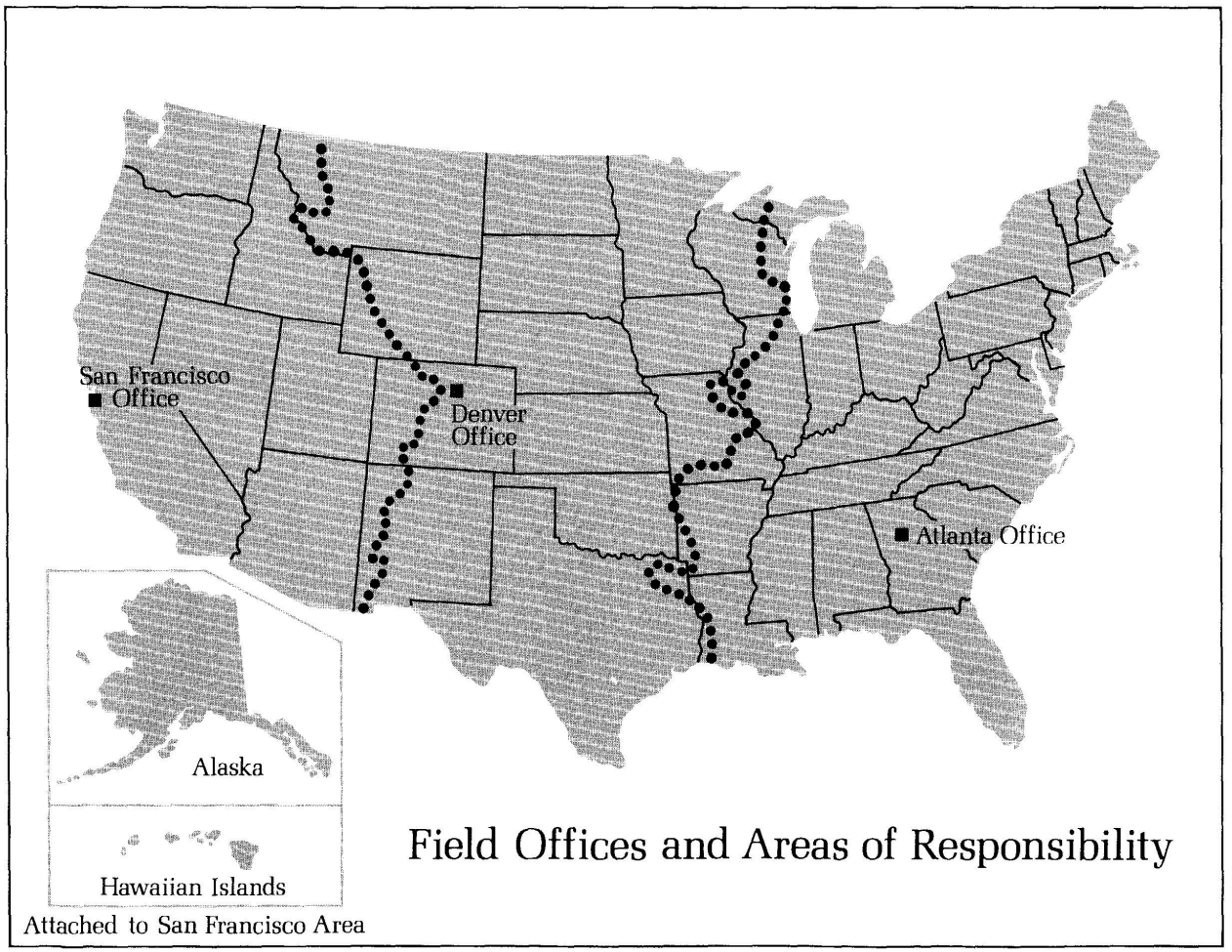
Submitted pursuant to Section 5(c) of Public Law 93-291 to the Interior and Insular Affairs Committees of the Senate and House of Representatives of the United States.



Field Offices and Areas of Responsibility

Introduction

An expanded Federal mandate in archeology and historic preservation, resulting in vast new responsibilities for the Interagency Archeological Program, was vested in the Secretary of the Interior by the Archeological and Historic Preservation Act of 1974- (Public Law 93-291). Current program responsibilities include prompt and thoroughly professional responses to executive and legislative calls for the protection and preservation of the Nation's historic heritage as well as to the technical scientific demands of contemporary archeological work. Most importantly, in the light of increasing public awareness and sensitivity to historic preservation, the program required substantial restructuring before it could begin to meet the challenge of its new legal responsibilities. An immediate task was to extend the procurement of technical services process to a far broader range of qualified institutions as a means of improving, through competition, the quality of salvage archeology. Further measures were taken to insure that archeological salvage authorities were used to compliment rather than conflict with other historic preservation programs and to make the results of investigations available to the public. Approaches taken to deal with these issues, program accomplishments, and significant problems that continue to impede the orderly development of the Interagency Archeological Program, are discussed in the following pages.

Office of Archeology and Historic Preservation

The Interagency Archeological Program is administered by the Interagency Archeological Services Division in the Office of Archeology and Historic Preservation (OAHP), National Park Service. Established in 1967, OAHP was conceived as the American equivalent of the historic monuments services functioning in many other countries. Its primary mission is to carry out those continuing Federal programs that derive principally from the Historic Sites Act of 1935 and from the National Historic Preservation Act of 1966. Major programs within the Office of Archeology and Historic Preservation are the National Register of Historic Places, the National Historic Landmarks Program, the Historic

American Engineering Record, the Historic American Buildings Survey, the Historic Preservation Grants-in-Aid Program, Technical Preservation Services, and the Interagency Archeological Services Program. Program functions are briefly described in Appendix A.

Interagency Archeological Services Division - Washington

The Interagency Archeological Services Division (IAS) directs and coordinates the nationwide program for the protection, through preservation or recovery, of significant archeological and historic remains that are threatened by Federal construction projects, programs, or activities.

IAS develops policies, standards, guidelines, and procedures for the professional conduct of the Interagency Archeological Program and disseminates information on its activities to the public and scientific communities.The Division also provides advice, when requested, on legislative proposals and on Congressional and Presidential requests and participates in programs of historical and archeological organizations. IAS manages the permit system instituted under the Antiquities Act of 1906 (Public Law 59-209) to regulate archeological investigations on most federally owned or controlled lands except those under the jurisdiction of the Department of Agriculture. As part of the Secretary of the Interior's responsibilities under J;xecutive Order *11593,* IAS offers procedural guidance and .technical advice on a consulting basis to other Federal agencies.

A major role of IAS is to provide professional assistance to agencies involved in data recovery operations authorized under Public Law 93-291 and to maintain managerial and professional credibiJity. This is accomplished through:

a. extensive consultation in preparing and distributing administrative and professional policies for the IAS program;

b. continuing adaptation of competitive procurement procedures to professional problems related to contracting for archeological investigations;

c. consultation with the Advisory Council on Historic Preservation on archeological issues;

d. development of an annual nationwide program for funding archeological investigations;

e. establishment of national program goals and objectives; and

f. reporting annually to the Congress on the scope and effectiveness of the program.

IAS Field Offices

Implementation of the Interagency Archeological Program at the field level is accomplished through I AS off ices in Atlanta, Denver, and San Francisco. Although each field office comes under the line control of a Regional Director of the National Park Service, each assists !AS-Washington in program aspects pertaining to data recovery including program planning, annual report preparation, and policy development. By maintaining day-to-day liaison with other Federal agencies at the regional level, field office staffs identify projects and programming requirements for future archeological investigations.

Because the field offices are the main procurement arm of the Interagency Archeological Program, they are responsible for generating scopes of work, identifying prospective contractors, evaluating proposals, negotiating contracts, monitoring field work, and reviewing final reports for technical adequacy and legal sufficiency. Procurement assistance is also provided to other agencies involved in data recovery operations under the Archeological and Historic Preservation Act, including preparation of scopes of work, technical support during contract negotiations, monitoring services during actual field work, and review and comment on final report drafts.

In addition, field office personnel serve as procedural generalists by assisting other Federal field offices with their compliance responsibilities, by educating the public and professional communities on developments in the historic preservation program, and by developing closer coordination with the State Historic Preservation Officers on Public Law 93-291 activiti s. On occasion they provide a needed balance between the Federal and the professional and private sectors in

licensing and permitting programs to insure that all interests are served.

Program Scope

Archeology deals with man both as an event and as a prime mover in cultural processes. Archeological research is undertaken with the long-range objective of increasing knowledge of the character of extinct societies and with the ultimate expectation of using this knowledge to plan for the future. Archeology has a firm foundation as a valid scientific pursuit and most archeo1ogica1 salvage being done today is professionally adequate.

Archeological sites, both finite and fragile, are particularly subject to disturbance and destruction; the mere *collection* of artifacts from damaged sites does *little* to mitigate their loss. The intent of historic preservation legislation is to make those responsible for adverse effects accountable for the damages their activities inflict on this portion of the cultural environment. Harmful effects can be moderated in many instances, and totally avoided in others, through the use of sound management practices. Accordingly, the major objective of the procedures and guidelines for the identification and protection of cultural properties that have been developed, or are in preparation, is to provide the basis for a management system to protect archeological resources from destruction or disturbance wherever and whenever possible.

