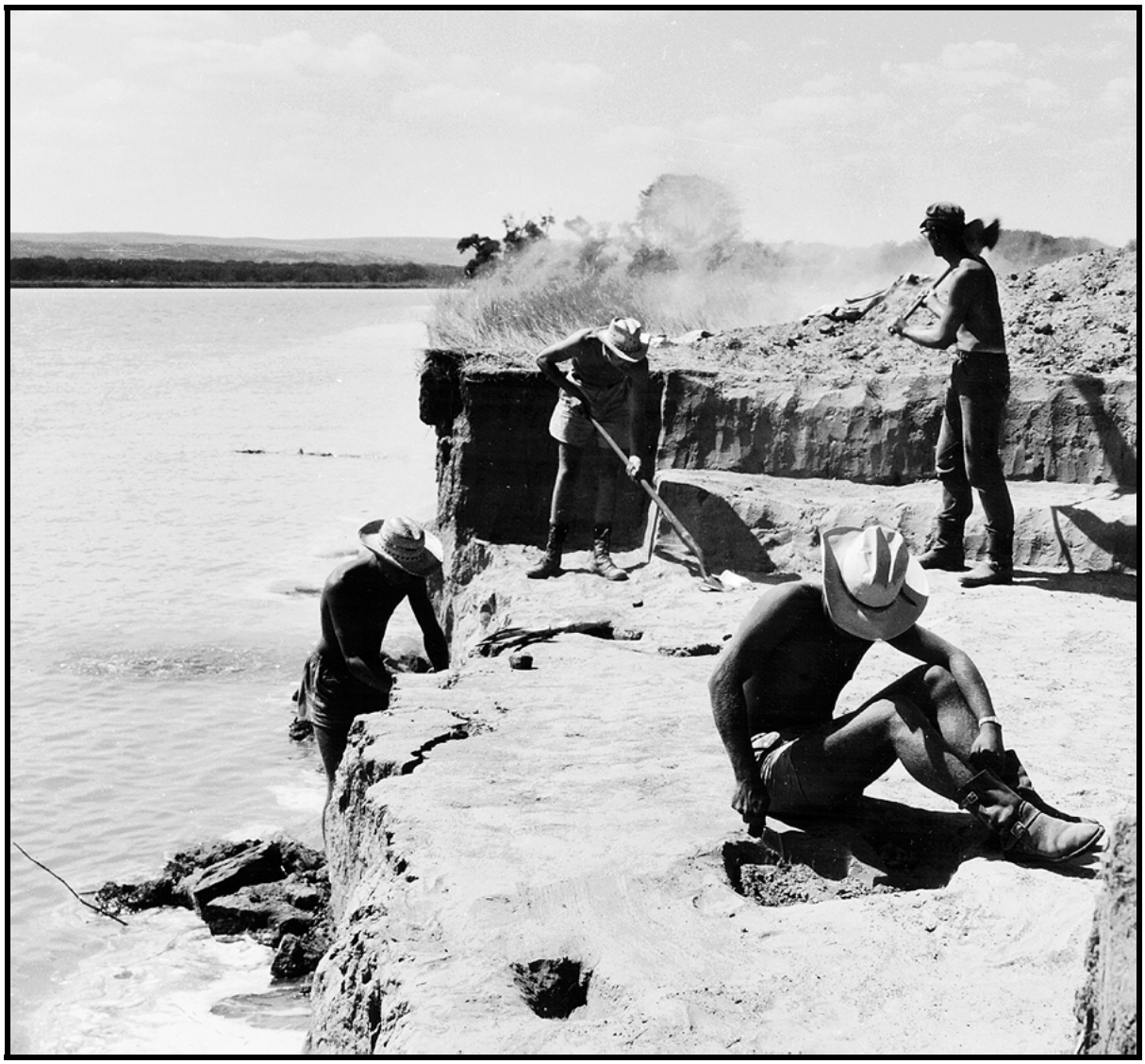
Emergency Archeology in the Missouri River Basin:

The Role of the Missouri River Basin Project and the Midwest Archeological Center in the Interagency Archeological Salvation Program, 1946-1975

Thomas D. Thiessen



Midwest Archeological Center
Special Report No. 2

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Midwest Archeological Center
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A River Basin Surveys field crew surveying in the Garrison Reservoir area, McLean County, North Dakota (RBS photograph 32MN11-1).

Excavations in progress in the early 1950s at the Cheyenne River site in the Oahe Reservoir area, Stanley County, South Dakota. Note the field camp on the distant horizon (RBS photograph 39ST1-110).

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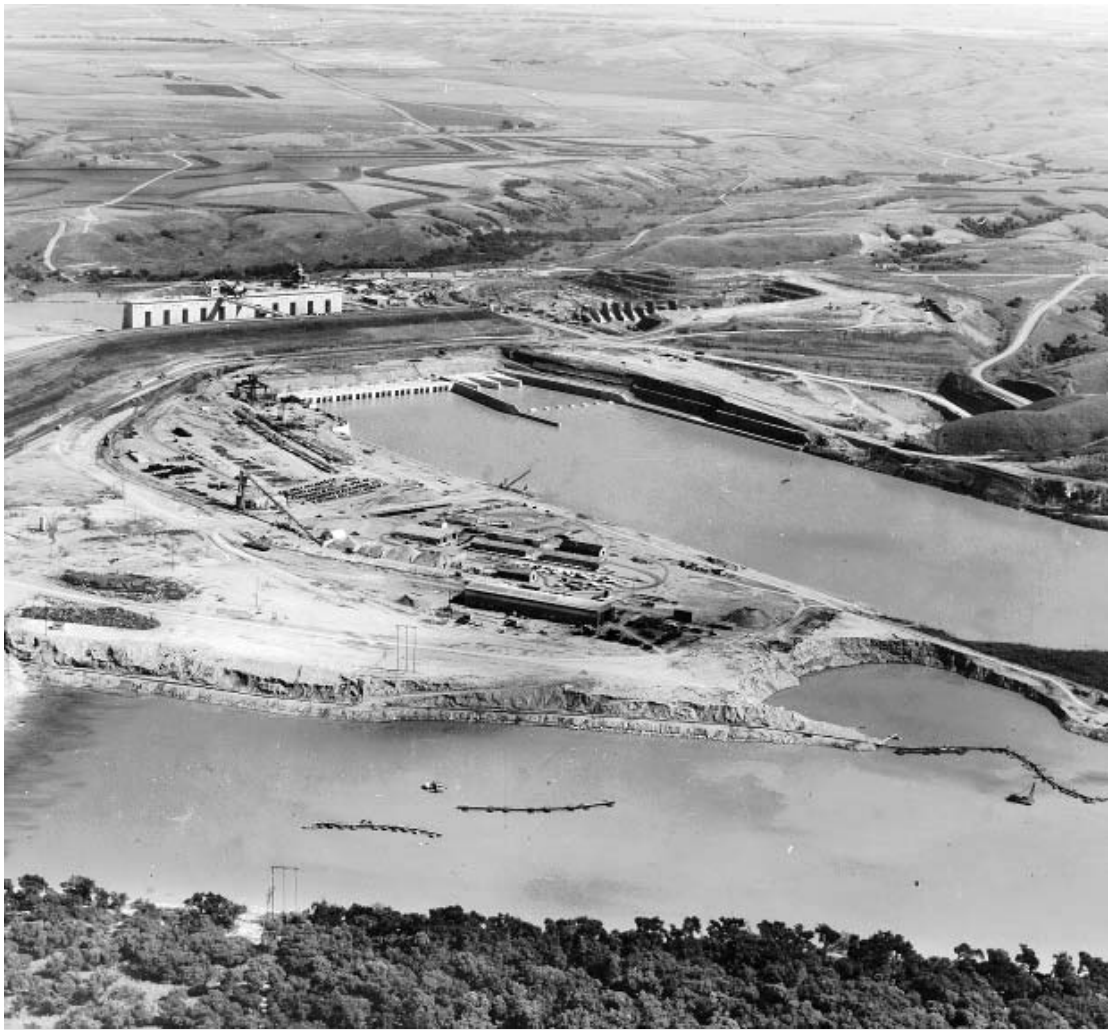


Fort Randall Dam under construction on the Missouri River in South Dakota. This was one of five massive dams constructed along the Missouri by the U.S. Army Corps of Engineers in the 1940s through the 1960s (RBS photograph 39CH00-59).

River Basin Surveys crews sometimes traveled to sites by water. These boats hold the crews of River Basin Surveys archeologists Oscar Mallory and Robert Neuman, who worked at sites in the Oahe Reservoir in Dewey County, South Dakota, during the summer of 1963 (RBS photograph 39DW00-127).

Preface

Nineteen ninety-nine marks the thirtieth anniversary of the establishment of the Midwest Archeological Center, a professional support office of the Midwest Region of the National Park Service. Thirty years earlier, the Center was created from the staff and facilities of the former Missouri Basin Project office of the River Basin Surveys program of the Smithsonian Institution, which was established in Lincoln, Nebraska, in 1946. During the first half-dozen years of its existence, the Midwest Archeological Center continued the mission of its predecessor, the Missouri Basin Project: "emergency" or "salvage" archeology at water resource development projects within the vast Missouri River Basin, primarily along the Missouri River in North and South Dakota. For nearly thirty years, these two offices oversaw the investigation and recovery of archeological data threatened by the water resource development programs of other federal bureaus, primarily the U.S. Army Corps of Engineers and the Bureau of Reclamation. As a result of new federal legislation as well as program shifts within the National Park Service, the Center's mission, funding sources, and organizational structure changed over time. Eventually the Center evolved into an office designed solely to support the archeological resource management responsibilities of National Park System areas. After 1975, it no longer engaged in archeological salvage investigations in conjunction with water resource development projects.

Together, the stories of these two offices represent a rich tradition of archeological research in America's heartland. What follows is a brief review of the role of the Missouri Basin Project and the Midwest Archeological Center in the Interagency Archeological Salvage Program between 1946 and 1975. The history of the River Basin Surveys program has been summarized by Jesse D. Jennings and James R. Glenn, but their papers do not focus exclusively on the Missouri Basin Project.[1] The present work grew out of an effort initiated by the author several years ago to compile an administrative history of the Midwest Archeological Center, an undertaking that is still incomplete. However, two articles and this review have resulted to date.[2]

This brief history has been compiled largely from records that survive at the Midwest Archeological Center. Documents archived at the National Archives and the National Anthropological Archives in Washington, D.C., as well as at the National Park Service's Harpers Ferry Center in West Virginia, were also utilized. Unfortunately, lack of funding precluded the author from visiting these repositories in person, forcing a reliance on correspondence and telephone calls to identify relevant holdings. Consequently, important documentation was undoubtedly overlooked because of this limitation, but may someday fill the gaps that are evident in the information presented below.

Many individuals assisted this retrospective in different ways. F.A. Calabrese provided encouragement and made available his extensive personal archive of documents dating back to his 1973 arrival at the Center. Mark J. Lynott also provided encouragement and volunteered to search for key documents at the National Anthropological Archives during visits to Washington, D.C. W. Raymond Wood and the late Wilfred D. Logan furnished documents from their personal archives and shared their memories of important events in the Center's history. Dr. Wood also

graciously allowed me to select prints from his personal photograph archive, as did Robert K. Nickel. Wilfred M. Husted loaned a photograph of his 1969 Fort Union Trading Post excavation crew for inclusion. Lawrence Tomsyck, former Administrative Officer of both the Missouri Basin Project and the Midwest Archeological Center, also shared his recollections. Special thanks are due Bobbie H. Ferguson of the Bureau of Reclamation for sharing archival documents she discovered during her own research into the history of the archeological salvage program and for clarifying my understanding of the complex arrangements by which the salvage program was funded. The late Robert L. Stephenson and Jesse D. Jennings read and offered comment on drafts of this paper, as did J.J. Hoffman, William B. Butler, Stanley A. Ahler, and W. Raymond Wood. Calvin R. Cummings, David Nathanson, and Douglas R. Givens provided information for the study. Richard E. Jensen helped identify River Basin Surveys staff in photographs. Gratitude is extended to all of these individuals.

Recently a number of reminiscent articles by persons who participated in Interagency Archeological Salvage Program work in the Missouri River Basin have appeared in print.[3] Articles of this nature, which hopefully will continue to be published, illuminate the personal experience of doing archeological salvage work in the Plains and complement the program history presented in this study.

What follows is only a general summary of the history of the Interagency Archeological Salvage Program and the interrelationships that developed among the participating organizations. The salvage program was of long duration, organizationally complex, geographically far ranging, and highly productive of research results. Its operation and resulting contributions to knowledge can be assessed from a number of perspectives, both historically and scientifically. A detailed history of the program, or of the specific involvement of any of its participating organizations, remains to be written.

Notes

[1] Jennings 1985; Glenn 1994.
[2] Thiessen 1994a, 1994b.
[3] For example, Wood and Hoffman 1994; Solecki 1994; Wood 1995; Hurt 1995; Gradwohl 1997; Grange 1997.

A rented house provided a "first-class" field camp for a University of Kansas crew working in the Fort Randall Reservoir area, Lyman County, South Dakota, during the summer of 1953 (courtesy of W. Raymond Wood).

Robert L. Stephenson served as Chief of the Missourin Basin Project from 1952 through 1963 (RBS photograph 00-L643).

Warren W. Caldwell served as Chief of the Missouri Basin Project from 1963 through 1969 and as Director of the RBS from 1966 through 1969 (RBS photograph 00-L1012).

Early Antecedents

The Missouri Basin Project and the Midwest Archeological Center were both important parts of the Interagency Archeological Salvage Program that originated in 1945. Following is a brief review of the federal government's involvement in archeology during the work relief programs of the 1930s and early 1940s. Experiences gained from New Deal–era archeological work greatly helped shape the way the federal government and the archeological community approached archeology after World War II. The result was the Interagency Archeological Salvage Program.