Historic Preservation Compliance Process

One of the major roles of Interagency Archeological Services is to help Federal agencies to recognize archeological values, to anticipate the effects their actions will have on the Nation's dwindling archeological resources, and to insure that they assume their share of responsibility for the protection and conservation of significant archeological remains. Responsibility for providing these services derives from authorities and requirements of the Historic Sites Act of 1935 (Public Law 74-292), the National Historic Preservation Act of 1966 (Public Law *89-665* as amended), the National Environmental Policy Act of 1969 (Public Law 91-190), Executive Order *11593,* and the Archeo1ogica1 and Historic Preservation Act of 1974 (Public Law 93-291), and through regulations and guidelines for all aspects of

the historic preservation program (Appendix C). Regulations and guidelines are published for comment in the "Federal Register" and are distributed to Federal agencies, State Historic Preservation Officers, the archeological community, and the private sector prior to their publication for effect.

Certain of the preservation authorities require that properties of historic significance be considered at an early point in the process of project planning. Because, in most instances, projects can be designed and implemented to protect historic properties without causing construction delays, it is especially important that archeologists and other preservation specialists participate actively in project planning--a function not yet fully appreciated by many agencies who have compliance responsibilities.

At the earliest stage of planning the *responsible* agency should take the following steps:

1. Identification of historic properties in the project impact area.

Federal agencies are required by Executive Order *11593* to locate, identify, and evaluate all historic properties under their jurisdiction or control or properties that will be affected by actions of the agency. They are further required to consult with appropriate State Historic Preservation Officers and to ask the Secretary of the Interior if any of the identified and evaluated properties qualify for inclusion in the National Register of Historic Places. If the Secretary determines that the properties are Register eligible, the responsible agency should reevaluate its proposed undertaking and give all due consideration to the resources that will be affected. The Secretary's role is to determine officially the significance of resources for which subsequent compliance steps are taken. This step is fundamental because the number of important archeological and historic sites is very large-far larger than previously perceived by the lay public.[1] Unfortunately,

[1]This statement may seem to contradict the frequent complaint that the Nation's archeological heritage is rapidly disappearing. Both statements are true; large numbers of sites yet remaining are being rapidly destroyed. Moreover, because any given archeological site is functionally related to other sites, the indiscriminate destruction of one or a few sites significantly reduces the data recovery potential of a much larger number of related sites.

many agency officials are unprepared to cope with the reality of this question and have, instead, suggested a variety of alternative explanations, e.g., archeologists are unrealistic in their expectations for preservation or data recovery; archeologists inflate estimates of significance in order to get more public money to support research activities; archeologists want to delay projects. Not one of these common rationalizations has been confirmed.

In all cases site documentation, estimates of significance, and requirements for data recovery, require close scrutiny to verify their accuracy; mistakes or inaccurate assessments do occur. But a far more serious problem is that many Federal and State agencies seem unable to believe that vast numbers of archeological sites remain in this country and that contemporary development urgently threatens them. The solution does not lie in arbitrary and artifical administrative formulas that, in effect, define the problem out of existence by altering criteria, procedures, or requirements; the significant sites will still be there and will in any case suffer irreparable damage.

Perhaps a suitable solution to adequate mitigation of site destruction *is* not possible; it may be that the extent of damage far exceeds any reasonable expectation for mitigation; perhaps adequate mitigation will result in an overwhelmingly adverse public reaction. While all are possible none has been demonstrated since Federal involvement in salvage archeology began in earnest shortly after World War II. Regrettably, many agencies seem unwilling to acknowledge that unmitigated damage is occurring to the archeological environment in their project areas. And, regrettably, this attitude is the most dangerous to the presevation of properties and the recovery of data. Obviously, a determination of Public Law 93-291 program effectiveness can never be made until all responsible agencies make a conscientious effort to identify significant properties, to evaluate them fully and accurately, and to have their identifications verified by the Secretary of the Interior. Only then will it be possible for the Federal Government to make realistic choices in light of the public interest•

2. Advisory Council on Historic Preservation consultation process.

lf, in accordance with the Advisory Council on Historic Preservation's (Advisory Council) procedures (36 CFR 800) for implementation of Section l 06 of the National Historic Preservation Act and Executive Order *11593,* the Federal agency finds that its undertaking will affect a significant archeological property, 1t must determine, in consultation with the State Historic Preservation Officer, whether the effect will be adverse and must give the Advisory Council an opportunity to comment. If there will be an adverse effect, the agency must submit to the Advisory Council a Preliminary Case Report that outlines the nature of the project on the properties. There follows a three-way consultation among the Advisory Council, State Historic Preservation Officer, and the agency to explore ways by which the adverse effect can be avoided or minimized. The final plan of avoidance, or mitigation of adverse impact, must be acceptable to the three parties and must be incorporated in a legaJly binding Memorandum of Agreement. Should no agreement be reached, the Advisory Council must provide the agency with a formal comment on the matter. The agency may then elect to carry out the Advisory Council's recommendations or it may choose to ignore the comments, cognizant that such actions are always subject to judicial review.

3. Data recovery.

If, after consultation with the Advisory Council and the State Historic Presevation Officer, all options for avoiding damage or destruction to the historic property are exhausted, and it is determined that data recovery is in the public interest, the Archeological and Historic Preservation Act of 1974 can be applied. Use of the 1974 Act, however, should be considered the last resort in the historic preservation process.

The 1974 Act must always be viewed in the context of the overall environmental planning process; it is impossible to divorce it from other existing historic preservation statutes. In this context, data recovery should not be thought of as the most satisfactory means of mitigatlng project impacts. Actions that preserve

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properties in place for a long-term program of planned depletion are usually preferable to data recovery activities. This is true because such actions extend the useful life of the properties and their data. It is also true because the preservation alternative is often less costly than salvage investigations, especially when addressed early in the planning process. The various compliance mechanisms established for historic preservation are intended to insure that adequate consideration *is* given to all such concerns and are not merely to legalize salvage archeology.

The Archeological and Historic Preservation Act of 1974 authorizes Federal agencies to undertake data recovery activities in advance of construction projects. Agencies also have the option to request the Secretary of the Interior to assume responsibility for data recovery efforts. In such cases the agency may transfer to the Secretary up to one percent of the funds authorized to be appropriated for the project or, alternately, if the responsible agency possesses its own archeological expertise it may choose to arrange for the work directly. In certain federa11y assisted, licensed, or permitted programs the Secretary of the Interior may be requested by a Federal agency to perform data recovery investigations under the 1974 Act. In any case, data recovery is undertaken only in those instances in which the Federal agency has fully discharged its responsibilities under the several historic preservation planning authorities and can assure that properties to be affected have been identified, evaluated properly, and duly considered in the planning process.

The role of the Federal Government in archeology is management. Archeological surveys and investigations are performed under rather narrowly constrained conditions for the sole purpose of minimizing the deleterious effect of the Government's ongoing operations on the Nation's dwindling archeo.logical resources. At the Federal level, implementation of historic preservation law is governed by a systematic conservation approach. *All* prudent means will be used to avoid disturbance of archeological sites threatened with destruction or damage by a Federal or federally related project. Excavation will be undertaken only when all

lawful and prudent means for in-place preservation have failed.

Several assumptions help shape this approach as a matter of public policy. *First,* there are very limited controls on the thoughtless and wanton destruction of cultural resources by totally nonfederal agents. Second, a vast number of archeological sites are suffering rapid and major damage from natural processes and these sites rarely have advocates. Third, there are presently no State or regional historic preservation plans that are sufficiently comprehensive to serve as a decisionmaking framework for scientific investigation or conflict resolution. Fourth, even though the capacity of the archeological profession to absorb an increased workload is not as limited as some claim, there can be no question that indiscriminate or hastily conceived excavation of archeological sites will danagerously lessen the profession's ability to respond effectively. Fifth, the high cost of scientificaIly adequate data recovery makes site avoidance a very cost-effective alternative provided assessment is performed early in project planning.

Implementation and Effectiveness of the Program

Because many Federal agencies, especially at the regional and local levels, are not fully aware of the historic preservation process or of their responsibilities under the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969, Executive Order 11593, and the Archeological and Historic Preservation Act of 1974, implementation ofthe Interagency Archeological Program continues to be both difficult and awkward. In consequence, the effectiveness of the program h«s yet to reach an acceptable level. An even more serious difficulty is that program effectiveness in many cases is hindered by inadequate agency internal orientation and sensitivity to the objectives of the national historic preservation effort. It is further restrained by the absence of sufficient incentives to carry them out despite Congressional and Executive directives.

Equally distressing is the fact that those agencies in most need (i.e., those whose professional staffs do not include archeologists or historic preservation specialists) often do not avail themselves of the technical expertise, assistance, and services offered by the Interagency Archeological Services field offices in Altanta, Denver,

and San Francisco. Because such expertise has not been supplied or heeded, time-consuming and costly delays in the project planning process have resulted. The separation of federally related archeological work into the project planning process and the project implementation process is a logical administrative convenience which permits archeological data to be collected and made available for input at the appropriate points in planning. But it is an administrative convenience that ignores basic unalterable realities in the continuity of archeological research. Decisions about whether to conduct data recovery investigations and, if undertaken, to what extent and for what purpose, are made on the basis of, among other things, the site survey and evaluation work which should be performed in conjunction with project planning and other environmental assessments. ln order for timely and well informed decisions about adequate mitigation to be made, the archeological and historic resource identifications and assessments need to have been made correctly. If they have not occurred, it is very difficult to proceed with adequate mitigation research no matter how many administrative procedures have been "successfully" completed. In other words, there is an important form versus substance question to be considered. The planning and undertaking of scientifically credible archeological data recovery in the construction project implementation phase requires certain types of data and analyses as background. If these data and analyses are not available, data recovery for mitigation purposes cannot proceed. At that point valuable time and money are consumed in doing or redoing wh::i"t should have and could have been done properly in the planning-environmental assessment phase.

There has been some notable improvement in these areas of concern and many individual field offices of Federal agencies are making excellent progress toward meeting national historic preservation objectives. In general, however, severe stresses remain between the administrative and technical processess that cannot be relieved simply by an increased money supply. While elimination of these problems relies to some extent on the concept that Federal managers will respond to an "ethical good," an eventual solution depends more on the creation of tangible incentives. Such incentives will encourage administrators to consider their decisionmaking in light of a set of technical options rather than move them to impose arbitrary and unrealistic administrative solutions of convenience.

Some of the more immediate problems are being alleviated by the Interagency Archeological Services' publication of procedures and guidelines designed to clarify the needs, requirements, and standards for cultural resource management work. Development of these guidelines and procedures has been a very time-consuming effort because of the great variety of legal, programmatic, and technical issues yet to be resolved between the Department of the Interior and other bureaus and agencies.

Comprehensive archeological and historic resource planning

Over the long-term many of the problems described are resolvable *only* with improvement of comprehensive historic preservation planning strategies in each of the States, as authorized by the National Historic Preservation Act of 1966. The function of such planning or decisionmaking frameworks is to bring together existing information on the location, type, and status of resources, on the types of threats to their integrity, and on any other relevant factors. Such consolidation enables planners to set objectives and action priorities for application of the full array of historic preservation tools--acquisition, rehabilitation, interpretive development, relocation, stabilization, mitigation, data recovery, long-term research, and so on. It is through this mechanism that the best opportunities exist for attaining a substantial measure of agreement on questions such as the significance of a property so that the conflicts over this issue, which presently plague the historic preservation program, can be minimized. Moreover, decisions for allocation of resources for survey, preservation, or data recovery would be possible on something other than the present ad hoc basis.

As indicated previously, most approaches for solving these problems have been based on the revision of statutes or on guidelines and criteria to, in effect, define the problem out of existence. Such approaches are unrealistic, and do nothing to relieve the circumstance that the national heritage of archeological and historic resources still is being severely pressured. In addition, they serve only to eliminate the opportunity to make systematic, well thought out decisions on a case-by-case basis.

Alternatively, suggestions have been made for a multi-State, regionalized system based on "culture areas" for which narrative regional summaries of the status of archeological knowledge would be written. These summaries would serve as the basis for making individual site decisions. Although the regional scheme has many advantages over the revision of laws and criteria approach, it contains several serious flaws. For example, it presumes a nonexistent administrative structure for carrying out the plan as well as funding support for which there is no appropriation authorization. In addition, the "culture area" approach would not provide a significantly improved decisionmaking capability because the analytical framework would continue to be one in which predominantly subjective judgments would be made on the basis of vague generalizations about a region.

The alternative, which has none of the defects of either the "revision" or "regional" solutions, is that of comprehensive historic preservation planning based at the State level as described previously. lnteragency Archeological Services continues to sponsor special studies on various planning issues as an investment in the development of a historic preservation system in which administrative versus technical conflicts can be reduced to a minimum. In addition, when a program of comprehensive historic preservation has been carried out, substantial indirect and direct cost savings will occur both for Federal agencies and the private sector and the limited data recovery funds that are available to the Department of the Interior will be used more efficiently and effectively.

Only through the development of carefully conceived planning frameworks can another basic problem be attacked, i.e., to measure program effectiveness under the Archeological and Historic Preservation Act. Ultimately, the primary measure of effectiveness is the difference between what data need to be recovered and what data actually are recovered in any given construction project. Because in most instances it is impossible to collect all necessary data, the best that can be expected now is a gross index of funding needed versus funds available; the actual ratio of data preserved to data lost cannot be determined.

Identification vs. Mitigation

The Archeological and Historic Preservation Act of 1974 requires Federal agencies to assume financial responsibility for the negative effect their activities may have upon archeological resources. Carrying out the provisions of the act, however, is contingent upon an agency's prior compliance with the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and Executive Order *11593.* The 1974 act, therefore, complements rather than supplants other preservation statutes. Although data recovery should be undertaken only after project planning and review have been completed, and after it has been *determined* that in-place preservation is not in the public interest, some agencies have been obliged to use funds authorized by the 1974 Act to carry out related planning process work, i.e., the identification and evaluation of archeological and historic properties. This practice arises from the fact that some agencies have not yet caught up with their NEPA compliance responsibilities. Lacking other authorities to cover costs of archeological assessment surveys in active *project* areas, those agencies have been obliged to use Public Law 93-291 funding *in* order to be *in* full compliance with NEPA. Although not a major deviation from the *intent* of the 1974 Act, *this* practice presents a potentially serious problem by significantly reducing the already limited funds available for *mitigation.* Because environmental assessments are authorized by NEPA it is both unnecessary and counterproductive to use the AHPA authorities for this purpose as a general practice. Regulations and guidelines recently developed in coordination *with* the Office of Management and Budget *will* help clarify the relationship between data recovery operations authorized under AHPA and the project planning and preservation *activities* required under NHPA, NEPA, and Executive Order 11593.

One Percent Allocation Problem

Several difficulties have arisen that relate directly to the one percent *limitation in* section 7(a) of the 1974 Act. The one percent *provision* was designed to serve as a reasonable *limitation* on both the dollar amount that may be transferred to the Secretary of the Interior and on the dollar amount an agency may use on its own for

data recovery purposes. Clearly the intent of Congress was to limit such expenditures in Federal construction projects. The one percent limitation does not apply to other sections in the act involving certain federally assisted programs and to projects in which the total cost of construction does not exceed *$50,000.*

Archeological data recovery is a labor intensive activity and, as a result of increasing mitigation costs, it has become apparent that the one percent authorized in construction projects often is an insufficient amount to carry out a scientifically adequate archeological project. In the Blue Marsh Lake project in Pennsylvania, for example, the U.S. Army Corps of Engineers did not have sufficient funding authority to provide for archeological needs because it had expended its authorized funding for the preservation and relocation of the historically significant Gruber Wagon Works.

Interagency Archeological Services continues to urge Federal agencies to identify sites early in the planning process so that the information can be used in the evaluation of project design options. Only through this management approach can both the data recovery costs and the destruction of the national cultural heritage be significantly reduced.

IAS Program Innovations

The general public, the archeological profession, Federal program managers, and public officials must have confidence in the historic preservation process. One of the prinicipal means of establishing credibility is to provide these groups with the opportunity to observe and participate in the process. A system of making all technical reports available to the archeological profession, to public officials, and to project planners has been instituted. Means of expressing the results of archeological investigations in a format that can be understood by the public are being developed. The public and professional communities are urged to become directly involved in the decisionmaking and review processes through closer coordination with SHPOs, local sponsors, and local institutions. In addition, we are seeking ways to introduce peer review into the archeological investigations process•

A Status Report to the Archeological Community

As a result of the Division's rapidly expanding scope it was necessary to present to the archeological community a position paper describing the mission and function of the IAS programs and the relationship of the Division to other elements of the National Park Service and other Federal and State agencies. In particular, it was calculated to orient the profession to contemporary needs, expectations, and objectives of the Federal archeology programs.

In March 1976, copies of the report were mailed to *all* of the approximately *5,000* members of the Society for Amercian Archaeology. Many of the comments received are reflected *in* the current IAS headquarters and field operations.

Cultural Resource Management Studies

In order to enhance the implementation and cost effectiveness of data recovery activities, we have invested in the development of improved archeological and historic site management and planning techniques. A series of pilot and feasibility studies is being jointly funded through the Interagency Archeological Program and through the Executive Order *11593* technical assistance program of IAS. Three reports have been published thus far: (1) An Overview of the Prehistoric Resources of the Metropolitan St. Louis Area by Elizabeth Benchley; (2) Prehistoric Resources of East Central New England: A Preliminary Predictive Study by Dena F. Dincauze and Judith W. Meyer; and (3) The Importance of Small, Surface, and Disturbed Sites as Sources of Significant Archeological Data by Valerie Talmage and Olga Chesler.

Several other studies are either completed or are in preparation. Among these are:

* Cultural Resources Evaluation of the Northern Gulf of Mexico Continental Shelf, by Sherwood M. Gagliano. This study, which is in press, outlines a prototype archeological site management framework for use on *oil* and mineral leases so that unnecessary survey and data recovery costs can be avoided•

* The Archeological Survey: Methods and Uses, by Thomas F. King. This report, also in press, is aimed at the agency planner. It describes how the archeological record comes into being, how it is discovered by the archeologist, and how environmental planners can obtain archeological services and use the results.
* Archeological Resources in the Urban Environment (tentative title), by Bert Salwen. In preparation, this report describes the many surprising and unexpected forms and situations in which archeological resources exist in urban settings that are unknown even to many archeologists.