Work Relief Programs

Widespread unemployment during the economic depression of the 1930s led to massive federal efforts to create employment for thousands of unemployed laborers. Several "make-work" programs were established for this purpose, most of them designed to rehabilitate and otherwise improve parks and other public lands throughout the nation, thereby benefiting the public good in ways other than simply reducing unemployment. Several of these programs used archeological excavations as one of the vehicles for work relief. Federally sponsored archeological excavations could utilize large amounts of labor, would not compete with private industry, and would further the goals of science by increasing public knowledge of the past.[1] Most of these archeological projects occurred in the southeastern part of the nation, where unemployment was rife and mild weather permitted outdoor work through the winter months.[2]

Several federal work relief programs utilized archeology in the achievement of their goals.[3] The first major archeological fieldwork undertaken under the auspices of a work relief program, the Federal Emergency Relief Administration (FERA), was initiated at Marksville, Louisiana, in August of 1933.[4] Another early work relief program to sponsor archeological investigations was the Civil Works Administration (CWA), which was established in November 1933.[5] Through the CWA, about 1,500 people were employed on eleven archeological projects in Florida, Georgia, North Carolina, Tennessee, and California.[6] The CWA was also the source of labor used for the massive archeological salvage efforts necessitated by the Tennessee Valley Authority (TVA), one of the earliest water resource development projects of the federal government that recognized the need to recover and record archeological data that would be endangered as a result of dam construction.[7] As the scientific research arm of the federal government, the Smithsonian Institution assumed responsibility for technical supervision of the CWA and TVA archeological research efforts and furnished field directors to oversee the projects. Although the "make-work" archeological programs were considered successful at the time from both political and scientific viewpoints, the CWA was designed only to be a short-lived work relief program, which ended on March 31, 1934.[8] After the end of the Civil Works Administration, archeological work continued under the auspices of the FERA.[9]

The CWA was soon followed by a longer-lived relief program called the Works Progress Administration (WPA), which was established in August 1935 after passage of the Emergency

Relief Appropriation Act in April of that year.[10] Archeological work was a component of the WPA program, but unlike the earlier CWA, local project sponsors were required to make a 25 percent contribution to the total cost of proposed projects, foreshadowing the cost-sharing arrangement between federal and non-federal parties that participated in the Interagency Archeological Salvage Program of the 1950s and 1960s. Project proposals were reviewed for scientific merit by the Smithsonian Institution and the National Park Service, which had recently been given responsibility for surveying the nation's archeological and historical resources under the Historic Sites Act of 1935.[11] Beginning in early 1936, numerous WPA archeological projects were conducted, some of them of quite large scale. Many of these projects were located in the South and some of them continued to be linked to the salvage needs of the TVA program.[12] WPA archeological projects were also conducted elsewhere in the nation, but these have not been as comprehensively described as those performed in the South. The pressures of a wartime economy following the entrance of the United States into World War II resulted in the end of WPA support for archeology early in 1942.[13]

Archeological investigations were also conducted under the auspices of another Depression-era relief program, the Civilian Conservation Corps (CCC), but to a much more limited extent than in the CWA and WPA programs.[14]

The archeology that was accomplished under the New Deal relief programs has been often assessed.[15] Griffin has enumerated fourteen specific benefits of this work to archeology.[16] Most archeologists agree that the advances in knowledge that resulted from this work were enormous and that the "make-work" programs gave invaluable training and experience to a generation of archeologists who later went on to follow eminent and productive careers in the field. However, the New Deal archeology has also been harshly criticized. It has been asserted that the overall research effort between 1933 and 1942 suffered from lack of central direction, insufficient numbers of trained supervisory personnel, administrative ineptness, publication lag, and scattering and even loss of the resultant data.[17] Many of these problems were recognized and caused concern soon after the inception of the FERA and CWA phases of archeological research.[18] Given the fact that the objective of the work relief programs was to reduce unemployment and not to stimulate archeological research, the results of the "make-work" archeology could not have been entirely satisfactory to the discipline of archeology. For example, over 90 percent of the funding for the CWA program was used for salaries for field personnel, making it virtually impossible to follow up with timely analysis and reporting.[19] Consequently, it took years for much of the work relief investigations to be written up, and some of them are still not reported to this day.

The experience gained from the work relief programs soon mobilized the archeological profession to seek a way to prevent the same problems from recurring in the future. As early as 1939, the National Research Council appointed a committee to review the results of the WPA archeological work and recommend ways to avoid the problems that attended the New Deal archeological

efforts.[20] Chaired by William Duncan Strong, the Committee on Basic Needs in Archaeology consisted of Carl Guthe, Clark Wissler, A.V. Kidder, Fay-Cooper Cole, W.C. McKern, J.O. Brew, and W.S. Webb, many of the leading anthropologists and archeologists of the day.[21] The Committee published a statement that same year, in which it defined the "minimum requirements of scientific archeology" and indirectly addressed many of the shortcomings of the work relief archeological experience.[22] Echoing concerns expressed earlier by Setzler and Strong about the diminishing nature of the nation's archeological resource base, the Committee's statement also identified a need for "national conservation" of archeological sites and called for the National Park Service to take a prominent role in preserving sites for the future.[23]

The Committee for the Recovery of Archaeological Remains

The recommendations of the Committee on Basic Needs in Archaeology regarding federal sponsorship of archeological programs did not fall on deaf ears. As the Second World War neared its end, Frank H.H. Roberts, Jr., and Julian Steward, both anthropologists employed by the Smithsonian Institution, made enquiries of federal officials about federal reservoir construction projects that were being planned for construction after the war. What they learned caused archeologists in the Washington, D.C., area to become alarmed at the scope of the ambitious reservoir construction programs on the drawing boards of the Corps of Engineers and the Bureau of Reclamation.[24] Roberts and Steward discussed the situation with Strong, Frederick Johnson, and J.O. Brew,[25] and the matter was raised for discussion at the annual meeting of the Society for American Archaeology held in Washington on May 13, 1944.[26] On July 20, 1944, the Society established a "Planning Committee" to review the results and problems of the WPA investigations.[27] The Committee, chaired by Frederick Johnson with James B. Griffin and Emil W. Haury as members, was also charged with considering "any other policies pertinent to the welfare of American Archaeology, or of this Society."[28] Implicit in this charge was a desire not to repeat the problems of the work relief archeological experience in any future federally sponsored archeological programs.

The Planning Committee met with members of the Committee on Basic Needs in Archaeology and other Washington-area archeologists on January 8-13, 1945.[29] Its report was presented to the Society for American Archaeology at the organization's annual meeting on May 19, 1945.[30] The report offered several recommendations for future federally supported archeological programs "which are in any way analogous" to the relief-era archeological programs: (1) a "guiding force" should be established to provide central direction to the effort; (2) the professional personnel engaged in such programs should not be burdened with administrative responsibilities, but rather should remain free to concentrate their attention on archeological matters; (3) properly qualified organizations and personnel should be selected; and (4) analysis and reporting of research should be completed for each project begun.[31] It also reported that the January meeting and subsequent discussions through March 1945 had resulted in the establishment in April of

another committee, the Committee for the Recovery of Archaeological Remains (CRAR), to give explicit guidance to the salvage effort that would be required by the postwar reservoir construction programs.[32] In effect, the CRAR became the "guiding force" that was recommended by the Planning Committee for future federal archeological programs. The Committee held its first meeting in May 1945.[33]

One of the first formal public statements of the newly formed CRAR was soon forthcoming. A resolution was published in the July 13, 1945, issue of *Science*, which called for legislatively mandated "adequate conservation of archeological resources" in federal water resource project areas and offered five explicit guidelines as to how such an effort should be staffed and operated.[34] The resolution was multi-organizational in nature and was signed by William Duncan Strong on behalf of the Committee on Basic Needs in Archaeology of the National Research Council, by Frederick Johnson for the Planning Committee of the Society for American Archaeology, and by William S. Webb for the Committee for the Recovery of Archaeological Remains.

In the early years of its existence, the CRAR consisted of Frederick Johnson (representing the Society for American Archaeology), A.V. Kidder and William S. Webb (both representing the American Council of Learned Societies), and J.O. Brew (on behalf of the American Anthropological Association).[35] William Duncan Strong and Frank H.H. Roberts, Jr., were appointed to serve as liaison with the CRAR for the National Research Council and the Smithsonian Institution, respectively.[36] The purposes of the CRAR were: (1) to ensure the development of an adequate overall organization to the federal salvage effort and (2) to encourage the work to be performed in accordance with the current standards of the archeological discipline.[37] The objective of the advisory group was to ensure the preservation of threatened archeological remains through systematic excavation, analysis, and publication of the results of reservoir-related research.[38] The Committee stressed the need for timely dissemination of the results of salvage investigations in order to avoid one of the severest criticisms leveled at the work relief archeological programs — publication lag.

The composition of the Committee for the Recovery of Archaeological Remains changed somewhat over the years as members dropped off the committee and new ones were added.[39] One member, J. O. Brew, remained on the committee from its inception through its last formally scheduled meeting in 1976.[40] Although composed of delegates from three professional organizations, the CRAR was free to act independently and in accordance with the professional judgment of its members.[41] It was not tied to any governmental entity and so was free from political control or pressure. In the early years of the salvage program, the CRAR was very effective in lobbying for widespread popular and governmental support for the federal salvage program. This was achieved largely by means of contacts with Congressional and bureau officials, presentations at professional meetings, and publications aimed at the general public.[42] In later years, it continued its advisory role by means of annual meetings attended by representatives of many federal agencies.[43]

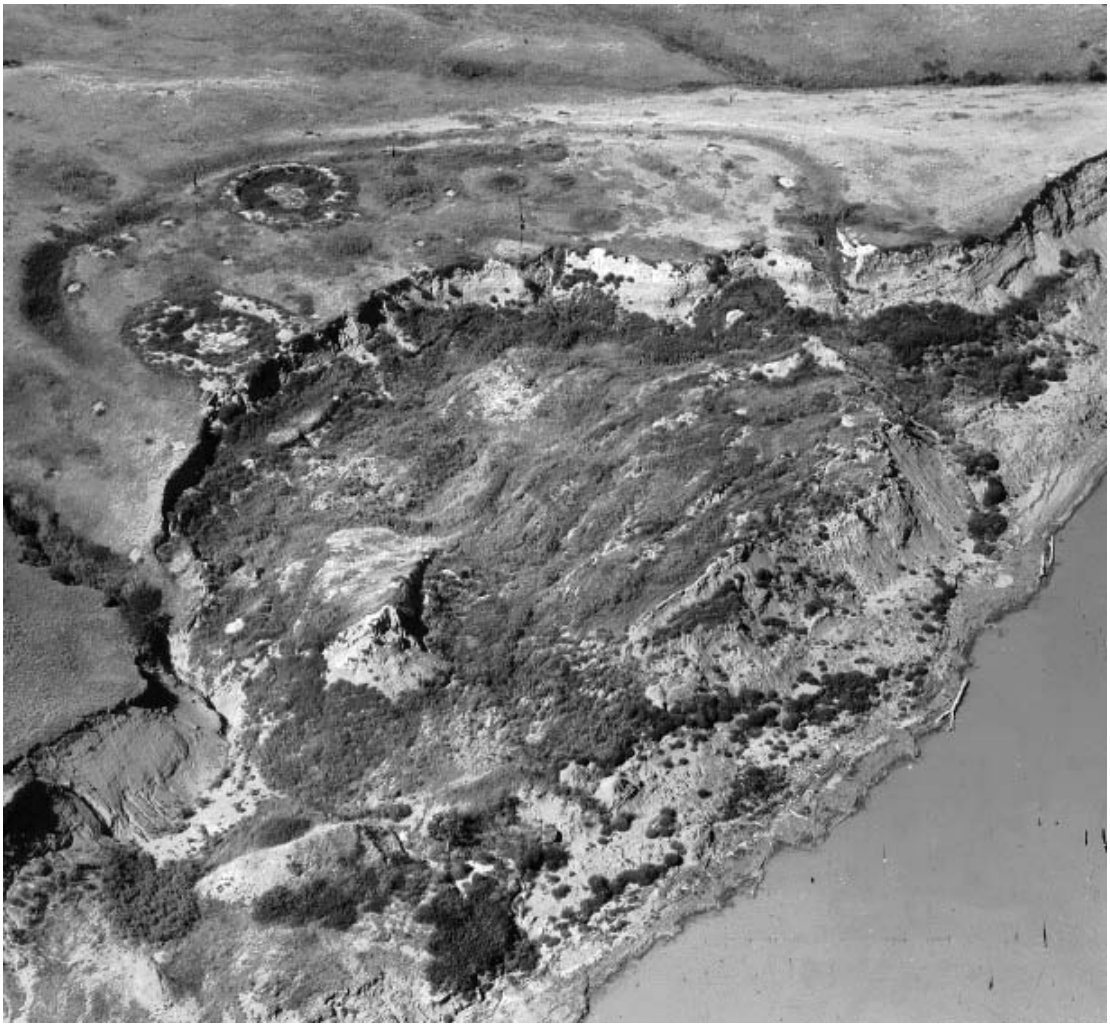
Notes

[1] Johnson et al. 1945a:143.
[2] Stoltman 1973:136.
[3] Guthe 1952; Stoltman 1973; Haag 1985. Lyon (1996) presents an excellent history of work relief archeological activities in the southeastern United States. Lyon's book is largely based on reorganization and expansion of his 1982 dissertation. The maturation and increasing political sophistication of American archeology during the work relief era, culminating with the formation of the Committee for the Recovery of Archaeological Remains, are aptly related by Fagette (1996).
[4] Lyon 1996:1-4, 28.
[5] Lyon 1996:28.
[6] Stirling 1934.
[7] The Tennessee Valley Authority Act was signed into law on May 18, 1933 (Lyon 1996:37). Shortly afterward, the archeological salvage program of the TVA was developed at the instigation of both professional and avocational archeologists, such as William S. Webb, who subsequently directed the TVA research program, and Burnham Colburn, an Asheville, North Carolina, banker who was influential with the TVA (Lyon 1982:46-49 and 1996:40; Jesse D. Jennings, personal communication to Thomas D. Thiessen, October 3, 1991). The TVA fieldwork began in January 1934 (Lyon 1996:40).
[8] Lyon 1996:30.
[9] Lyon 1996:30; Jesse D. Jennings, personal communication to Thomas D. Thiessen, October 3, 1991.
[10] Haag 1985:275; Lyon 1996:63.
[11] Lyon 1996:173-174; Kelly 1940:276-277.
[12] Haag 1985; Stoltman 1973.
[13] Guthe 1952:6; Fagette 1996:125.
[14] Haag 1985:278.
[15] See Guthe 1952; Stoltman 1973; Griffin 1976; Lyon 1982 and 1996; Haag 1985; and Fagette 1996.
[16] Griffin 1976:28.
[17] Guthe 1952; Stoltman 1973.
[18] Setzler and Strong 1936; see also Johnson et al. 1945a:142-143.
[19] Setzler and Strong 1936:306; Lyon 1996:71-73.
[20] Johnson 1966:1594; Lyon 1996:71.
[21] Guthe 1939:528; Fagette 1996:124.
[22] Guthe 1939.
[23] Setzler and Strong 1936:307-309; Guthe 1939:529.
[24] Lehmer 1971:1.
[25] Ibid.
[26] Wedel 1944:221.