Groundwork has been laid for a very important study in cooperation with the American Anthropological Association to define the technical requirements for long-term curation and preservation of specimens and records obtained through Federal funding. When these needs have been defined, the study will examine the problems encountered by universities, colleges, musuems, and other archeological repositories in meeting them. Recommendations for dealing with the problem will form a major part of the final report.

NTIS and other Information/Education Approaches

During Fiscal Year 1976, IAS began to enter those archeological reports into the National Technical Information Service **(NTIS)** system[2] that have resulted from salvage contracts awarded by the National Park Service. In this manner information gained from archeological investigations is made available to scientists and the public. Eventually all final reports prepared under the authorities of Public Law 93-291 will be deposited with the NTIS along *with all* reports submitted in accordance with the requirements of Antiquities Act permits issued by the Departmental Consulting Archeologist.

[2] Inquiries about these reports should be addressed to: National Technical Information Service, U.S. Department of Commerce, *5285* Port Royal Road, Springfield, Virginia 22161.

We are also experimenting with a variety of ways to make the reports of investigations more understandable and accessible to the general public; for example, nontechnical summaries of reports, audiovisual presentations, and visits by local residents to view excavations and archeological laboratories and learn about work that is underway.

Peer Review

The Interagency Archeological Program must have a means of consistently attaining a high level of professional performance in Federal archeology. No matter how well qualified staff archeologists may be, the range of situations to be dealt with is sufficiently great that outside expertise is absolutely essential to carrying out scientifically acceptable archeological work. Through the peer review system, the necessary expertise is applied to any given problem and traditional peer controls on scientific research quality are brought to bear. Peer review processes have customarily been used in conjunction with grant programs and recent reviews of these processes have found them to be fundamentally sound.[3] Contract reviewing in cooperation with the Society of Professional Archeologists. When this experiment is completed IAS, in cooperation with the archeological community, should be able to design and institute a continuing peer review process.

[3] Symington, James W. and Thomas R. Kramer "Does Peer Review Work?" American Scientist. January-February 1977, Volume 5; pp. 17-20.

U.S. House of Representatives Committee on Science and Technology. 1976. National Science Foundation Peer Review. U.S. Government Printing Office.

U.S. House of Representativ s Committee on Science and Technology. 1975. National Science Foundation Peer Review: Special Oversight Hearings, no. 32. U.S. Government Printing Office

Archeological Advisory Committee

With the establishment of a new and sorely needed advisory board for the Office of Archeology and Historic Preservation, an archeological advisory committee will also be established. Appointments to the committee, which will be composed of a broad cross section of highly experienced archeologists, will be for two years. A primary function of the group will be to review and comment on policies and procedures developed for the Interagency Archeological Services Division and for *all* other archeological programs in OAHP. It will also serve as a forum for the airing of professional and public concerns about historic preservation programs as they affect archeology, provide advice on the resolution of archeological problems facing IAS, and generally comment to the Departmental Consulting Archeologist on the scope and effectiveness of the Interagency Archeological Program as viewed by the profession at large.

Intern Program

In order to improve IAS responsiveness to the archeological community and the public, as well as to improve the professional diversity and strength of the Division, an intern program has been established to place highly experienced senior professional archeologists and carefully selected graduate students planning careers in public archeology in temporary appointments. Because the program has proven to be highly successful in the Washington office, interns are now being used by the Denver and Atlanta field offices with the result that the IAS program *is* becoming increasing well-suited to the needs of contemporary archeology.

Airlie Seminars

In the summer of 1974, IAS contracted with the Society for American Archaeology to hold a series of six conferences to develop concepts and recommendations from within the discipline on such matters as professional standards, approaches to resource management, report preparation standards, and the interests and concerns of Native Americans in matters of North American archeology. The results of

these conferences, held in Airlie, Virginia, have been published by the Society.[4] They represent another aspect of the role of IAS in stimulating the archeological community to participate in the evolution of solutions to important archeological management questions at a time when the continued existence of archeological resources is in doubt in many areas of the Nation.

Budget and Cost Effectiveness

As discussed earlier in this report, it has not been possible to obtain information on expenditures from other agencies which would more fully reveal the effectiveness of the program. From the material submitted it is estimated that $6,931,000 was obligated in Fiscal Year 1976 by the Federal Government for archeological data recovery under the authority of Public Law 93-291. This estimate does not include funds spent for the purposes of compliance with the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966, or Executive Order 11593, all of which deal with the assessment of resources in the project planning process or with long-term resource management. Neither does the estimate include data recovery work carried out in conjunction with Federal-aid highway construction.

Of the expenditures for Public Law 93-291 data recovery in Fiscal Year 1976, $1,695,150 was administrated by IAS from its own appropriated funds as well as from funds transferred from other Federal agencies. Of this total, 23 projects amounting to $847,300 were funded solely with NPS funds; 9 projects amounting to $708,100 were conducted with transferred funds; and 4 projects amounting to $139,750 were jointly funded by IAS and other agencies.

[4] McGimsey, Charles R. III and Hester A. Davis (editors), 1977. The Management Of Archeological Resources: The Airlie House Report. Special Publication of the Society for American Archaeology, available from the Society at 1703 New Hampshire Avenue NW, Washington, D.C. 20009.

In the absence of comprehensive resource planning and the large-scale research designs referred to ear lier, there are no established baselines against which to measure data recovery needs. As a consequence, most decisions are now made on an ad hoc basis. Accordingly, accurate estimates of need are not possible this year, although some figures are being developed for the Fiscal Year 1977 Annual Report. Reliable estimates of minimum needs for IAS funded projects in the 1978 Fiscal Year exceeds *$5,000,000,* a figure based on estimates prepared by the Departmental Consulting Archeologist in consultation with the IAS field offices. Because expenditures by other agencies in Fiscal Year 1976 totalled nearly $6,000,000, we can identify a minimum level of need of about $11,000,000 for the entire Federal program.

Aside from being unable to meet current data recovery needs, the cost effectiveness of the program frequently is seriously eroded by the inadequate assessment of archeo1ogica1 resources during the project *planning* phase so that either or both of two conditions result: (1) costly data recovery needs are not minimized; and (2) IAS must invest heavily in obtaining adequate identification and evaluation data and in defining basic data recovery needs. Because these operations waste valuable time and money, recommended solutions are offered and discussed earlier in this report.

A number of other economic factors also affect the implementation of Public Law 93-291. Increases in institutional indirect costs, inflation, and rising wage labor pay scales for archeological field work all have a salient effect on archeological data recovery. IAS limited the extent to which its own activities compound this problem by restricting its field offices to an increase of not more than *5* percent in operating program costs during Fiscal Year 1976. In addition, data recovery proposals and budgets are subjected to increasingly closer scrutiny to eliminate unnecessary or poorly conceived tasks or imprudent expenditures.

In conclusion, the national program for the preservation of materials and recovery of data from archeological and historic properties authorized by the Archeological and Historic Preservation Act of 1974 faces many formidable challenges. But, at

the same time, much progress has been made, particularly toward reorienting the traditional approaches to "salvage archeology" that have brought new life to the field and demonstrates the Federal Government's heightened and growing concern for historic preservation. The Interagency Archeological Services Division will continue to use the resources at it disposal to promote this revitalization and to expand and improve working relationships between archeological preservation interests and other areas of public concern•

Appendices

A. Office of Archeology and Historic Preservation

B. Historic Preservation Law Affecting Archeological Resources

C. NTIS Abstracts

D. IAS Archeological Salvage Investigations for Fiscal Year 1976

E. Figures for Program Spending

Appendix A:
Office of Archeology and Historic Preservation

The National Register administers the National Register of Historic Places and provides guidance to the States, Federal agencies, communities, and the private sector in identifying and evaluating resources and planning for the preservation of the Nation's cultural heritage.

The National Historic Landmarks Program grants official recognition by the Federal Government, through the Secretary of the Inteiror, to properties that are associated with nationa11y significant elements of the American past. AdditionaHy, the program serves to identify historic resources that, because of their high national significance and integrity, qua1if y for inclusion in the National Register of Historic Places and in the National Park System.

The Historic Preservation Grants-in-Aid Program conducts a national program to identify and document structures representing the history of architecture and related arts, to encourage public interest and action in preserving the historic environment, and to assist and advise Federal agencies in the preparation of structural documentation according to HABS standards.

The Historic American Engineering Record serves to identify and document the engineering and industrial heritage of the United States, to advise and assist State and local organizations on matters concerning engineering history and industrial archeology, to advise Federal agencies on the documentai ton of federally owned engineering and industrial sites, and to increase public awareness of the Nation's industrial, engineering, and technological history.

Technical Preservation Services develops and disseminates technical information on preservation and restoration of cultural properties and advises Federal agencies on these matters. The division also reviews the plans of recipients of surplus Federal

historic property, evaluates and advises preservation grant recipients on preservation methods, and monitors grant assisted projects to foster professional standards and techniques.

Interagency Archeological Services - See discussion in text.

Appendix B:

Historic Preservation Law Affecting

ANTIQUITIES ACT OF 1906: PUBLIC LAW *59-209;* 16 U.S.C. 431-33 (1970)

This act provides for the protection of all historic and prehistoric ruins or monuments on Federal lands. It prohibits any excavation or destruction of such antiquities without permission of the Secretary of the Department having jurisdiction. It authorizes the Secretaries of the Interior, Agriculture, and War to give permission for excavation to reputable institutions for increasing knowledge and for permanent preservation in public museums. It also authorizes the President to declare areas of public lands as National Monuments and to reserve lands for that purpose.

HISTORIC SITES ACT OF 1935: PUBLIC LAW 74-292; 16 U.S.C. 461-67 (1970)

This act declared as national policy the preservation for public use of historic sites, buildings, and objects. It led to the establishment of the Historic Sites Survey, the Historic American Buildings Survey, and the Historic American Engineering Record, by giving the Secretary of the Interior the power to make historic surveys, to secure and preserve data on historic sites, and to acquire and preserve archeological and historic sites. The National Historic Landmarks program and its Advisory Board were also established under this act to designate properties having exceptional value as commemorating or illustrating the history of the United States.

NATIONAL HISTORIC PRESERVATION ACT OF 1966; PUBLIC LAW 89-665; 16 U.S.C. 470-470m (1970) as amended 16 U.S.C. 470h, 470i, 4701-470n (Supp. 1973

This act provided for an expanded National Register of Historic Places to register districts, sites, buildings, structures and objects significant in American history, architecture, archeology, and culture. It provided for a program of matching

grants-in-aid to the States for historical survey and planning and for preservation, acquisition, restoration, and development projects. The act also established the Advisory Council on Historic Preservation, appointed by the President, to advise the President and the Congress on matters relating to historic preservation. The Advisory Council is authorized to secure information it may need from Federal agencies in order to carry out its responsibilities. Section 106 of the act requires Federal agency heads to allow the Advisory Council opportunity to comment when undertakings to be licensed or executed by their agency will afect properties listed in the National Register.

NATIONAL ENVIRONMENTAL POLICY ACT: PUBLIC LAW 91-190; U.S.C. 4321 ET SEQ. (1970)

Federal agencies are required to prepare an environmental impact statement for every major Federal action that affects the quality of the human environment. The environment *is* defined to include cultural as well as natural resources

EXECUTIVE ORDER 11593 PROTECTION AND ENHANCEMENT OF THE CULTURAL ENVIRONMENT, 16 U.S.C. 470 (Supp. 1, 1971)

Federal agencies are directed to take a leadership role in preservation in two particular ways. First, for all property under Federal jurisdiction or control, the agencies must survey and nominate all significant historic properties to the National Register. These historic properties must also be maintained and preserved by the agency. Second, for every action funded, licensed, or executed by the Federal Government, the agency involved must ask the Secretary of the Interior to determine if any property in the environmental impact area is eligible for inclusion *in* the National Register of Historic Places. If the Federal action will substantially alter or destroy a historic property, the agency must have the property recorded by the Historic American Buildings Survey or the American American Engineering Record•

THE ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT OF 1974: PUBLIC LAW 93-291; 16 U.S.C. 469

This act is directed to the preservation of historic and archeological materials and data that would otherwise be lost as a result of Federal construction or federally licensed or aided activities. Archeological salvage or in situ preservation are available to the Secretary. This act presents several prominent changes in the Reservoir Salvage Act of 1960 (Public Law 86-523) which it amends:

(l) it makes all Federal construction programs and all licensed or otherwise assisted by Federal agencies responsive to the damage they will cause to scientific, prehistoric, and archeological resources once a project is authorized;

(2) it places coordinating responsibility in the Secretary of the Interior so that a relatively uniform Federal program can be assured;

(3) it authorizes all Federal agencies to seek future appropriations, obligate

available monies, or reprogram existing appropriations for the recovery, protection,

(4) it permits agencies to either undertake the requisite recovery, protection, and preservation of archeological material and data themselves in coordination with the Secretary of the Interior, alternatively, to transfer a maximum of l percent of the total amount authorized to be appropriated for each project to the Secretary of the Interior for this purpose.

Appendix C:
NTIS Abstracts

ALABAMA

AN ARCHEOLOGICAL SURVEY ALONG LUXAPALILA CREEK LOWNDES COUNTY, ivHSSISSIPPI, AND LAMAR COUNTY, ALABAMA (!AS-Atlanta)

Sheila Lewis

NTIS Order *II:* PB262121/AS: *$4-.50* paper; $3.00 microfiche*

Field investigations were carried out to locate prehistoric sites in the Corps of Engineers flood control program construction in the Luxapaliia Creek in the area of Lowndes County, Mississippi, and Lamar County, Alabama. The study represents the Phase I and Phase II aspects of the contract proposal, consisting of reconnaissance, survey, report of survey, *site* descriptions, classification and description of artifacts, and evaluation of site significance. The report combines the survey data with the existing archeological research and makes recommendations regarding the future treatment of the archeological resources in the area.

ARCHEOLOGICAL INVESTIGATIONS ON DAUPHIN ISLAND, MOBILE COUNTY, ALABAt\tlA OAS-Atlanta)

Vernon J. Knight, Jr.

NTIS Order *Ii:* PB262812/AS: *$5.50* paper; $3.00 microfiche

Excavations were conducted at a site (1Mb72) on an extensive shell midden on the northern shore of Dauphin Island, Mobile Bay, to mitigate the adverse effects of a proposed boat slip. The chronology of the site revealed *its* beginnings about 3000 years ago, yielding Bayou La Batre-Tchefuncte ceramic sherds, one of the earliest ceramic *traditions* of the Gulf Coast, into Fort Walton and historic times. Clay-sand tempered ceramics in the upper levels of the sites were probably made by the Indian wives of the French voyageurs who occupied Dauphin Island from 1701-1725. These ceramics closely resemble types from the Lower Mississippi valley, the homeland of the voyageurs' Indian wives and slaves.

ARCHEOLOGICAL INVESTIGATIONS IN THE GAINESVILLE LOCK AND DAM RESERVOIR: 1972 (!AS-Atlanta)

Jerry Neilsen and Ned Jenkins

NTIS Order *II:* PB26387 *5/* AS: $6.00 paper; $3.00 microfiche

Excavations were conducted at six sites in the Gainesville Lock and Dam Reservoir to mitigate the effects of the project on these sites. After analyzing the cultural materials and synthesizing the data from the Gainesville Reservoir with data from other sites in the Tombigbee basin, the contractors devised a tentative cultural chronology for the central and upper Tombigbee basin.

ARCHEOLOGICAL INVESTIGATIONS IN THE GAINESVILLE LOCK AND DAM RESERVOIR: 1974 (!AS-Atlanta)

Ned Jenkins

NTIS Order II: PB263876/ AS: $9.75 paper; $3.00 microfiche

Excavations were conducted at six sites in the proposed Gainesville Lock and Dam Reservoir area to mitigate the project's effects on cultural resources. The most noteworthy sites is 1G2, a large, deeply-stratified multicomponent site, containing cultural deposits which dated from the Early Archaic period (8000-6000 B.C.) to historic times (ca. A.D. 1800). Analysis of the fauna!, human skeletal, and floral remains recovered during the excavaions is included. The section on floral remains is particularly significant, providing information about the plant foods utilized by Archaic, Woodland, and Mississippian peoples.

ARCHEOLOGICAL SITE SURVEY OF THE DEMOPOLIS AND GAINESVILLE LAKE NAVIGATION CHANNELS AND ADDITIONAL CONSTRUCTION AREA (IAS-Atlanta)

Ned Jenkins, Curren, and De Leon

NTIS Order *II:* PB26281 l/ AS: $8.00 paper; $3.00 microfiche

53 additional sites were located in the Gainesville project area bringing the total archeologial sites to 84 (81 prehistoric and 3 historic sites). Using physiographic, pedologic, and biological variables a prehistoric settlement system was recognized.

Recommendations for mitigation of adverse impacts are made. The excavation data contributed to a tentative cultural chronology for the central and upper Tombigee basin and settlement pattern studies.

ARCHEOLOGICAL SURVEY OF THE MONTGOMERY LEVEE PROJECT AREA (IAS-Atlanta)

Roger Nance

NTIS Order #: PB263506/AS: $4.00 paper; $3.00 microfiche

A proposed United Stated Army Corps of Engineers project was surveyed, locating four late Woodland period (A.D. 500-900) archeological sites. The contractors conducted subsurface tests at three of the sites. These revealed that there were no undisturbed cultural remains below the plowzone. The archeological sites located during the survey lacked the significance needed for further investigations and the contractors recommended no plans to mitigate the project's effects on these sites.

COLORADO

AN ARCHEOLOGICAL STUDY OF ABORIGINAL SETTLEMENTS AND LAND USE IN THE COLORADO FOOTHILLS (!AS-Denver)

Ric Windmiller and Frank W. Eddy

NTIS Order #: PB260674/AS: $10.75 paper; $3.00 microfiche

Survey of the archeological, historic, and paleontological remains within the Two Forks Dam and Reservoir alternative, Colorado, resulted in the recording of 79 archeological and historic sites and 118 loci of isolated artifacts. The district appears to have been occupied from the Early Archaic (ca. 700 B.C.) to the historic period. Two broad types of settlements are defined for these periods: camp sites and limited activity sites. Most of the campsites appear to cluster around permanent sources of water and adjacent to two or more contrasting microenvironments. Land use during the entire period of occupation appears to have been based on a hunting gathering strategy. Studies of stone tools and lithic debitage indicate that there is little variation in stone tools between sites, possibly representing little change through time in adaptive strategy.