[27] Johnson et al. 1945b:320.
[28] Ibid.
[29] Johnson et al. 1945a:142; Roberts 1952a:351.
[30] Johnson et al. 1945a:142-144.
[31] Ibid.
[32] Ibid.; Roberts 1952a:351.
[33] Johnson 1947:213; see also Johnson et al. 1945a:144.
[34] Strong et al. 1945.
[35] Ibid.:143.
[36] Ibid.
[37] Ibid.:144.
[38] Johnson 1947:213.
[39] Lehmer 1971:2.
[40] Charles R. McGimsey (1991:xviii) has stated that the CRAR "died in 1977 largely as a result of a Carter Administration decision against advisory committees."
[41] Johnson 1966:1595.
[42] For example, see Committee for the Recovery of Archaeological Remains 1945, 1958.
[43] See, for instance, the minutes of one such meeting in U.S. Department of the Interior, National Park Service 1974.

The River Basin Surveys pioneered the use of aerial photography to identify and document archeological sites. Here, investigators confer at the Pierre, South Dakota, airport before taking off on an aerial reconnaissance (RBS photograph 3900-L114).

A glimpse of the remains of Fort Stevenson over the tip of an airplane wing. Fort Stevenson, now under the waters of Garrison Reservoir, was a late-nineteenth-century military post in McLean County, North Dakota (RBS photograph 32ML1-178).



Impoundment of water in the five Missouri River mainstem reservoirs induced extensive shoreline erosion and bank slumpage, processes that continue today. Here, a portion of the Cheyenne River site in Stanley County, South Dakota, has slumped into the Oahe Reservoir (RBS photograph 39ST1-101).

The Interagency Archeological Salvage Program

As the United States approached the end of World War II, American civil works planners prepared to turn their attention to the construction of many dams which would flood a large part of the nation's watercourses. The Flood Control Act was passed in late 1944, which authorized dam construction on a massive scale throughout the nation. Many of these reservoir projects had been planned and even authorized before the war, but construction of them was suspended while the nation was at war. The U.S. Army Corps of Engineers and the Department of the Interior's Bureau of Reclamation were the organizations primarily responsible for planning and constructing these dams. Many of the reservoirs would be quite large, such as the Oahe Reservoir, which would inundate over 300 miles of the Missouri River valley in North and South Dakota.[1] Four other reservoirs were also planned for the "mainstem" of the upper Missouri. These would flood most of the remainder of that river valley in the Dakotas, leaving very little of the Missouri River in anything approaching a natural condition. Hundreds of other reservoirs of varying sizes were also planned throughout the United States, over 100 of them in the vast Missouri River Basin (MRB) alone.[2] The specific plan for water resource development in the MRB was the so-called Pick-Sloan Plan, a blending of two plans independently developed by the Corps of Engineers and the Bureau of Reclamation.[3]

The archeological community was quick to realize the implications of this intensive program of dam building for the archeological sites that lay within the nation's river valleys where eighty percent of the nation's archeological resources were estimated to be located.[4] Consequently, it became apparent that many of these sites would be destroyed by dam construction or inundated below reservoir pools. It was recognized that this would result in the loss of large and irreplaceable portions of the prehistoric and historic record of past life in the United States. Since construction of many dams was set to commence as soon as the war was over, the urgency of this danger gave rise to the concept of "salvage" archeology or, as it is sometimes called, "emergency" archeology. Salvage archeology is archeology conducted for the purpose of recovering archeological specimens and data threatened with destruction or flooding. At first stemming solely from water development projects, the salvage concept was later broadened to include investigations conducted as a result of highway construction programs, pipeline construction projects, and many other forms of governmentally sponsored development. The historical "roots" of the archeological salvage concept lay in the Tennessee Valley Authority excavations of the work relief era.[5]

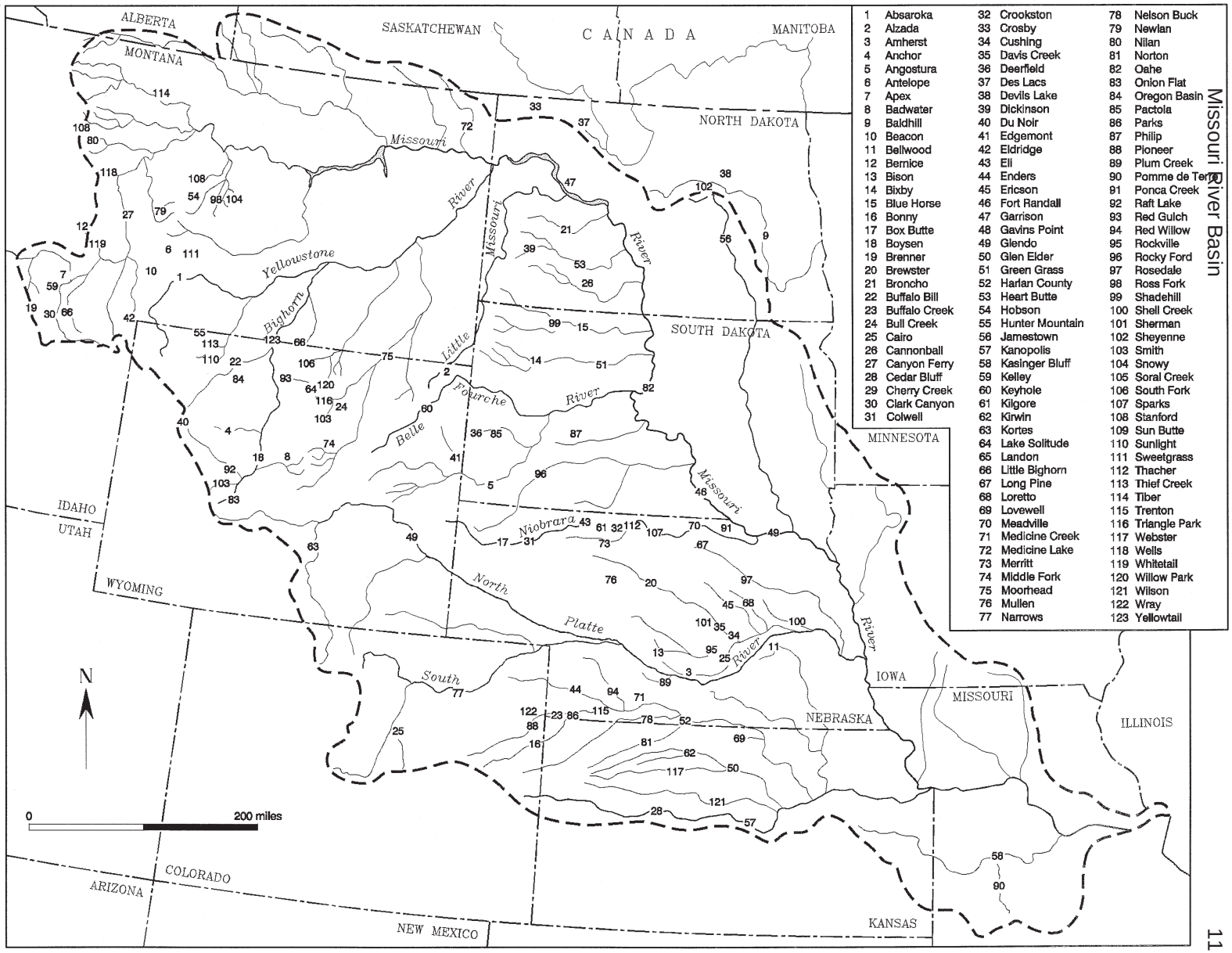
The federal salvage archeology effort that emerged after World War II in response to federal water resource development programs was called the Interagency Archeological and Paleontological Salvage Program, later shortened to the Interagency Archeological Salvage Program (IASP). Created in the late summer and early fall of 1945, the Interagency Archeological Salvage Program was a multi-agency, cooperative program designed to inventory and assess the importance of archeological resources in planned reservoir areas and to preserve a portion of the archeological record in those reservoir areas by conducting excavations at selected sites.

Participating organizations were the Corps of Engineers and the Bureau of Reclamation as the nation's foremost dam-building agencies; the Smithsonian Institution (SI) as the scientific research arm of the federal government; the National Park Service (NPS) as the federal bureau with legislatively mandated responsibility for surveying the nation's archeological and historical resources; the Committee for the Recovery of Archaeological Remains as the principal advisory spokesgroup for the archeological profession; and state or local universities, historical societies, and museums that had both an archeological research capability and an interest in furthering the goal of the salvage program. A complex set of interrelationships developed among these entities.

The Historic Sites Act of 1935 charged the Secretary of the Interior with responsibility for identifying potential new historic and archeological areas to add to the National Park System. This responsibility was carried out by the NPS as the primary federal agency that administered parks of historical and archeological value. In addition, prior to the 1945 IASP agreement, the NPS had entered into agreements with the Corps of Engineers and the Bureau of Reclamation to assist those agencies with planning recreational facilities for their reservoir projects.[6] These studies were to be carried out under the authority of the Park, Parkway, and Recreational Study Act of 1936.[7] As early as May 1945, the NPS was interpreting studies of archeological and historical resources to be within the purview of its recreational resource studies in reservoir areas.[8] Consequently, the NPS assumed a major coordinative role in the Interagency Archeological Salvage Program. Brew has also pointed out that the NPS became the central coordinating agency for the IASP "Partly because of its convenient regional organization throughout the country, which coincides roughly with the regional organization of the construction agencies."[9]

Largely at the instigation of Arthur E. Demaray, then Associate Director of the National Park Service and an early supporter of the salvage concept, a Memorandum of Understanding between the NPS and the SI was developed and approved on October 9, 1945, by the Secretary of the Interior.[10] It formally initiated the IASP and defined the relationship between the two bureaus. It was subsequently replaced by Memoranda of Understanding dated April 27, 1961 (the date of approval by the Acting Secretary of the Interior), and April 30, 1965, both of which continued the same basic relationship between the bureaus and clarified certain conditions regarding the disposition of collections resulting from the program.[11] All three agreements included paleontological, as well as archeological, remains within their scope.

As defined in the 1945 Memorandum of Understanding, the NPS, in the course of its surveys of recreational resources in Corps of Engineers and Bureau of Reclamation reservoir areas, was to advise the SI of the locations of proposed dams and reservoirs. The Smithsonian, in turn, was to advise the NPS of the "number and importance of the known archeological or paleontological sites located within such reservoir areas." Not restricted only to sites that were already recorded, the Smithsonian was also charged with recommending to the NPS "such surveys in the field as seem indicated" (i.e., necessary) to identify other, presently unknown archeological and



Missouri River Basin reservoir projects where Interagency Archeological Salvage Program (IASP) archeological and/or paleontological investigations took place through December 31, 1951. Most of the dams planned or actually constructed in the Missouri Basin are depicted. Adapted from Figure 1 in The Archeological and Paleontological Salvage Program in the Missouri Basin, 1950-1951, *by Paul L. Cooper, Smithsonian Miscellaneous Collections, Vol. 126, No. 2 (1955), Washington, D.C.*

Above: *River Basin Surveys excavators working at 39FA83, a prehistoric occupation site in the Angostura Reservoir area, a Bureau of Reclamation project in Fall River County, southwestern South Dakota. The site was excavated in 1949 and 1950 (RBS photograph 39FA83-35; courtesy of W. Raymond Wood).*

Facing Page, Top: *A River Basin Surveys crew busily excavating the Sitting Crow site in the Big Bend Reservoir area, Buffalo County, South Dakota (RBS photograph 39BF225-169; courtesy of W. Raymond Wood).*

Facing Page, Bottom: *Members of the State Historical Society of North Dakota crew that excavated Kipp's Post in 1954 standing outside the log cabin that served as their field camp. The crew included (left to right) Jerry Giddings, W. Raymond Wood, Fred McEvoy, Harold Dietz, Clifford Chapman, and Alan Woolworth (holding the crew's mascot, Fishhook). Wood and Woolworth co-directed the work at this 19th-century trading post site in the Garrison Reservoir area, Mountrail County, North Dakota (courtesy of W. Raymond Wood).*

paleontological resources of potential importance. The NPS would then inform the appropriate dam-building bureau of the "cultural and paleontological remains that would be lost if thorough investigation and excavation of the sites are not undertaken sufficiently in advance of the flooding of the reservoirs." Nothing in the agreement or its supporting legislation required the constructing bureaus to fund archeological or paleontological surveys or excavations in connection with their reservoir projects. Their participation in the IASP was voluntary.[12]

The remaining provisions of the 1945 agreement gave the National Park Service responsibility for planning exhibition rooms and museum laboratories in reservoir areas. These were to be used for the processing and display of collections resulting from Interagency Archeological Salvage Program excavations. The Smithsonian was to advise the NPS on locations suitable for such facilities. The agreement also established the policy of depositing "important" excavated materials in the U.S. National Museum, with "duplicate collections" being retained in local museums. "Surplus" materials from those collections could be placed with other institutions or museums as jointly decided by the NPS and the Smithsonian Institution.