GEORGIA

ARCHEOLOGICAL INVESTIGATIONS OF THE LITTLE EGYPT SITE (9Mu 102) MURRAY COUNTY, GEORGIA, 1969 SEASON. (IAS-Atlanta)

David J. Hally

NTIS Order *II:* PB262810/ AS: *$9.75* paper; $3.00 microfiche

The Little Egypt site is a multicomponent habitation site with two earth mounds. Testing was done to identify all the components represented at the site and which of those were connected with the construction of the two mounds; to investigate site utilization during each recognized occupation; and to ascertain the extent of damage to the site from natural and human agents. Four aboriginal occupations are recognizable in the pottery collection, one or more Woodland period, one Woodstock period, and two Lamar period (Little Egypt and Barnett phases), the latter two are the major site components. Analysis of fauna! material suggests a diet of local small game that would be characteristic for Late Mississippian

ILLINOIS

THE CENTERVILLE SITE: 1973 SEASON (IAS-Atlanta)

Terry Norris

NTIS Order *II:* PB262623/ AS: *$4.50* paper: $3.00 microfiche

The investigation of the Centerville site, Illinois was undertaken by personnel from Southern Illinois University at Edwardsville in response to the planned Corps of Engineers' Blue Waters Ditch project. The site was occupied during both Middle Woodland and Mississippian periods. Dates of occupation from ca. *500* B.C. to A.O. 500 and from A.O. 900 to A.O. 10.50. Largely based on the absence of grinding, it was concluded that the site served as a large seasonal hunting camp during

Middle Woodland times. During Mississippian times the economy was based on intensive horticulture. This interpretation is based on the recovery of a number of stone hoes and maize remains. A rectangular single-post pit house was discovered in association with the Mississippian artifacts.

IOWA

PALEONTOLOGICAL INVESTIGATIONS WITHIN THE WAUBONSIE CREEK WATERSHED IOWA (!AS-Denver)

R. Sanders Rhodes II and Holmes A. Semken, Jr.

NTIS Order *II:* PB260767/ AS: *$4.50* paper; $3.00 microfiche

Five paleontological sites in the Waubonsie Creek Watershed in Fremont and Mills Counties, Iowa, were excavated by the Department of Geology of the University of Iowa. Pleistocene floral and fauna! assemblages ranging in time from a period approximating Wisconsin age to about **A. D.** l 800 were found. Abundant plant and animal remains recovered will contribute to future studies concerned with the Holocene and Recent geologic periods.

K1'\NSAS

AN ARCHEOLOGICAL RESEARCH DESIGN AND SALVAGE MITIGATION PLAN FOR THE EL DORADO RESERVOIR, BUTLER COUNTY, KANSAS (IASDenver)

Gary P. Leaf

NTIS Order *II:* PB262866/ AS: $6.00 paper; $3.00 microfiche

A theoretical research design is proposed to maximize the return of archeological and historical data from the area to be flooded by the El Dorado Reservoir in Butler County, Kansas. The investigation plan is explicitly geared toward the problem orientations proffered in the research design. Year by year recommendations are made for conducting cultural resource surveys and archeological test and salvage excavations to fulfill theoretical and practical aspects of the research design. The goals of the archeological research design and

mitigation plan are (1) to retrieve data and test hypotheses on prehistoric subsistence and settlement systems and (2) to implement an interdisciplinary program to retrieve data and test models of paleoenvironments useful for the study of prehistoric cultural ecological relationships.

THE COFFEY SITE: ENVIRONMENT AND CULTURAL ADAPTATION AT A PRAIRIE PLAINS ARCHAIC SITE (IASDenver)

Larry J. Schmits

NTIS Order II: PB266962/ AS: $7.50 paper; $3.00 microfiche

The Coffey site (14PO1) is a deeply buried campsite located along the Big Blue River within the boundaries of the Tuttle Reservoir, Pottawatomie County, Kansas. The Archaic occupation in Horizons III-5, III-7, and III-8, are described in terms of environmental and cultural change during the late altithermal climatic episode. These levels date from about 3000 to *3500* B.C. Subsistence activities appear to have focused on the exploitation of a number of plant and animal foods available from the floodplain biotic community located in the vicinity of the site. The site is thought to have been seasonally occupied only in the late summer and early fall• The cultural complex appears more closely related to the eastern Archaic complexes than to the Archaic found on the high plains.

KENTUCKY

ARCHEOLOGICAL SURVEY AND TESTING IN THE PROPOSED TAYLORSVILLE RESERVOIR IN ANDERSON, SPENCER, AND NELSON COUNTIES, KENTUCKY OAS-Atlanta)

Betty J. McGraw

NTIS Order *II:* PB262ll5/AS: *$4.50* paper; $3.00 microfiche

An archeological survey and testing program was undertaken in the proposed United States Army Corps of Engineers Taylorsville Reserver project. This project, located in north Central Kentucky, will inundate, at maximum flood, approximately 5,000 acres of land in the Salt River Basin. Due to the rugged nature of some of the terrain and a limited budget, only *50* percent of the proposed reservoir was

surveyed. In all, *58* archeological sites and test excavations were conducted at 7. Nine sites were nominated to the National Register of Historic Places. Of the remaining 49 sites and localities, no further work is recommended. However, it is strongly recommended that the entire reservoir be completely surveyed before construction.

TEST EXCAVATION IN THE PROPOSED RED RIVER LAKE, KENTUCKY: 1974 SEASON (IAS-Atlanta)

Charles Wesley Cowan

NTIS Order *II:* PB262102/ AS: $6.00 paper; $3.00 microfiche

Test excavations were undertaken by the University of Kentucky Museum of Anthropology in the proposed Red River Lake in Menifee, *Powell* and Wolfe Counties, Kentucky. This research centered upon excavation of l 5Pol 7, a stratified camp site, and 15Po47B, a small dry, rock overhang. A single test pit was excavated at l 5Po42 and additional surface collections were made from other sites. 15Pol7 is one of the most important sites in the project and may hold the key for interpretation of the Late Archaic-Early Woodland transition in the Red River drainage. Quantities of normally perishable cultural materials were recovered from limited excavations at 15Po47B. These items are unique in temperate North America and potential can provide considerable information on Late Woodland subsistence as well as paleoclimate.

MASSACHUSETTS

THE UPPER FACTORY BROOK SAWMILL SITE: AN EARLY INDUSTRIAL SITE IN MIDDLEFIELD, MASSACHUSETTS (!AS-Atlanta)

John S. Wilson

NTIS Order *II:* PB262179/ AS: *$6.75* paper; $3.00 microfiche

The rural millwright of colonial or early 19th-century America derived much of his technical information from ources very unlike the engineering tests of today. At best, he followed manuals which relied heavily upon "rule-of-thumb" procedures•

At worst, he used only his own experience as a guide. Trie results of such irregular information flow in a fairly technical craft have seldom been considered. The Upper Factory Brook Sawmill site, a early 19th-century mi11, was constructed by men relying on "folk" knowledge, and exhibits several major flaws in its construction. These flaws demonstrate the problems resulting from an incomplete "mental template" of a complex mechanism due to the incorrect or incomplete "folk" knowledge of the builders, and indicate one of the effects of poor communication during a period of general technological advancement.

MISSISSIPPI

ARCHEOLOGY OF THE OKASHUA AND SELF SITES, MISSISSIPPI (!AS-Atlanta)

Jack T. Wynn and James R. Atkinson

NTIS Order *//:* PB260690/ AS: $5.50 paper; $3.00 microfiche

Two archeological sites (22Mo586; 22Mo651) in Monroe County, Mississippi, were excavated. The contractors recovered information about community patterns, localized craft activities, and population size. Sites were occupied only seasonally, probably in the summer and fall months. Archaic (cc1.. 220 B.C.) and Woodland (ca. A.O. 800) peoples used these sites as camps, while collecting seasonal wild foods. Historic material recovered at the Okashua sites suggests that it was occupied shortly after the Civil War by a sharecropper family.

MISSOURI

THE PHILLIPS SPRING SITE, 23Hi216, HARRY S. TRUMAN RESERVOIR, MISSOURI OAS-Denver)

Stephen A. Chomka

NTIS Order *//:* PB262619/ AS: $6.00 paper; $3.00 microfiche

Eight radiocarbon dates provide a good chronologic framework for the cultural sequence at Phillips: A Middle Archaic occupation is present at 4-280 B.P. (2330 B.C.) followed by a Late Archaic component from *3050* to 2910 (1100 to 960 B.C.);

a second Late Archaic component is present from 2340 to 1990 B.P. (390 to 40 B.C.). Late Woodland materials occur in the upper levels of the sit . Historic utilization of the spring occurred after 270 B.P. (.l\D 1680). A descriptive analysis of artifact classes is presented together with a summary of the floral remains recovered through water screening. Comparative data are presented for other excavated, stratified sites in the Truman Reservoir area. The presence of Cucurbitapepo (squash) seeds associated with dates of 4310 and 4240 B.P. is of primary importance for establishing the introduction of cultigens into the area, and raises several questions concerning subsistence activities of these Archaic peoples.