The language of the 1945 agreement was generally vague and non-explicit about the ultimate responsibilities of each bureau, but the 1961 and 1965 agreements substantially clarified the roles of the NPS and the SI in the IASP and clearly established the legislative and fiscal basis of the program. Both agreements continued the requirement that the bureaus would swap information on "any and all reservoirs, planned or authorized," of which they possessed information. The NPS was given formal responsibility for requesting funds from Congress for necessary surveys and excavations in reservoir areas pursuant to the Historic Sites Act of 1935 and the Reservoir Salvage Act of 1960. For this purpose, the Smithsonian was to furnish the NPS with cost estimates for such work. The 1961 and 1965 agreements designated the SI as advisor to the NPS on the scientific aspects of the IASP and charged the SI, "within the limits of the funds transferred to it," with conducting "its designated part of the program of archeological survey, excavation, laboratory analysis, and reporting." The agreements gave the NPS explicit responsibility for coordinating the overall program and administering the funds which it received from Congress for the IASP. It clearly presented the NPS with three options to "accomplish the objectives of the program:" (1) through "its own staff services;" (2) through "research contracts with qualified educational and scientific institutions;" and (3) by transferring funds to the SI.

The 1961 and 1965 agreements also required the two bureaus to exchange reports of the work conducted under the auspices of the IASP, and clarified the disposition of certain portions of the resultant collections — such as "representative series of artifacts," unique specimens, and artifacts that have been illustrated in published reports — in the U.S. National Museum. Another provision also required review of the agreement every three years "so that it can either be revised to fit new conditions or be terminated if it is no longer desirable." This provision ultimately played an important role in the termination of the Smithsonian's participation in the IASP and the establishment of the Midwest Archeological Center, as explained in the next two chapters.

The Missouri River Basin was the scene of the first IASP fieldwork. A sum of $20,000 was transferred to the NPS by the Bureau of Reclamation in 1946 for work on both Bureau and Corps of Engineers projects in the MRB, and this was augmented by an additional $40,000 in 1947.[13] Later in 1946 and 1947, the Corps of Engineers and the Bureau of Reclamation both transferred additional funds to NPS for work outside the MRB.[14] These monies came from appropriations made to these bureaus for construction or other non-archeological purposes.

The funding arrangements for the IASP became complicated soon after the program was initiated. During 1946 and 1947, extended discussions were held between Bureau of the Budget officials and representatives of other bureaus involved in federal water resource development programs regarding the propriety of funding the archeological work out of appropriations made to the constructing agencies for construction purposes. At first, most of the participating Department of the Interior bureaus considered it proper for the construction agencies to pay for the archeological salvage excavations necessitated by their activities. This view was supported by advice from Bureau of the Budget officials as well as by a March 27, 1947, Solicitor's opinion relating to the Bureau of Reclamation's Davis Dam project (in Arizona and Nevada) and a precedent case involving the relocation of water mains and sewers during the construction of government buildings in Washington, D.C.[15]

The Corps of Engineers repeatedly questioned the legality of these expenditures, maintaining that the Corps had no statutory authority to expend funds for archeological work.[16] On September 22, 1947, the Secretary of the Army wrote to the Director of the Bureau of the Budget to formally question the existing practice of transferring Corps funds to the NPS for archeological salvage investigations, pointing out that the NPS, and not the Corps, was legislatively authorized to conduct archeological researches in the United States.[17] Bureau of the Budget officials rethought the matter and on November 4, 1947, the Acting Assistant Director of the Bureau replied to the Secretary, stating that

> ...we have carefully reexamined the legislative background and the history to date of Federal activity in the field of archeology. On this basis it has now been decided that, unless or until new legislation on the subject is enacted, future Federal financing of archeological work on Government-owned lands and in connection with Government construction projects should be requested from Congress, pursuant to the Historic Sites Act of 1935, upon the basis of estimates submitted and justified by the Department of the Interior under our regular budgetary procedures.[18]

This placed the funding responsibility for the salvage program squarely on the NPS as the Interior bureau with legislative authority for conducting archeological investigations. In addition, the broad language of the Bureau of the Budget decision expanded the scope of the Interagency Archeological Salvage Program to include investigations conducted in connection with the water resource development projects of federal bureaus other than the Bureau of Reclamation and the Corps of Engineers, as well as projects of state governments.[19]

During the life of the IASP, program administrators maintained a distinction between work funded and conducted within the MRB and work funded and conducted in river basins outside the MRB. This was reflected in the fact that NPS received funds from two sources for all of the salvage program work. Investigations outside the MRB were funded from money requested in the NPS's annual budget request to Congress. The water resource development program in the MRB, however, was viewed as a unified, comprehensive plan in which all of the participating Department of the Interior bureaus cooperated fiscally under the lead of the Bureau of Reclamation. Consequently, the several Interior bureaus provided budget estimates to the Bureau of Reclamation for submittal to Congress as part of the Bureau's annual budget request; when received by the Bureau of Reclamation, these monies were transferred to the estimating bureaus. In the case of the IASP work in the MRB, NPS budget estimates were included in the "Maintenance and Protection" portion of the Bureau of Reclamation's budget requests.[20]

For over twenty years (1946-1969), the IASP was carried out by two means: investigations conducted by staff of the SI, through the River Basin Surveys (RBS), a program established solely for that purpose; and investigations carried out by researchers in universities, museums, and historical societies. Between 1946 and 1950, the federal government provided no financial support for research conducted by local "cooperating" institutions, who voluntarily contributed their services out of a shared sense of emergency.[21] The cooperation of these institutions was formally recognized through letters issued by the SI which authorized them to undertake research at specific sites or reservoir areas.[22] In 1950, however, the NPS began to support their efforts by diverting a portion of the salvage program appropriation into cooperative agreements with local institutions who had the willingness and interest to conduct salvage investigations, as well as the capability of doing so.[23] These agreements did not bear the full cost of the research, however, as they were intended only to "defray" the cooperators' expenses.[24] Cooperating institutions were expected to contribute some portion of project costs. This cost-sharing practice was continued throughout the life of the cooperative aspect of the IASP, until the mid-1970s when passage of the Archeological and Historic Preservation Act of 1974 authorized all federal bureaus to fully pay for archeological salvage investigations necessitated by their programs.

In many years, the funds diverted to cooperative agreements or contracts with cooperating institutions were substantial, particularly for research outside the MRB, where the total of contracted research funds often far exceeded that allocated to the SI.[25] This is because in 1952 the NPS took over responsibility for funding salvage investigations outside of the MRB, except for areas in Virginia, Georgia, and Tennessee.[26] In the MRB, however, the greater part of IASP funding was always allocated to the Smithsonian Institution (Table 1).

The research conducted by the cooperating institutions was not conducted in a scientific vacuum, however. It was integrated with the salvage research program of the Smithsonian Institution through: (1) Smithsonian recommendations for excavations at specific sites; (2) the Smithsonian making available records from its own researches; (3) the Smithsonian providing technical

consultation on in-progress work by cooperators; and (4) the NPS disseminating the results of the cooperators' research to the Smithsonian.[27] Waldo R. Wedel, an early leading figure in the River Basin Surveys, has reflected that the research efforts of the cooperating institutions "have always been planned and carried out in coordination with the broader salvage procedures and objects of the River Basin Surveys and the National Park Service".[28] The cooperative aspect of the IASP has been a valuable and indispensable part of the overall program:

> The value of the cooperation provided by non-government institutions cannot be overestimated. This more than anything else, indicates the basic interest ordinary citizens have in the prehistory of the locality in which they live.[29]

Not only have the financial contributions of the cooperating institutions to the IASP been substantial (though untallied), but the increase in knowledge of prehistory resulting from their research has been considered to be equal to the very considerable scientific advances made by RBS participation in the Interagency Archeological Salvage Program.[30]

Table 1. Archeological funds appropriated for the Interagency Archeological Salvage Program, 1946-1967.

	Missouri River Basin				Elsewhere in the US			
Fiscal Year	Total Amount	SI	Contracts	NPS	Total Amount	SI	Contracts	NPS
1946	20,000	20,000	—	—	—	—	—	—
1947	41,500	40,000	—	1,500	30,000	27,000	—	3,000
1948	53,000	50,300	—	2,700	29,500	23,500	—	6,000
1949	88,900	81,000	—	7,900	66,900	64,400	—	2,500
1950	220,600	155,140	22,250	43,210	69,169	60,746	7,250	1,173
1951	222,030	121,875	23,000	77,155	75,000	52,500	9,000	13,500
1952	175,000	120,783	37,000	17,217	59,400	29,020	13,800	16,580
1953	165,000	111,065	7,750	46,185	64,000	12,135	13,500	38,365
1954	95,000	64,500	12,750	17,750	53,570	6,995	12,750	33,825
1955	95,000	52,700	11,500	30,800	—	—	—	—
1956	145,000	92,360	11,500	41,140	25,000	—	23,000	2,000
1957	147,500	90,000	21,750	35,750	132,000	18,500	78,510	34,990
1958	208,950	157,624	14,000	37,326	319,900	18,000	229,145	72,755
1959	196,500	137,00	17,200	42,300	353,449	25,000	292,075	36,374
1960	168,480	98,055	19,400	51,025	413,149	24,000	309,100	80,049
1961	172,800	103,895	24,000	44,905	488,600	20,000	428,455	40,145
1962	299,600	204,500	31,500	63,600	589,200	27,205	497,675	64,320
1963	365,000	271,000	25,650	68,350	750,000	—	541,615	208,385
1964	348,700	254,500	39,725	54,475	761,700	—	567,630	194,070
1965	346,300	237,000	56,150	53,150	765,000	—	641,911	123,089
1966	341,000	220,500	44,890	75,610	775,600	—	626,911	123,089
1967	341,000	219,000	58,000	64,000	783,300	—	571,638	211,662
	4,256,860	2,902,797	478,015	876,048	6,604,437	409,001	4,863,801	1,331,635

Note: Adapted from "A Review of the River Basin Surveys, Smithsonian Institution, Museum of Natural History for the Ad Hoc Advisory Committee," Lincoln, Nebraska, 1968, page 42.

The River Basin Surveys

The best-known component of the IASP was the River Basin Surveys (RBS), a program established by the Smithsonian Institution for the sole purpose of carrying out its research responsibilities in the IASP. The RBS was organized during the fall of 1945 in response to the 1945 Memorandum of Understanding between the National Park Service and the Smithsonian Institution.[31] Administratively within the Smithsonian's organization, it was placed under the Bureau of American Ethnology, where it remained until February 1, 1965, when the Bureau was merged into the Smithsonian Office of Anthropology, a newly created division of the Museum of Natural History with responsibility for all of the anthropological activities of the Museum.[32] The River Basin Surveys existed for twenty-four years, from 1945 through mid-1969.

Dr. Frank H.H. Roberts, Jr., Associate Chief of the Bureau, was appointed to be the first Chief of the RBS, a position he held through October 15, 1963, when he went on sick leave.[33] He was an excellent choice for the position because of his scientific preeminence and his earlier work on behalf of the Smithsonian with the Committee for the Recovery of Archaeological Remains and the NPS in planning and coordinating the start of archeological salvage efforts.[34] He was succeeded by Robert L. Stephenson (in an acting capacity) and Warren W. Caldwell (Table 2).

Most RBS investigations were conducted from field offices established in Lincoln, Nebraska; Eugene, Oregon; Berkeley, California; and Austin, Texas, which provided necessary administrative and laboratory support (Table 3). Investigations in certain states outside of the MRB were directed from the Washington office of the RBS, and a laboratory was briefly maintained in Athens, Georgia. All of these offices were established in cooperation with local universities, and generally were housed in university facilities. At the close of Fiscal Year 1952 (i.e., June 30 of that year) all RBS offices outside the MRB were turned over to the NPS, which assumed responsibility for conducting salvage investigations in those areas, except for the MRB, where a project office continued to be staffed, and the states of Virginia, Georgia, and Tennessee.[35]

Generally, and perhaps coincidentally, the phasing out of the RBS field offices seems to have occurred shortly after initiation of the practice of entering into cooperative agreements with local institutions, which the NPS began in 1950.[36] This increased reliance on local assistance with the salvage program evidently obviated the need for the SI to maintain local logistical bases, except for the Missouri River Basin where the water resource development threat remained massive and long term.[37]

The RBS was the largest and most intensive archeological salvage operation ever conducted by a single institution in the United States. In some years, virtually dozens of field crews were dispatched across the nation to reservoir areas. Intensive as were the RBS research efforts and those of the cooperating institutions in the IASP, the total salvage effort fell far short of preserving a complete record of the thousands of threatened archeological sites in the nation's reservoir

An orderly River Basin Surveys tent camp in Sully County, South Dakota. Note the Smithsonian Institution flag (RBS photograph 39SL00-55).

areas. In retrospect, the scope and pace of reservoir construction proved inexorable and overwhelming. Available time and funds permitted the excavation of only a relatively small number of the known sites in reservoir areas — perhaps 10 percent or less, according to a recent estimate[38] — and many important resources were consumed by construction or inundated by reservoir waters without any significant degree of investigation.