NEW MEXICO

ARCHEOLOGICAL SURVEY OF MAXIMUM POOL AND NAVAJO EXCAVATIONS AT ABIQUIU COUNTY, NEW MEXICO (IAS-Denver)

Curtis F. 5chaafsma

NTIS Order *II:* PB63996/ AS: $9.75 paper; $3.00 microfiche

ArcheologicaJ survey and test excavations of selected sites were conducted in the maximum pool area of Abiquiu Reservoir, New Mexico, in anticipation of an expected rise in water levels flooding previously unaffected areas. The goals of this fieldwork were: (1) to determine the extent of early (17th century) Navajo occupations, first recognized in previous survey projects, and (2) to complete an intensive survey of the maximum pool area. These goals were carried out with orientations toward reconstruction of- cultural systems and typing of sites according to subsistence/settlement patters. Sites were classified as Jithic areas, sherd areas, cobble rings, petroglyphs, rock shelters, prehistoric and historic structures, ranging in size from isolated finds to entire hogan villages. Cultural occupations of the area discovered in the course of the survey and test excavation included Archaic, Basketmaker, Pueblo, Navajo, historic Ute, Spanish and Anglo, dating from 3000 B.C. to the present. Information concerning the size, number, and distribution of aJJ site types as weJJ as the nature of artifact assemblages and features, provided the basis for influences about social structure, specialized activities and ecological adaptations for each cultural occupation.

NEW YORK

ARCHEOLOGICAL SALVAGE OF SELECTED SITES IN THE ALLEGHENY RESERVOIR **IN NEW YORK** 1973-74 (IAS-Atlanta)

Don Dragoo and Stanley Lantz

NTIS Order *II:* PB263945/ AS: *$5.00* paper; $3.00 microfiche

As a result of the construction of the AHegheny Reservoir by the Corps of Engineers. Carnegie Museum excavated a site (30Ca16) located in the project area 30Ca16 proved to be a Proto-Iroquian site with a large number of preserved pits and structur . The ceramics indicate that 30Cal 6 may be attributed to the Kinzua Phase of the Ontario Iroquoian Tradition (ca. 800 to 1400 A.O.). The village gradually expanded in size as the population increased through time. Also, there was a tendency for the long house residences to increase in size. Apparently subsistence was based on intensive cultivation and hunting.

OKLAHOMA

KAW RESERVOIR-THE NORTHERN SECTION (!AS-Denver)

John D. Hartley

NTIS Order *II:* PB262817: $6.00 paper; $3.00 microfiche

Limited testing was conducted on three sites: The Herbert Shelters site (34Ka91), the Greenhagen site (34Ka91), and the Bryson site (34Ka5). 34Ka91 consists of five shallow shelters, three showed aboriginal occupation. 34Ka92 appeared to be a chert collection station. 34Ka5 was a large proto-historic Wichita village site, only a portion of all trash midden was tested. Detailed analysis of the Jithic ceramic and other artifactual remains is presented. The sites appear to represent Archaic and Woodlands occupations.

EXCAVATIONS AT Cd244, CADDO COUNTY, OKLAHOMA (!AS-Denver)

Annetta L. Cheek

NTIS Order ti: PB262431/ AS: $6.00 paper; $3.00 microfiche

This contract provided for mitigation of unavoidable damage to an archeological site, Cd244, Caddo County, Oklahoma, scheduled for inundation by a Soil Conservation Service impoundment dam. Five days of salvage excavations resulted in the recovery of portions of two burials, as well as small quantities of artifactual and fauna! material. No temporary diagnostic materials could be definitely associated with the skeletal remains.

BIRCH CREEK AND SKIATOOK RESERVOIRS: PRELIMINARY REPORT ON ARCHEOLOGICAL INVESTIGATIONS IN 1974 (!AS-Denver)

Marshall Gettys, Robert Layhe, and Sheila Bobalik

NTlS Order *II:* PB262628/ AS: $6.00 paper; $3.00 microfiche

Archeological investigations were conducted in two reservoirs areas, Birch Creek and Skiatook, Oklahoma. Due to the lack of sufficient diagnostic artifact material, it was impossible to establish any valid chronology or cultural sequence in the Birch Creek Reservoir. It can only be noted that the material excavated from 41Os75 is considered of late prehistoric occupations. Work in the Skiatook Reservoir concentrated on testing several sites, 41Os85, 41Os90, and 41Osl05; excavating three sites 41Os91, and 41Osl60, and resurveying the entire reservoir to locate new sites and reassess the status of previously known sites. The three excavated sites appear to represent a Woodlands occupation.

SOUTH DAKOTA

ARCHEOLOGICAL INVESTIGATIONS ALONG THE PROPOSED PIERRE CANAL, HUGHES COUNTY, SOUTH DAKOTA (IAS-Denver)

Alice M. Tratebas

NTIS Order *II:* PB262826/ AS: $4.00 paper; $3.00 microfiche

Archeological sites 39Hu251, *252,* and *253,* comprising five stone mosaics were mapped and test excavated. Except for a single flake of knife river flint which may be associated only by chance with one mosiac, no artifacts were found, and no subsurface cultural features were observed. The soil beneath and adjacent to the mosaics is undisturbed except by rodents. Arrangements of the boulders in the mosaics form a single layer, with few rock piled on top of others. They rest on a consistent, single form soil surface with a slope comparable to that of the present ground surface. All three mosaics are within partial or fragmentary stone circles. In the other two mosaics, the rocks are more deeply buried with two or three layers stacked on top of each other. These two mosaics are also the only ones which include large, naturally occurring boulders. The explanations for these two patterns remain speculative but religious/ceremonial activities having to do with commemoration of the dead is suggested.

EXTENDED MIDDLE MISSOURI COMPONENTS IN THE BIG BEND REGION, SOUTH DAKOTA (!AS-Denver)

Ann M. Johnson

NTIS Order *II:* PB266996/ AS: $9.00 paper; $3.00 microfiche

Lehmer's Modified Initial Middle Missouri Variant implies change within the Middle Missouri tradition between the Initial and Extended variants. An investigation utilizing ceramic, house plans, and radio-carbon dates for evidence fails to substantiate the validity of the Modified taxon. Primary site data is from 39St23, 39St238, 39St37, and 39St38 along with a discussion of Sommers, Cattle Oiler, and the King site. The extended Middle Missouri peoples are found to have extended farther south than has been previously believed. Architectural analyses reveal only one architectural tradition with observed differences only being a gradation along a spatial continuum.

TENNESSEE

ARCHEOLOGICAL INVESTIGATION AT THE HARRISON BRANCH AND BAT CREEK SITES (!AS-Atlanta)

Gerald F. Shroedl

NTIS Order *II:* PB264168/AS: *$9.75* paper; $3.00 microfiche

Stratified deposits related to Late Archaic, Woodland, Mississippian, and historic periods were excavated at the Harrison Branch Site. Earlier Archaic period deposits are also present. A Hiwassee Island phase mound and village were partially excavated at the Bat Creek site (40Ld24). The mound, semi-rectangular in plan, was constructed in a single building stage over an earlier public building. Twelve structural features identified in the village excavations were: domestic houses, *5;* fences or walls, 4; and undetermined use, 3. Most ceramics, lithics, bone, and shell artifacts were probably associated with this component. Diagnostic artifacts of the Archaic and Woodland periods were also recovered. The range of tools and other artifact types suggest that a wide variety of domestic tasks were undertaken within the village.

TEXAS

A PALEONTOLOGICAL SURVEY OF THE AUBREY RESERVOIR BASIN (IAS-Denver)

Ronald Ritchie and Bob H. Slaughter

NTIS Order *II:* PB260673/ AS: $3. 50 paper; $3.00 microfiche

Report lists vertebrate and invertebrate fossils salvaged from the Aubrey Lake Reservoir, Denton County, Texas. Notable was the find of a sawfish, Onchopristis dunklei dunklei in the Pawpaw Formation, which until now has only been found in deposits of Upper Cretaceous Age (Cenomanian).

CUL TUR AL VARIATION ON THE. TEXAS COAST: ANALYSIS OF AN ABORIGINAL SHELL MIDDEN, WALLISVILLE RESERVOIR, TEXAS (IAS-Atlanta)

Kathleen Gilmore

NTIS Order *II:* PB262253/ AS: *$5.50* paper; $3.00 microfiche

Archeological investigation of an aboriginal shell midden in Wallisville Reservoir resulted in the definition of a continuing occupation from Late Prehistoric through European contact. Further, it is felt that the late occupation of the site was

contemporaneous with Spanish Colonial occupation in the area during the 18th century. Excavations at the site indicated culture change and interaction as illustrated by changes in subsistence and artifact patterning.

PREHISTORIC SUBSISTENCE EXPLOITATION IN THE LOWER TRINITY RIVER DELTA, TEXAS (IAS-Denver)

Tom D. Dillehay

NTIS Order #: PB262625/AS: $7.50; $3.00 microfiche

Results of recent archeological excavations at five sites in the Wallisville Reservoir suggest a pattern of differentiation in seasonal occupation of the region by discrete societal groups. This pattern is based upon the development of an efficient adaptation to a highly variable, high diversity environment. This adaptation required complex interplay between social organization, settlement size and location, technology, and the seasonal availability of certain exploitable fauna! and presumably associated floral species. This concern with variables related to food item acquisition, differential access to high or low resource productivity zones and social group size is relevant to an understanding of significant aspects of prehistoric hunter-gatherer adaptation to a basic marine environment, including demographic processes. A theoretical paradigm and some speculations for understanding subsistence exploitation in this environment are offered.

\J./ ASHING TON

SLACK WATER SEDIMENTS IN THE ALPOWA CREEK DRAINAGE, WASHINGTON (IAS-San Francisco)

Lucy Loughlin Folley

NTIS Order #: PB264240/AS: $4.50 paper; $3.00 microfiche

Six geologic units in the Alpowa drainage, Washington are described in terms of stratigraphic position, geomorphic expression, sedimentary structures, estimated particle size, lithology, and elevation. Two episodes of "slack water" deposition are

recognized in the Alpowa drainage. The upper Slack Water Unit is attributed to floodwaters moving up tributary canyons from the Snake River some time after 13,000 B.P. and before the earliest known human occupation in the Lower Snake River canyon at approximately 1 0,000 B.P. Prior to deposition of the Upper Slack Water Unit, mass wasting on the canyon walls, deposition of large coalescent alluvial fans, and aggradation by tributary streams predominated. High floodplain terraces are found in the Alpowa drainage only above 1,200 feet (366 meters)
A.S.t. A radiocarbon date obtained from charcoal deposited in these floodplain sediments is 14,300-200 B.P. (WSU-1499).

REGIONAL STUDIES

AN OVERVIEW OF THE PREHISTORIC RESOURCES OF THE METROPOLITAN ST. I_OUIS AREA OAS-Washington)

Elizabeth Benchley

NTIS Order *II:* PB265016/ AS: *$5.00* paper; $3.00 microfiche

Unique and important archeological resources of the greater St. touis area are being continuously and, in some instances, intensely threatened by the growing metropolis and its network of transportation routes, surrounding communities, agricultural zones, and recreational areas. In this overview study, Benchley examines the quality, distribution, and condition of the known prehistoric resources of this area, and investigates the present and projected impact of modern land use on this data base. The author then proposes measures which should be further explored for promoting the preservation of these sites, and for establishing an effective archeological resource management program for the metropolitan St. Louis area.

PREHISTORIC RESOURCES OF EAST-CENTRAL NEW ENGLAND: A PRELIMINARY PREDICTIVE STUDY OAS-Washington)

Dena F. Dincauze and Judith W. Meyer

NTIS Order *If:* PB265019/ AS: $4.50 paper; $3.00 microfiche

Dincauze and Meyer attempt to shed light on the nature of the severe prehistoric resource losses occurring throughout New England. Their report is intended to make land-use planners and policy makers, historic preservationists, legislators in Federal, State, and municipal governments and concerned citizen groups, cognizant of the distribution, density, and scientific value of the prehistoric sites in this region, and to stimulate policy for the development of approaches to the historic preservation planning process.

THE IMPORTANCE OF SMALL, SURFACE, AND DISTURBED SITES AS SOURCES OF SIGNIFICANT ARCHEOLOGICAL DATA OAS-Washington)

Valerie Talmadge and Olga Chesler

NTIS Order ll:PB270939/ AS: $4.00 paper; $3.00 microfiche

Federal agencies are occasionally advised by archeologists, or assume on their own, that small, surface and/or disturbed sites are of limited value to the study of prehistory. As a result, these types of cultural resources frequently have been ignored in the development of local and regional archeological research designs. This paper show that such sites often yield significant information relating to a variety of pre historic activities. Techniques exist for recovery of important data in these sites pertaining to settlement patterns, activity loci, demographic para meters site utilization, etc.

Appendix D:

IAS Archeological Salvage Investigations for **Fiscal Year 1976**

Projects	1976
ARIZONA	
Foote Wash Resource	

Projects	1976
OTHER EXPENDITURES	
Default Contracts	20,000
Smithsonian Institution River Basin Survey Backlog	*69,500*
PROGRAM GENERAL	
Interagency Archeo1ogica1 Services Operational Program	*763,500*

Appendix E:
Figures for Program Spending

Bandelier Portion of Cochiti Reservoir (Corps of Engineers)	80,000
Placitas Arroyo (Soil Conser.vation Service)	2,000
OHIO	
Dillon Lake (Corps of Engineers)	8,000
OKLAHOMA	
Lower Clear Boggy Creek (Soil Conservation Service)	50,000
PENNSYLVANIA	
Blue Marsh (_Corps of Engineers)	10,000

Temple University

National Park Service, SWRO

North Texas State University

Ohio Historical Society

Archeological Research Associates

Franklin and Marshall College

"Archeological Survey and Evaluation of Blue Marsh Lake, Pennsylvania"

Table 1

Fiscal Year 1976 Public Law 93-291 Investigations Funded with National Park Service Appropriations

Project and Agency	Cost	Contractor	Report
ARIZONA			
Foote Wash Resource Conservation and Development Project (Soil Conservation Service)	$ 8,000	Commonwealth Associates	"Mitigation of Adverse Effects to Archeo1ogica1 Resources on the Foote Wash Conservation and Development Project"
CALIFORNIA			
Sweetwater River Flood Control (Soil Conservation Service)	20,000	San Diego State University	
MASSACHUSETTS			
Newburyport Housing and Urban Development)	*500*	Historic Conservation and Interpretation, Inc.	"Archeological Testing of Various Cellar Units of Parcels 6A and 6B, Market Square Historic District"
MISSISSIPPI			
Bay Springs (Corps of Engineers)	33,000	University of Alabama	

Texas Watersheds (Soil Conservation Service)	40,000
WASHINGTON	
Bonneville Second Powerhouse (Corps of Engineers)	20,000
Ozette Village	175,000
WISCONSIN	
Madeline Island (Farmers Home Administration)	8,800

University of Tulsa

University of Washington

Washington State University

Beloit College

SOUTH DAKOTA	
Larson Site (Smithsonian River Basin Survey Analysis)	*35,000*
Medicine Crow *Site* (Smithsonian River Basin Survey Analysis)	30,000
Helb and Walth Bay Sites (Smithsonian River Basin Survey Analysis)	*5,000*
TENNESSEE	
Tellico Reservoir Archaic **(Tennessee Valley Authority)**	25,000
Tellico: Toqua Mound and Village (Tennessee Valley Authority)	86,000
Normandy Reservoir (Tennessee Valley Authority)	30,000
TEXAS	
Cooper Lake Analysis (Corps of Engineers)	23,000
Granger Lake (Corps of Engineers)	40,000
Tennessee Colony (Corps of Engineers)	40,000

University of Nebraska

Illinois State Museum

National Park Service, MWRO

University of Tennessee

University of Tennessee

University of Tennessee

Southern Methodist University

Texas A and M University

Southern Methodist University

Table 2

Fiscal Year 1976 Public Law 93-291 Investigations Funded Jointly by the National Park Service and Other Federal Agencies

Project and Agency	Cost NPS/Other	Contractor	Report
KENTUCKY			
Paintsville Lake (Corps of Engineers)	$ *5,000/4-,500*	University of Kentucky	"Archeological Survey and Test Excavations in the Proposed Paintsville Reservoir Project"
Taylorsville Lake (Corps of Engineers)	20,000/1 0,000	Iroquois Research Institute	(Terminated)
MISSISSIPPI			
Columbus Lock and Dam (Corps of Engineers)	*3,000/2,250*	Mississippi State University	"Archeology of the Okashua and Shelf Sites"
TEXAS			
Canyon Lakes (Bureau of Outdoor Recreation)	80,000/15,000	Texas Tech University	

Table 3
Fiscal Year 1976 Public Law 93-291 Investigations Funded through Transfer of Monies to the National Park Service

Project a.nd Agency	Cost	Contractor	Report
COLORADO			
Two Forks (Bureau of eclaination)	$ *2,550*	University of Colorado	[11] An Archeological Study of Aboriginal Settlements and Land Use in the Colorado Foothills"
Sav2ry Pot Hook (Bureau of ecia.;nation)		Colorado State University	"Preliminary Report on the Archeological R.cconnaissance of the Savery Pot Hook Project"
KANSAS			
El Dorado (Corps of Engineers)	*5,500*	University of Kansas	
Marion Local Protection (Corps of Engineers)	22,550	Wichita State University	
NEW MEXICO			
Brantley Reservoir (Bureau of Reclan,ation)	23,700	Southern Methodist University	"An Archeological Inventory of Brantley Reservoir"

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Cochiti Reservoir (Corps of Engineers)	*550,900*
OKLAHOMA	
Kaw Reservoir (Corps of Engineers)	44,000
Optima Lake (Corps of Engineers)	4,400
TEXAS	
Granger Lake (Corps of Engineers)	10,000

University of New Mexico

"An Assessment of Cultural Resources in Cochiti Reservoir"

University of Oklahoma

Archeological Research Associates

Texas A and 1\1 University

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our peoµle. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration•


U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849


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