Nevertheless, an impressive amount of work was accomplished. Investigations were conducted in more than 275 reservoir or other project areas in 29 states, and more than 5,000 archeological sites were recorded as a result of RBS efforts.[39] Three months before the River Basin Surveys program was ended, it was reported that the Lincoln office had cataloged more than 1,800,000 artifacts and specimens.[40]

During its twenty-four-year lifespan, the RBS program gathered massive amounts of data on the prehistoric and historic archeological resources of the nation. The initial inventories of sites in specific reservoir areas were reported in dozens of mimeographed "appraisals" which described individual sites, assessed their significance for understanding local culture history as then understood, and assigned research priorities to them. These became the basis for planning excavations and further surveys in reservoir areas. Because they contained precise locational information, these reports were produced in limited quantity and received restricted distribution to the construction agencies and participating institutions. Nearly 200 appraisals were issued over the life of the RBS program, many of which reported more than one reservoir.[41]

The results of major investigations were formally reported in "River Basin Surveys Papers" that were published in the Bureau of American Ethnology Bulletin series. Thirty-nine such papers were published between 1953 and 1967.[42] Between 1966 and 1969, thirteen more reports were published in a series issued by the MBP, entitled *Publications in Salvage Archeology*.[43] Through the end of Fiscal Year 1964, the year-by-year administrative details of the RBS operation were amply documented in annual summaries published as part of the Bureau of American Ethnology's annual reports contained in the annual reports of the Smithsonian Institution. After that date through the end of Fiscal Year 1969, RBS activities were only briefly reported in the Smithsonian's annual reports entitled *Smithsonian Year*. These annual summaries were supplemented by detailed, periodic summaries covering the first 5, 15, and 22 years of the program's existence.[44]

The RBS has justly been called "an event of transcendent importance" to American archeology for the enormous advances in archeological knowledge which resulted from its extensive research.[45] Considered with the results of the research conducted by the other "cooperating" institutions of the IASP, the total accomplishments of the salvage effort appear all the more profound. RBS and cooperating IASP researchers illuminated huge voids in the archeological record of the United States and established "the broad outlines, as well as the details, of most regional cultural sequences and of the continent as a whole."[46] In many places throughout the

An impromptu evening jam session in a River Basin Surveys field camp in Sully County, South Dakota (RBS photograph 39SL00-91).

Table 2. Directors of the River Basin Surveys.

Name	Term	Source
Frank H.H. Roberts, Jr.	Oct 1945 to 15 Oct 1963	Stirling 1947:66 Stephenson 1965:85
Robert L. Stephenson (acting)	15 Oct 1963 to Feb 1966?	Stephenson 1965:85 Smithsonian Institution 1966a:87
Warren W. Caldwell	Feb 1966 to 25 Jan 1969	Smithsonian Institution 1966a:87 Smithsonian Institution 1969b:2
Richard B. Johnston[a]	ca. 25 Jan 1969 to 28 Jun 1969	Smithsonian Institution 1969b:683 Smithsonian Institution 1969c:2

[a] Johnston's actual title after Caldwell's departure was "Curator" (J.J. Hoffman, personal communication, June 1991).

United States, the cultural-historical sequences proposed by IASP researchers still serve as the foundation for most contemporary archeological research and undoubtedly will continue to do so for many years to come. An insightful critique of the RBS program has recently been published and provides a valuable historical perspective on the program,[47] but the full depth of the contributions of the River Basin Surveys and the Interagency Archeological Salvage Program to American archeology remains to be plumbed.

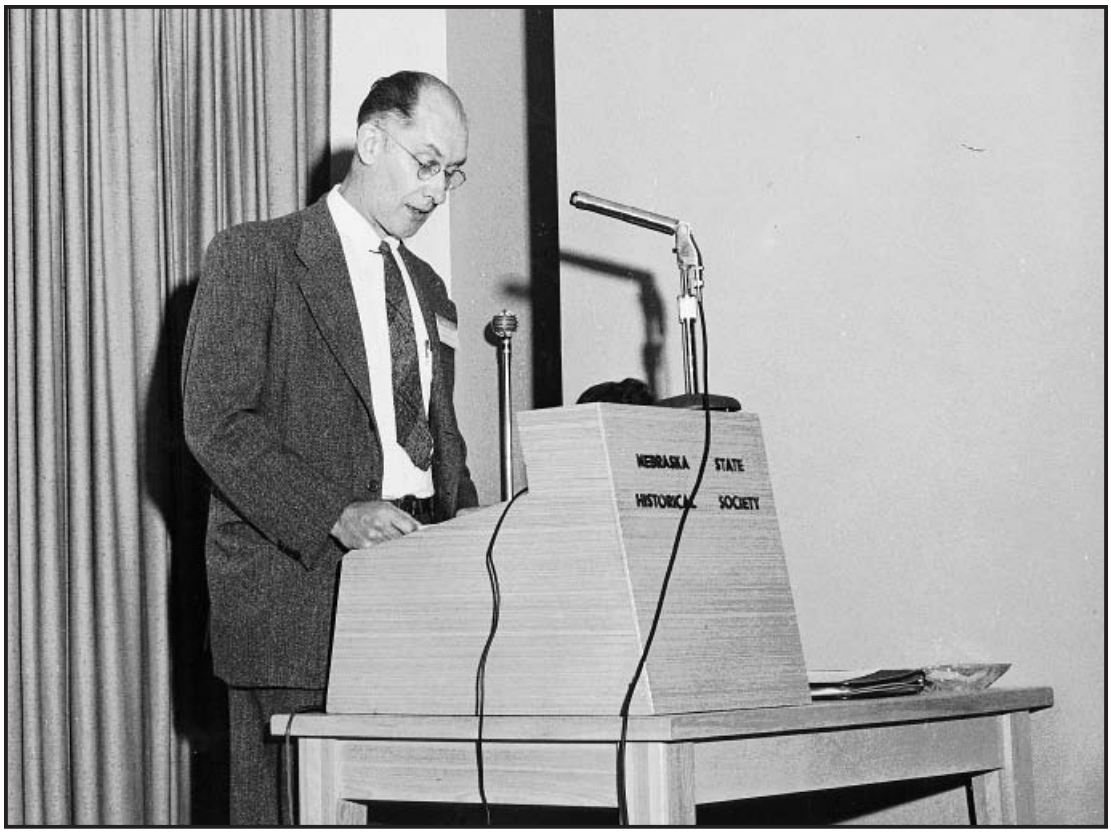
The Missouri Basin Project

The largest and longest-lived of the RBS field offices was the Missouri Basin Project (MBP) in Lincoln, Nebraska, which subsequently became the Midwest Archeological Center when the RBS program ended. The MBP was maintained from the second year of the RBS program — 1946 — through the end of June 1969, when the RBS program was terminated altogether.[48]

Because of the size and imminence of the reservoir projects planned along the upper Missouri River, as well as the paucity of knowledge about the archeology of the Missouri Basin, the MRB became the first scene of RBS field activities.[49] In July of 1946, Waldo R. Wedel arrived in Lincoln, Nebraska, to establish a logistical base for RBS operations throughout the immense MRB.[50] Funding for the first year was meager. A sum of $20,000 was transferred to the RBS by the Bureau of Reclamation in May 1946 to initiate work in the MRB.[51] This amount comprised the total funding for the RBS program in Fiscal Year 1946, but was supplemented by an additional $40,000 from the Bureau for Fiscal Year 1947 investigations in the MRB.[52] These funds were for use in projects of both the Bureau and the Corps of Engineers.

Research results quickly followed establishment of the office. Wedel hired five archeologists by the end of July and another in October 1946; field survey investigations were initiated on August 3, 1946.[53] By the end of June 1947, field surveys had been conducted in 44 Bureau and six Corps reservoir project areas in six states, and appraisals of the archeological resources in 25 of the 1946 project areas were completed and distributed to the construction agencies.[54]

Paleontological investigations were also an element of MBP operations for several years after establishment of the office. A paleontologist from Harvard University, Theodore E. White, joined the MBP staff in April 1947.[55] He conducted paleontological research in MRB reservoir areas intermittently through the end of June 1953.[56] White's work consisted of a mix of traditional paleontology (i.e., the study of fossil animal remains regardless of their association with evidence of man) and analysis of unmodified faunal remains from archeological sites, which was conducted as an adjunct to archeological research.[57] White transferred to the National Park Service in 1953, which ended the paleontological aspect of the RBS program. After that date, he twice returned to the MBP on brief details (six weeks in 1957 and one month in 1960 or 1961) to analyze unmodified faunal assemblages from Missouri Basin Project excavations.[58] Largely



Waldo R. Wedel speaking at the 1962 Plains Anthropological Conference. He established and directed the Missouri Basin Project from 1946 through 1949 (RBS photograph 00-L347).

Table 3. Field offices of the River Basin Surveys.

River Basin	Office Location	In Operation
Missouri	Lincoln, Nebraska	1946-1969
Columbia-Snake	Eugene, Oregon	1946-1952
Various in Texas	Austin, Texas	1946-1952[a]
Various in California	Berkeley, California	1946-1952?[b]
Various in Georgia	Athens, Georgia	1950-1952?

Note: This information is from the annual reports of the Bureau of American Ethnology and the Smithsonian Institution.

[a] Jennings (1985:284) gives the terminal date as 1953.

[b] Jennings (1985:284) gives the terminal date as 1950.

from his IASP work, White is acknowledged as being responsible for establishing zooarcheology as an essential part of the modern practice of archeology.[59]

Lincoln was chosen as the home of the Missouri River Basin operations for several reasons. Chief among them were: (1) the availability of office and laboratory space at the University of Nebraska; (2) proximity to the Region Two office of the NPS and the Corps of Engineers division office, both located in nearby Omaha; (3) excellent museum and library facilities in Lincoln, as well as the availability of professional consultants representing many disciplines; and (4) access to the Plains Cross-Cultural Survey information on Missouri Basin native groups then being compiled jointly by the University of Nebraska and Yale University.[60]

As the result of deliberations by a faculty committee composed of Deans R.W. Goss and C.H. Oldfather, Professor J.O. Hertzler of the Department of Sociology and Anthropology, and Dr. John L. Champe of the Laboratory of Anthropology, RBS quarters were established on the University of Nebraska campus.[61] The committee recognized the importance of the national archeological salvage program then being launched, and viewed the University's cooperation with the RBS as "its obligation to assist in every way possible the recovery of the archaeological and paleontological remains endangered by the Missouri River development."[62]

The first home of the River Basin Surveys was in the basement of the Social Sciences Building, which also housed the University's Laboratory of Anthropology.[63] In 1947, the Missouri Basin Project quarters were relocated to a basement hallway of the University's Don L. Love Memorial Library.[64] After September 1948, the MBP was housed in the basement of Burnett Hall. Vehicles and field equipment were stored at the Lincoln Municipal Airport and additional laboratory space at the Nebraska State Historical Society was also used during 1948.[65] Storage space at the Lincoln Air Base was used through at least the end of calendar year 1949.[66] Additionally, a World War II–vintage building at the Pierre, South Dakota, airport was used to store equipment and as a logistical base for MBP field crews working along the Missouri River in the Dakotas.

The growing operations of the office soon required additional space, and the first floor and basement of a store building at 1517 O Street were leased in early 1951.[67] For a time, most of the laboratory functions were housed in the leased building, while the MBP offices continued to be housed within the Laboratory of Anthropology at Burnett Hall.[68] In 1953, the offices on the University campus were also moved into the O Street facility.[69]

The final move of the Missouri Basin Project occurred in 1963 and 1964, when the deteriorating condition of the O Street building resulted in relocation of the offices and laboratory into a 14,000-square-foot building at 1835 P Street, which was rented on May 1, 1963.[70] The Missouri Basin Project remained at this address until the summer of 1969, when the Midwest Archeological Center was established at yet another location in Lincoln.

The Missouri Basin Project shared quarters with the Laboratory of Anthropology for seven or eight years, during which time both entities conducted very active programs of archeological field research. In order to distinguish their equipment from one another and to facilitate equipment loans, they color-coded items of field, laboratory, and office equipment by painting them with swatches of distinctive colors.[71] The colors adopted by the Missouri Basin Project were red and yellow, while other Lincoln-based cooperating institutions used red and white.[72] The MBP also assisted other cooperating institutions working in the Missouri Basin by sometimes loaning equipment. These institutions, too, adorned their own equipment with distinctive colors for the same purpose. Numerous items of "vintage" equipment at the Midwest Archeological Center still bear colorful red/yellow swatches of paint, indicating that they date to the days of the Missouri Basin Project operation.

The Missouri Basin Project existed for nearly twenty-four years, during which time it was a major focus of RBS program activities. Waldo R. Wedel was the first director of the office, and he was followed by a long succession of capable archeologist/administrators (Table 4). Many other archeologists received invaluable professional experience through employment by the MBP (Table 5), and many of them later went on to lead productive academic and professional lives elsewhere. Employment on MBP field projects trained dozens if not hundreds of students in archeological field and laboratory research techniques and stimulated many of them to earn advanced degrees in anthropology and develop professional archeological careers for themselves.

During the Interagency Archeological Salvage Program, more salvage work was accomplished in the Missouri River Basin than in any other river basin in the nation. In 1968, the Missouri Basin Project published a bibliography of all IASP publications and reports completed to that date (both those resulting from the River Basin Surveys program and those written by "cooperating" researchers as well), listing 2,600 entries organized by state.[73] Under the states which in large part comprised the Missouri River Basin — Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, and Wyoming — 898 entries were listed, or 34.5 percent of all of the entries contained in the bibliography. Much of this literature reported research conducted by the River Basin Surveys program.

Of the two formal series published by the RBS, 26 of the 39 "River Basin Surveys Papers" described Missouri River Basin investigations and 10 of the 13 *Publications in Salvage Archeology* reported the results of Missouri River Basin research. Despite this impressive publication record, the RBS was frequently criticized for the slowness of its publication progress and, sometimes, for professional shortcomings in the quality of its publications as well. This criticism and continuing dissatisfaction with the RBS program on the part of administrators both inside and outside the Smithsonian Institution ultimately contributed to the termination of the River Basin Surveys program and the transfer of the Missouri Basin Project facilities and staff to the National Park Service.

Table 4. Directors and Chiefs of the Missouri Basin Project of the River Basin Surveys.

Name	Term	Source
Waldo R. Wedel	8 Jul 1946 to 7 Oct 1946	Stirling 1948:66
Paul L. Cooper (acting)	7 Oct 1946 to 21 May 1947	Stirling 1948:66, 68
Waldo R. Wedel	21 May 1947 to 31 Oct 1947	Stirling 1948:66; Stirling 1949:71
Paul L. Cooper (acting)	31 Oct 1947 to ca. 1 Jun 1948	Stirling 1949:71, 73
Waldo L. Wedel	ca. 1 Jun 1948 to 1949	Stirling 1949:71
Paul L. Cooper (acting)	24 Mar 1949 to 1 Jul 1949	Stirling 1950:75; Roberts 1951:58
Waldo R. Wedel	1 Jul 1949 to 31 Dec 1949	Roberts 1951:58
Paul L. Cooper (acting)	23 Jan 1950 to 3 Oct 1950	Roberts 1951:59,60; Roberts 1952b:71
Paul L. Cooper	3 Oct 1950 to 28 Feb 1952	Roberts 1952b:71; Roberts 1953:67,72
Ralph D. Brown (acting?)	28 Feb 1952 to 1 Jul 1952	Roberts 1953:67,72; Roberts 1954:71
Ralph D. Brown	1 Jul 1952 to 7 Sep 1952	Roberts 1954:71
Frank H.H. Roberts, Jr. (interim)	7 Sep 1952 to 22 Sep 1952	Roberts 1954:71
Robert L. Stephenson (acting)	22 Sep 1952 to 14 Jun 1954	Roberts 1954:86; Roberts 1955:35
Robert L. Stephenson	14 Jun 1954 to 3 Sep 1954	Roberts 1955:35; Roberts 1956:43
G. Hubert Smith (acting)	3 Sep 1954 to 10 Jan 1956	Roberts 1956:43,51
Robert L. Stephenson	10 Jan 1956 to 30 Sep 1963	Roberts 1957:49-50 Stephenson 1965:85,87
Warren W. Caldwell	1 Oct 1963 to 25 Jan 1969	Stephenson 1965:87 Smithsonian Institution 1969b:2 Smithsonian Institution 1969c:2
Richard B. Johnston[a]	ca. 25 Jan 1969 to 28 Jun 1969	—

Note: The title "Director" was replaced by "Chief" in early 1952. Ralph D. Brown was the first to carry the title "Chief" (Roberts 1953:67).

[a] Johnston's actual title after Caldwell's departure was "Curator" (J.J. Hoffman, personal communication, June 1991).

In-progress salvage investigations were annually inspected by National Park Service and River Basin Surveys officials. Here, a joint NPS-RBS inspection party visits excavations at the Anton Rygh site in the Oahe Reservoir area in Campbell County, South Dakota, in the late 1950s. Left to right: unidentified, Paul Beaubien (Regional Archeologist of NPS Region Two), John Corbett (Chief Archeologist, NPS), Frank H.H. Roberts, Jr. (Director, RBS), and Alfred Bowers (RBS archeologist) (RBS photograph 39CA4-4).

Table 5. Archeologists on the staff of the Missouri Basin Project, 1946-1969.

Name	Term	Name	Term
William M. Bass III	1956[a], 1957[a], 1958[a], 1959, 1962, 1963	Wilfred M. Husted	1962-1969
J. Joseph Bauxar	1946-1949	William N. Irving	1957-1959
Walter Birkby	1963	Richard E. Jensen	1961-1969
Wesley L. Bliss	1946-1949	Alfred E. Johnson	1956-1957
Alfred W. Bowers	1959, 1962, 1963, 1964	Elden Johnson	1963
Lionel A. Brown	1962-1968	Richard B. Johnston	1964-1969
Ralph D. Brown	1952	David T. Jones	1964-1968 (?) intermittent
William G. Buckles	1961	Marvin F. Kivett	1946-1949
G. Ellis Burcaw	1950	Donald J. Lehmer	1950-1951
Warren W. Caldwell	1956-1969	Lee G. Madison	1958-1969
Richard E. Carter	1962	Oscar L. Mallory	1962-1969
Alan H. Coogan	1958	Charles H. McNutt	1957-1960
Paul L. Cooper	1946-1954	George Metcalf	1947-1953, 1955[c]
Robert B. Cumming, Jr.	1946-1954	Carl F. Miller	1951, 1955, 1956, 1962
James J.F. Deetz	1958	John E. Mills	1952-1953
Walter D. Enger, Jr.	1950	Jon Muller	1962
Franklin Fenenga	1950-1953	Robert W. Neuman	1956-1966 (?)
William J. Folan	1963	Frank H.H. Roberts, Jr.	1952
Thomas R. Garth	1950	Stephen H. Schwartz	1963
Bernard Golden	1958	Robert L. Shalkop	1950-1951
Robert E. Greengo	1957[a]	James M. Shippee	1947-1953
Donald D. Hartle	1950, 1951-1953, 1957	G. Hubert Smith	1951-1953, 1954-1968
Vernon R. Helmen	1962[b]	Ralph S. Solecki	1952
J.J. Hoffman	1962-1969	James J. Stanek	1962
James H. Howard	1957[a]	Robert L. Stephenson	1952-1954, 1956-1963
Jack T. Hughes	1946-1949	Waldo R. Wedel	1946-1949, 1951[c], 1955[c], 1956[c], 1957[c]
Harold A. Huscher	1953, 1954, 1956-1958	Richard P. Wheeler	1949-1959

Note: This information has been taken from River Basin Surveys annual reports. The table includes individuals in positions described as archeologists, field assistants, and physical anthropologists.

[a] Technically assigned to the Washington office of the River Basin Surveys, but detailed to the Missouri Basin Project. Greengo and Howard worked outside the Missouri River Basin while detailed to the Missouri Basin Project.

[b] Worked on a voluntary basis.

[c] Detailed from the U.S. National Museum.

Notes

[1] Brew 1961:3.
[2] Ibid.; Roberts 1952a:352; Wedel 1947a:220 and 1967:590. The map on page 11 in this book shows IASP reservoir projects in the MRB through the end of 1951.
[3] Baumhoff 1951:276-277.
[4] Strong et al. 1945.
[5] Jennings 1985:282.
[6] Kahler 1947:216.
[7] Ibid.
[8] Roberts 1952a:352 and 1961a:524; see also Kahler 1947:216.
[9] Brew 1961:3-4.
[10] Smithsonian Institution 1968:54-56; Johnson 1966:1595; Jennings 1985:282; see also the Committee for the Recovery of Archaeological Remains 1958:2. The text of the agreement is reproduced herein as Appendix A.
[11] A copy of the 1961 agreement is in the National Anthropological Archives, hereafter referred to as NAA. The 1965 agreement is reproduced in Smithsonian Institution 1968:57-58. Both documents appear in the present study as Appendices B and C, respectively. The 1945 agreement was ultimately revised "Because of changes in the [salvage] program through the years and because the auditors advise that the language of the Memorandum is an inadequate base on which to transfer funds" (draft memorandum from Chief, Division of Interpretation, NPS, to the Director, NPS, September 15, 1959, in NAA, River Basin Surveys Records, Records of the Washington Office, Box 46, Correspondence with the NPS Western and Capitol Regions, folder entitled "The Regional Director's Office").
[12] Although not active participants in the salvage work, Corps of Engineers and Bureau of Reclamation personnel often shared information and assisted the work in many ways. See, for example, the acknowledgment given Bureau Project Engineer Philip E. Ehrenhard "for providing reservoir maps, engineering data, and wise counsel" during the 1952 investigations in the Jamestown Reservoir area (Wheeler 1953:2; see also Roberts 1952a:353).
[13] Wedel 1947b:11.
[14] Roberts 1952a:353.
[15] The history of the funding of the Interagency Archeological Salvage Program, and the funding sources used for it, are a complicated story involving multiple bureaus, agencies, and levels of government. Bobbie H. Ferguson of the Bureau of Reclamation's Technical Services Center in Denver, who is reconstructing much of this history from primary documents, has located abundant documentation relating to the early IASP funding arrangements, including discussions of their propriety or impropriety, in National Archives Record Group 51, Bureau of the Budget Records, Subject Files for Director, folder entitled "Archeology." The legal opinion is stated in a memorandum from therein dated March 27, 1947, from Mastin G. White, Solicitor, Department of the Interior, Washington, D.C., to the Chairman, Coordination Committee; Subject: Expenditure of Construction Funds for Archeological Excavations.

[16] See memorandum from Charles W. Kinney, Corps of Engineers, October 28, 1946, to Mr. Beard, Corps of Engineers; Subject: Meeting Held on 25 October 1946 with Interested Parties Relative to Archaeological Investigations at Impoundments; memorandum from C.D. Curran, Bureau of the Budget, August 15, 1947, to the Files; Subject: Corps of Engineers-National Park Service Relationship in regard to Archaeology; and memorandum for the files from W. Barton Greenwood, Bureau of the Budget, undated but accompanied by a routing slip dated September 19, 1947; Subject: Discussion with Interior Department representatives concerning the financing of work required...to recover archeological deposits in areas that will be affected by the construction programs of the Corps of Engineers and the Bureau of Reclamation. These documents are in National Archives Record Group 51, Bureau of the Budget Records, Subject Files for Director, folder entitled "Archeology."

[17] Letter from Kenneth C. Royall, Secretary of the Army, September 22, 1947, to the Honorable James E. Webb, Director, Bureau of the Budget, in National Archives Record Group 51, Bureau of the Budget Records, Subject Files for Director, folder entitled "Archeology."

[18] Letter from F.J. Lawton, Acting Assistant Director, Bureau of the Budget, November 4, 1947, to the Secretary of the Army, in National Archives Record Group 51, Bureau of the Budget Records, Subject Files for Director, folder entitled "Archeology." See also U.S. Department of the Interior, National Park Service 1969a:page 5.6 for a partial text of this letter. See also Roberts 1952a:353 and Corbett 1961:14.

[19] Roberts 1952a:353.

[20] The dual nature of the IASP funding arrangement is outlined in "Archeological Program, Fiscal Year 1960," draft report prepared by T. Homer Black, Branch of Archeology, Division of Interpretation, NPS, July 1959, in MWAC files. "M & P" funds were used for IASP work in the MRB until superceded by the Preservation of Historic Properties (PHP) appropriation during the later years of the salvage program. The team approach to MRB water resource development is explained in "Statement of Assistant Secretary William E. Warne Before Joint Meeting of Water Resources Committee and Interior Missouri Basin Field Committee, October 14, 1947," in NAA, River Basin Surveys Records, Container 15, Records of the Washington, D.C. Office, Administrative and Reference File.

[21] In an October 1, 1991, letter to the author, Jesse D. Jennings related that much of his work as an archeologist in the NPS Region Two office in 1947 and 1948 involved enlisting the assistance of cooperating institutions; see also Jennings 1994:132-133, 291.

[22] Wedel 1948:39.

[23] Roberts 1951:66. Cooperative agreements were initially used during the earlier years of the IASP, but by at least 1954 contracts were in use as well (memorandum from Hillory A. Tolson, Acting Director, NPS, June 29, 1954, to Regional Directors, NPS; Subject: Archeological Contracts with Local Institutions; in NAA, River Basin Surveys Records, Container 15, Records of the Washington, D.C. Office, Administrative and Reference File). Jennings (1985:286-287; 1994:135, 291) states that the concept of the cooperative program was developed between 1947 and 1949, but the first actual agreements were awarded in 1950.

[24] Cooper 1955:71.

[25] See Table 1 of this book and Smithsonian Institution 1968:42 for an annual breakdown of IASP expenditures from 1946 through 1967. Also, a table dated April 13, 1967, and enclosed with a July 17, 1967, memorandum from John M. Corbett, Chief Archeologist, NPS, to NPS archeologists in the several regional offices and archeological centers lists IASP funding from Fiscal Year 1946 through Fiscal Year 1966 (copy in MWAC files). The figures in these lists do not, however, include funds contributed by the cooperating institutions.

[26] Roberts 1961a:527; see also footnote 35 below.

[27] Wedel 1948:39; Cooper 1955:4.

[28] Wedel 1967:592.

[29] Johnson 1966:1596.

[30] Brew 1961:4. Lehmer (1965:pages A.21-A.22 and 1971:7) provides a list of the cooperating institutions and the dates of their participation in IASP work in the MRB.

[31] Stirling 1948:64.

[32] Smithsonian Institution 1965:13, 39. See also footnote 48 below.

[33] Stephenson 1965:83.

[34] Stirling 1946:58 and 1947:66; Stephenson 1967a.

[35] Roberts 1953 and 1961a:527. In a reminiscent article, Edward B. Jelks (1997:1-3), who was in charge of the Austin office in 1952, recalls that the NPS continued to administer the Austin office for several years after 1952. Some of the details of the transfer of most outside-MRB RBS activities to NPS administation are explained in a letter from Conrad L. Wirth, Director, NPS, May 6, 1952, to Dr. Alexander Wetmore, Secretary, Smithsonian Institution, in NAA, River Basin Surveys Records, Container 15, Records of the Washington, D.C. Office, Administrative and Reference File.

[36] Jennings 1985:286-289.

[37] In a February 5, 1990, interview, Wilfred D. Logan indicated that the phasing out of the River Basin Surveys offices outside the Missouri River Basin was due more to reduced funding levels than to the contracting activity of the NPS (Thiessen 1992). Table 1 of this book indeed shows a marked drop in Interagency Archeological Salvage Program funds spent by the Smithsonian Institution outside the MRB in Fiscal Year 1952 and following fiscal years. In a popular book about the salvage program, Robert Silverberg (1967:67-68) attributes severe budget reductions and cutbacks in River Basin Surveys personnel to fiscal belt-tightening during the Korean War.

[38] Jennings 1985:294.

[39] Stephenson 1965:84; 1967a:89.

[40] Smithsonian Institution 1969c:2.

[41] Roberts 1961b:53-54.

[42] Judd 1967:122-126; Jennings 1985:285; Glenn 1994: Thiessen 1994a:19.

[43] Ibid.

[44] Roberts 1952a and 1961a; Smithsonian Institution 1968. MBP progress between 1946 and 1952 was also reviewed in an unpublished manuscript report (Missouri Basin Project n.d.).
[45] Jennings 1985:281.
[46] Ibid.:294.
[47] Jennings 1985.
[48] As a result of the RBS program being administratively transferred within the Smithsonian from the Bureau of American Ethnology to the newly formed Office of Anthropology, and the fact that RBS operations were confined to the MRB alone during the latter years of the program, the name "Missouri Basin Project" was dropped and the Lincoln office was referred to simply as the "River Basin Surveys." This appears to have happened early in calendar year 1966 (Smithsonian Institution 1966b:2). The MBP title is used throughout the present study, however, to distinguish the Lincoln office from other RBS operations.
[49] Roberts 1952a:352 and 1961a:525.
[50] Wedel 1947b:11.
[51] Stirling 1948:64.
[52] Ibid.
[53] Stirling 1948:68-71; Wedel 1947b:12.
[54] Stirling 1948:67.
[55] Wedel 1948:36; Stirling 1948:72.
[56] Roberts 1954:80-81; see also Roberts 1955:33.
[57] Stirling 1949:70 and 1950:77-79.
[58] Roberts 1958:56 and 1962:61.
[59] Falk 1977:152; W. Raymond Wood, personal communication, July 16, 1998.
[60] Wedel 1947b:11.
[61] Champe 1947.
[62] Ibid.:223.
[63] Roberts 1964:82.
[64] Ibid.; Wedel 1947b:11.
[65] Wedel 1953a:8-9.
[66] Wedel 1953b:68.
[67] Cooper 1955:6. The parking garage for the Robert V. Denney Federal Building in downtown Lincoln now occupies that entire block.
[68] Ibid.:6-7.
[69] Roberts 1964:82.
[70] Ibid.; see also Stephenson 1965:87.
[71] Letter from Robert L. Stephenson to the author, March 7, 1990; Lawrence L. Tomsyck, personal communication, March 27, 1990.
[72] James H. Gunnerson informed the author that the University of Nebraska, the Nebraska State Historical Society, and possibly the University of Nebraska State Museum used red and white paint swatches to identify their equipment, while he used blue to distinguish his own personal

equipment (personal communication, September 6, 1997). Former River Basin Surveys archeologist J.J. Hoffman also informed the author in June 1991 that the late Lee G. Madison, a long-service Museum Technician with the River Basin Surveys, once told him that the Nebraska State Historical Society color-coded its equipment with red and white.

[73] Petsche 1968.

A sudden Plains thunderstorm overtakes a River Basin Surveys tent camp in Dewey County, South Dakota (RBS photograph 39DW00-67).

Larry Tomsyck (Administrative Officer, Missouri Basin Project, left) with John Corbett (Chief Archeologist, National Park Service, center) and Frank H.H. Roberts, Jr. (Director, River Basin Surveys, right) outside the Missouri Basin Project office at 1517 O Street, Lincoln, Nebraska, which housed Missouri Basin Project operations from 1951 through 1963-64. Roberts directed the River Basin Surveys program from its inception in 1945 through 1963-64 (RBS photograph 00-L526).

End of the River Basin Surveys

The rationale and circumstances behind the termination of the RBS program and the establishment of the National Park Service's Midwest Archeological Center (MWAC) are largely obscure to this day and can be incompletely reconstructed only from the scattered and fragmentary documentation which has come to the author's attention. The termination of the RBS program was the result of inter- and intra-agency infighting that appears to have left deep emotional scars among those who participated in it. Naturally, few of the participants relish recalling those bitter times in any detail. Little notice of the end of the RBS and the creation of MWAC was taken in published administrative reports of the SI or the NPS, and other documentation of the decisions made about these matters in 1968 and 1969 is difficult to locate. From an outsider's vantage, it seems strange indeed that the RBS program was ended only to have its mission, staff, and facilities continued largely intact under the administration of another agency.[1]

As mentioned earlier, the original 1945 Memorandum of Understanding between the Smithsonian Institution and the National Park Service was replaced with another on April 27, 1961. Ten months earlier, the Reservoir Salvage Act of 1960 had passed, which for the first time explicitly vested the Secretary of the Interior with a central coordinating and funding role in the IASP. In addition to generally reaffirming the relationship between the two bureaus, the 1961 agreement stipulated two conditions that would help set the stage for the termination of the RBS program a few years later. The first of these was a statement that "The National Park Service will administer the [salvage program] funds and accomplish the objectives of the program through its own staff services, through research contracts with qualified educational and scientific institutions, and through transfer of working funds to the Smithsonian Institution." This clause, which was repeated in a succeeding Memorandum of Agreement enacted on April 30, 1965, not only gave the Service primary funding and coordination responsibility for the entire salvage program, but it also relegated the RBS program to being merely one of three options available to the Service for accomplishment of salvage research.

The second condition of the 1961 agreement that would prove to have an impact on the fate of the RBS program is contained in the last paragraph, which stipulated that the Memorandum of Understanding would be reviewed every three years "so that it can either be revised to fit new conditions or be terminated if it is no longer desirable." The succeeding 1965 agreement also contained an identical provision regarding program review. Eight years later, in 1969, the RBS program was terminated as the result of recommendations stemming from one of these periodic program reviews.

The first of these reviews took place in Washington, D.C., on December 14 and 15, 1964. The results are discussed in a March 2, 1965, memorandum from T. Dale Stewart (Director, Museum of Natural History) to S. Dillon Ripley (Secretary, Smithsonian Institution), which transmitted the review committee's report.[2] The reviewing committee consisted of T.D. Stewart (chair), Albert C. Spaulding (University of Oregon), Robert H. Lister (University of Colorado), Jesse D. Jennings (University of Utah), and Douglas S. Byers (R.S. Peabody Foundation). Waldo R.

Wedel, Senior Scientist of the Museum of Natural History, and Robert L. Stephenson, then acting director of the RBS, also attended the meeting for the purpose of providing information to the committee. The committee's report, signed in February 1965, commended the RBS for the important advances in archeological knowledge that had resulted from its research and for "pioneering" the application of new research techniques such as the careful use of powered earth-moving equipment for excavation projects and utilization of aerial photographs to identify archeological sites along the Missouri River. It also severely criticized the publication record of the RBS. The committee noted that "a large backlog of publishable but unedited manuscripts" existed in the RBS office, that many other reports were incomplete, and that many RBS collections were totally unreported in any published or manuscript form. Six recommendations were offered to expedite publication of the results of RBS research, including devoting less emphasis to field research and more attention to follow-up analysis and report preparation; the addition of editorial staff to facilitate report production; increasing the funds used for publication purposes; and urging RBS staff, archeologists outside the RBS, and university graduate students to complete reports on existing collections. In general, the tone of the report was critical of the RBS program, with most of the discussion and recommendations being directed at what the committee perceived as the program's poor publication record. The 1964 committee recommended that the RBS program again be reviewed in three years. Ironically in light of subsequent developments, the committee's report also recognized the "certainty of indefinite continuation of the [RBS] program" in light of federal plans to build dams in all parts of the nation "through the rest of the century."

The MBP also received sharp criticism in the mid-1960s from an NPS-sponsored review of salvage research in the Missouri River valley in the Dakotas and in a 1967 *Science* magazine article by Waldo R. Wedel, an early participant in the salvage program.[3] While generally praising the advances in knowledge that resulted from RBS researches, these assessments particularly criticized the publication record of the RBS, noting general problems with report quality and lack of synthetic content. Lehmer estimated that "Well over 70% of the work done is still to be published," and offered specific recommendations to transform the RBS from "a pedestrian salvage operation into an archeological classic."[4] RBS staff, however, disagreed with the critical views of Lehmer and Wedel. In a letter to the editor of *Science*, Richard B. Johnston, an MBP archeologist, defended the publication record of the RBS, concluding that "The Smithsonian Institution River Basin Surveys is proud of both its field operations and its publication program."[5] A former chief of the MBP, Robert L. Stephenson, also defended the RBS publication record in a paper presented before the 1967 Plains Anthropological Conference.[6] A later review of the RBS, benefiting from a perspective of the entire RBS program some fifteen years after its end, has been kinder than contemporary critics of the program.[7]

Contrary to the optimistic view of the 1964 RBS review committee, the Smithsonian itself, it seems, soon had doubts about the future role of the RBS in the Office of Anthropology and about the prospects for its continued funding as well. On October 11, 1967, the director of the Museum of Natural History, Richard S. Cowan, directed that the RBS report directly to his

Excavations near the slumping bank along the shore of the Big Bend Reservoir at the prehistoric Cattle Oiler village site in Stanley County, South Dakota, in the mid-1960s (RBS photograph 39ST224-42).

office.[8] "Scientific leadership and direction" for the RBS was to be provided through a "Scientific Advisory Committee" of four Smithsonian Office of Anthropology staff members, which he also established on that date. The Scientific Advisory Committee consisted of Richard B. Woodbury (chair and Curator of North American Anthropology); Saul H. Riesenberg (Chairman of the Smithsonian Office of Anthropology); Donald F. Squires (Deputy Director of the Museum of Natural History); and Waldo R. Wedel (Senior Archeologist of the Smithsonian Office of Anthropology). The first charge given by Cowan to the Scientific Advisory Committee was to arrange for another "ad hoc" review of the RBS. Other "specific problems" to be considered by the Scientific Advisory Committee included "the future of the River Basin Surveys and the development of appropriate funding to support its activities;" establishment of a review procedure for RBS reports and publications; and evaluation of specific "research and salvage programs" proposed by RBS director Warren W. Caldwell. Specific "recommendations for future funding" of the program were solicited from the committee.

The second RBS review meeting was held in the MBP office in Lincoln on January 30 and 31, 1968. The committee for this "ad hoc" review consisted of Douglas W. Schwartz (chair) of the School of American Research, David A. Baerreis of the University of Wisconsin, Jesse D. Jennings of the University of Utah, and W. Raymond Wood of the University of Missouri. Also attending the meeting were at least some of the members of the Scientific Advisory Committee (including Squires and Woodbury), Sidney R. Galler (Assistant Secretary for Science, Smithsonian Institution), John J. Prenzel (Administrative Officer, Museum of Natural History), John M. Corbett (Chief Archeologist, National Park Service), and Cowan, in addition to Warren W. Caldwell of the MBP staff.

Caldwell and his staff had prepared a combined organizational resume and prospectus for the RBS program, which was distributed beforehand to the committee members.[9] This extremely informative booklet was entitled "A Review of the River Basin Surveys, Smithsonian Institution, Museum of Natural History for the Ad Hoc Advisory Committee" but was informally called the "Blue Book" after the color of its covers. It provided an excellent brief overview of the history of the RBS, a profile of the present MBP facility and staff, and directions for future growth of the RBS program, including the outline of a "Projected Five Year Research Plan." The "Blue Book" — which was in actuality a position paper — strongly advocated expansion of the RBS role to include "not only salvage but general archeological researches anywhere [in the United States] which are deemed worthy of scientific pursuit".[10] How the "ad hoc" committee or the Smithsonian's management reacted to this far-reaching proposal is not documented on paper other than the committee report's passing remark that the "new research directions...seemed diffuse and inadequately formulated."[11] It is hard to believe, however, that the overseers of the RBS program could have responded enthusiastically to such a profound reorientation in program emphasis as that proposed in the "Blue Book."

Excavators at the Medicine Creek site in Lyman County, South Dakota. Big Bend Reservoir is in the background (RBS photograph 39LM2-67).

The report of the 1968 review committee (Appendix D) expressed two broad concerns about the management of the RBS program. First, the old problem of publication backlog was viewed as the "major scientific problem" facing the RBS, despite the facts that the MBP had, in the intervening years since the 1964 review, added an editor to its staff to facilitate publication, established the *Publications in Salvage Archeology* series, which was issued from the Lincoln office on what was essentially a quarterly basis, and "made a general attempt to reduce the backlog of unpublished manuscripts." The committee expressed concern that insufficient funds were devoted to the publication backlog problem, and that manuscripts were not evaluated by reviewers outside the RBS prior to publication. The committee as well encouraged the RBS to consider using more non-Smithsonian publication outlets for its productions and to reconsider "the wisdom of making each report broadly comparative as well as descriptive, instead of designing special comparative and synthesizing reports on larger regions of its concern." The latter was tantamount to a recommendation to de-emphasize the synthetic content of RBS reports, ironically contrary to criticisms often leveled at cultural resource management studies today.

The "most far reaching problem" of the RBS, to which the bulk of the seven-page report was devoted, was seen as the ambiguity of its administrative relationships to the Smithsonian and the NPS. The committee described the RBS as an "autonomous" unit of the Smithsonian whose funding was controlled by an outside bureau, the NPS. It was viewed neither as an integral part of the Smithsonian, sharing in that organization's traditional mission of research, nor as a part of the outside bureau, NPS, to whose mission it directly contributed. Neither the Smithsonian nor the NPS exercised complete administrative control of the RBS. "Thus," the report concluded, "the River Basin Surveys has, in effect, two masters but without clear lines of authority to either."[12]

This reasoning, coupled with the committee's belief that "the need for an organization such as the River Basin Surveys is no longer so crucial as it was at the time of its inception" because many of the largest dams in the country had achieved operational status, led the committee to propose four possible directions for the future of the RBS: (1) the *status quo* could be maintained, with the RBS continuing to be dually responsible to the Smithsonian and the NPS; (2) the RBS operation could be gradually phased out under the current administrative arrangement "after completing its original objectives of major salvage archeology;" (3) the RBS could be completely absorbed into the Smithsonian's management and funding structure and redirected toward "problem-directed research" of the sort proposed in the "Blue Book;" or (4) the RBS could be completely turned over to the NPS and managed by that agency as a regional research center that conducted salvage research as well as research in park areas.

The review committee's report briefly listed advantages and disadvantages of each reorganizational alternative, and offered a general endorsement of the fourth — transfer of the RBS to NPS. It cited three advantages and a single disadvantage of the NPS transfer alternative:

1. The most important advantage of this alternative is that the distinction between the funding agency and the supervisory agency would finally be clear and could result in greater quality control by the National Park Service.

2. Salvage archeology could continue under the federal agency directly responsible for that activity.

3. Such a change would result in the loss of research flexibility inherent in the affiliation of the RBS with the Smithsonian.

4. Under this arrangement RBS would be in a position to mount a mobile task force not tied to academic schedules and move into areas where emergency excavation needs develop and where no collaborators are available to carry out the necessary salvage work.[13]

The committee's report also noted in passing that the NPS already possessed two such regional research centers of this kind, in the southwestern and the southeastern United States.

In a May 3, 1968, memorandum to Cowan, Warren W. Caldwell, Director of the RBS, took issue with several of the review committee's criticisms and urged that the RBS be fully absorbed into the Smithsonian structure with NPS funding continuing at decreasing levels until all salvage projects "now at hand" were completed.[14] His suggestion was not implemented.

The undated report of the 1968 review committee was received by Museum of Natural History Director Richard S. Cowan by April 4, 1968.[15] A final decision regarding the fate of the RBS was not made for over a year after the "ad hoc" review meeting. However, it is clear that the recommended alternative — transfer of the RBS to the NPS — was the subject of discussions during the ensuing months. On September 6, 1968, George B. Hartzog, Jr., Director of the NPS, wrote to Secretary S. Dillon Ripley II of the Smithsonian seeking his "thoughts and reactions" on the proposed transfer.[16] In his reply, dated in January 1969, Ripley proposed a meeting between Smithsonian and NPS officials to resolve the matter.[17] The suggested meeting was held on February 17, 1969, and was attended by Cowan and Galler of the Smithsonian and Ernest A. Connally (Chief, Office of Archeology and Historic Preservation), John Corbett (Chief Archeologist) and Zorro Bradley (Assistant Chief Archeologist) of the NPS. At the meeting, it was agreed that the MBP would be transferred to the NPS effective July 1, 1969, and that the two bureaus would cooperate to work out the many details of the transfer.[18] The apparently informal agreement also stipulated that the NPS would continue the "present operations of the River Basin Surveys ... for the foreseeable future," which meant, in effect, continuing the salvage mission of the RBS.[19]

The last home (1963/64-1969) of the Missouri Basin Project at 1835 P Street, Lincoln, Nebraska (RBS photograph 00-L1178).

A River Basin Surveys field crew loaded into vehicles and ready to start the day's work at a nearby site in Sully County, South Dakota (RBS photograph 39SL00-50; courtesy of W. Raymond Wood).

Most of the staff of the River Basin Surveys office in Lincoln posed for a group photograph in the late 1960s. Left to right: Warren Caldwell (Director), unidentified woman, Linda Stubbendick (Clerk-Typist), Joyce Williams (Secretary), Paulette Workman (Administrative Clerk), Richard Johnston (Assistant Director), Jerry Livingston (Scientific Illustrator; seated), Jerry Petsche (Editor), J.J. Hoffman (Archeologist), Lionel Brown (Archeologist), Clarence Johnson (Museum Technician), Gaillard Jackson (Museum Aid; seated), Oscar Mallory (Archeologist), Ed Dodd (Museum Technician), Richard Jensen (Archeologist), Lee Madison (Museum Technician; seated), and G. Hubert Smith (Archeologist; seated). The photograph was probably taken by Photographer Wayne Nelson, who does not appear in the group. Archeologist Wilfred M. Husted is also absent (RBS photograph).

Donald Lehmer, a cooperating investigator, taking a break on driftwood during research in the Oahe Reservoir area ca. 1965 (RBS photograph 39CO6-22).

Many of the details of the transfer were resolved at a second meeting held on February 26, which was attended by the same individuals as well as Riesenberg, Woodbury, Richard B. Johnston (who directed the MBP for several months prior to its transfer to the NPS[20]), Samuel D. Falbo (a Personnel Management Specialist for the SI), Lawrence L. Tomsyck (Administrative Officer, MBP), and Paul K. Knierim (Assistant Director, Museum of Natural History) of the Smithsonian staff, as well as Wilfred D. Logan, Chief of Archeological Research in the Midwest Regional Office of the National Park Service, and other administrative officials of both agencies. The agreements reached at this meeting were summarized in an attachment to a February 28, 1969, letter from Knierim to Corbett.[21]

They covered such subjects as establishing the effective date of transfer; transfer to the NPS of the lease for the space occupied by the MBP; disposition of the MBP collections, records, and library; loan of specimens to other institutions; transfer of personnel and non-expendable property to the NPS; issuance of RBS publications "in process" at the time of the transfer; development of a memorandum of agreement between the two agencies for future collaborative research; and the preparation of a joint press release to formally announce the administrative change. It was also agreed in general terms that the Smithsonian in the future may engage in archeological research in the Missouri Basin with the cooperation of the newly established NPS office in Lincoln. The stage was now set for the transfer of the MBP to the NPS.

Notes

1 The bulk of surviving documentation relating to the end of the RBS exists at the National Anthropological Archives of the Smithsonian Institution in Washington, D.C. Relevant documents are in the U.S. National Museum, Department of Anthropology records, primarily in the "River Basin Surveys Files 1965-1969" and the "Richard Woodbury Office File on 'RBS Reorganization.' " References to National Anthropological Archives holdings that follow will be cited as NAA. Lesser amounts of information survive at the Midwest Archeological Center and the National Park Service archives in the Harpers Ferry Center at Harpers Ferry, West Virginia. The circumstances behind the termination of the River Basin Surveys program have also been briefly reviewed by Glenn (1994) and Thiessen (1994a), based on use of largely different sources.

2 In NAA.

3 Lehmer 1965, later revised and published in 1971; Wedel 1967.

4 Lehmer 1965:E-13.

5 Johnston 1967:1685.

6 Stephenson 1967b.

7 Jennings 1985.

8 Memorandum from Cowan to Richard B. Woodbury, October 11, 1967, in NAA.

[9] Smithsonian Institution 1968.
[10] Ibid.:47-52.
[11] See Appendix D.
[12] Jesse D. Jennings (personal communication to Thomas D. Thiessen, October 3, 1991), a former NPS archeologist in the Region Two office during 1947 and 1948, has pointed out that in the early days of the IASP, NPS personnel (on the regional level at least) lacked authority to discuss IASP policy and funding matters with Smithsonian personnel and consequently had no say in how NPS funding was used by the RBS. Research was not regarded by the highest levels of NPS management as one of the three purposes of the NPS (preservation, protection, and interpretation), and so implementation of the reservoir salvage research program was left entirely in the hands of the RBS. See Jennings' comments on the early NPS-RBS relationship in his recently published memoir (Jennings 1994:132-133).
[13] Quoted from the report of the 1968 committee that reviewed the River Basin Surveys; see Appendix D.
[14] NAA.
[15] A copy of Cowan's April 4, 1969, letter acknowledgment of receipt is in the possession of W. Raymond Wood, University of Missouri.
[16] Copy in Midwest Archeological Center files.
[17] Copy of letter in Midwest Archeological Center files; the exact date is not legible, but January 21 can be inferred from another copy in the NAA.
[18] Letter from Hartzog to Ripley, February 28, 1969; copy in Midwest Archeological Center files.
[19] Ibid.
[20] Warren Caldwell left the RBS in January 1969 to accept the chairmanship of the Department of Anthropology at the University of Nebraska.
[21] Copy in Midwest Archeological Center files; see also Appendix E. Richard B. Johnston is identified as "Dr. Johnson" in the attachment to the February 28 letter, but Lawrence L. Tomsyck (personal communication, January 2, 1992) has confirmed that the man in question was Johnston.

River Basin Surveys crews pioneered the use of mechanized earth-moving equipment to remove non-cultural overburden from archeological sites, such as here at the Sommers site, a prehistoric village site in the Big Bend Reservoir area in Stanley County, South Dakota (RBS photograph 39ST56-43; courtesy of W. Raymond Wood).

Establishment of the Midwest Archeological Center

The changeover evidently proceeded smoothly. On April 1, 1969, A-D-T Incorporated notified Administrative Officer Lawrence L. Tomsyck of the Missouri Basin Project that it would not renew the lease on the MBP quarters at 1835 P Street when it expired on June 30.[1] In consequence, it became necessary to seek a new building to house the soon-to-be-established NPS research center. For a time, consideration was given to moving the facility and staff to Omaha, which would have the advantage of placing the center in proximity to the headquarters of the Midwest Region of the NPS, the regional office that would ultimately exercise supervision of the new center.[2] Early press announcements, dated in April of 1969, were either mute on the location of the facility or indicated that the office would "probably" remain in Lincoln.[3] By mid-May, however, the decision to leave the office in Lincoln seems to have been made, and announcements appeared in the press.[4] Nebraska Congressman Robert Denney interceded at the request of the Lincoln Chamber of Commerce and his influence apparently was instrumental in deciding the issue.[5] The cost of moving the staff and the office, estimated at $115,000,[6] and the presumed financial loss to the city of Lincoln appear to have been important factors in the decision to leave the office in Lincoln. The May 20, 1969, issue of the *Review Preview*, a publication of the Lincoln Chamber of Commerce, announced that

> A $200 million annual payroll will stay in Lincoln now that the *Smithsonian Institution's* Lincoln based research office has found office space on North 27th Street. The organization's scheduled plans to move to Omaha have been cancelled.

The Chamber of Commerce announcement was not altogether accurate, as it overestimated the Center's annual payroll by a factor of approximately 1,000!

New quarters were soon located in two adjacent buildings at 2605 and 2621 North 27th Street, and the General Services Administration arranged to lease a total of 9,150 square feet for an annual rent of $27,450.[7] One building (2605) was used primarily for office space, records storage, library, and photographic and cartographic studios, while the other building (2621) housed the analytical laboratory and collections. Field equipment was stored in a rented commercial building on the west side of 16th Street, between O and N Streets, where the parking garage for the Robert V. Denney Federal Building now stands.

The new office, named the Midwest Archeological Center, was formally established on July 1, 1969, as part of the Office of Archeology and Historic Preservation (OAHP) of the Washington Office of the NPS.[8] The name, Plains Archeological Research Center, was considered for the new office briefly in early 1969.[9] Dr. Wilfred D. Logan, formerly Chief of Archeological Research in the Midwest Region, transferred to Lincoln to become Chief of the new center.[10] His assistant, Archeologist Jackson ("Smokey") W. Moore, Jr., and a vacant Clerk-Stenographer position also transferred to Lincoln. The new office was assigned the number 921 (later changed to its current number, 6115) as its organizational code,[11] and its organizational acronym was MIDW (later changed to MWAC, its current form). Sixteen full-time employees of the Missouri Basin

Project transferred to the NPS on June 29, the beginning of a federal pay period.[12] One archeologist position became vacant shortly after the transfer to NPS because of the resignation of Oscar L. Mallory.[13]

Apart from local newspaper coverage, the end of the River Basin Surveys and the establishment of the Midwest Archeological Center received little fanfare. The change was explained in the April 1969 issue of *The Smithsonian Torch*, as mentioned above, but the annual reports of the Smithsonian for Fiscal Years 1969 and 1970 (issued under the title *Smithsonian Year* for the appropriate year) contain no mention of the termination of the RBS other than a short footnote in the listing of Smithsonian staff contained in the report for 1969, which merely observes that the RBS "was transferred to the National Park Service 28 June 1969."[14] The annual summary of NPS archeological activities for Fiscal Year 1968 mentions the 1968 "ad hoc" review of the RBS and suggests that "a substantial change may be made in the near future in the operations of the River Basin Surveys" office,"[15] but the report for the following year mentions only briefly that Corbett and Bradley initiated discussions in February 1969 with Smithsonian representatives regarding the transfer of the RBS to NPS.[16] The National Park Service archeological program report for fiscal year 1970 featured a photograph of the newly established Midwest Archeological Center as its frontispiece.[17] Page 37 of the same report briefly noted that

> Chief Archeologist Corbett and Assistant Chief Archeologist Bradley spent considerable time during the fiscal year setting up the Midwest Archeological Center and dealing with its major problem, the excavation of the steamboat *Bertrand.*

Little notice of the change was also taken in the written minutes of the 1969 and 1970 annual meetings of the Committee for the Recovery of Archaeological Remains, at which various federal bureaus reported on their archeological activities during the previous year. In his report to the 1969 gathering of the CRAR, Richard B. Johnston of the MBP related that

> The year 1968 at the Smithsonian River Basin Surveys was one of retrenchment and change arising chiefly from fiscal conditions and the process of administrative review and reassessment of the role of the Smithsonian Institution and the Inter-Agency Archaeological Salvage Program. The process of examination and administrative action is not yet complete, and the outcome of any reorientation and the trend of resultant changes should be much clearer as this group convenes a year hence.[18]

The Smithsonian evidently did not present a formal, written report at the next year's meeting of the Committee for the Recovery of Archaeological Remains, in 1970, but Wilfred D. Logan, reporting on archeological activities within the NPS Midwest Region, merely observed that "The transfer of the staff of the River Basin Surveys, Smithsonian Institution, to the newly formed [Midwest Archeological] Center occurred in orderly fashion."[19] If there was any further discussion of the transfer at that year's meeting of the Committee for the Recovery of Archaeological Remains, it was not documented in the minutes of the meeting.

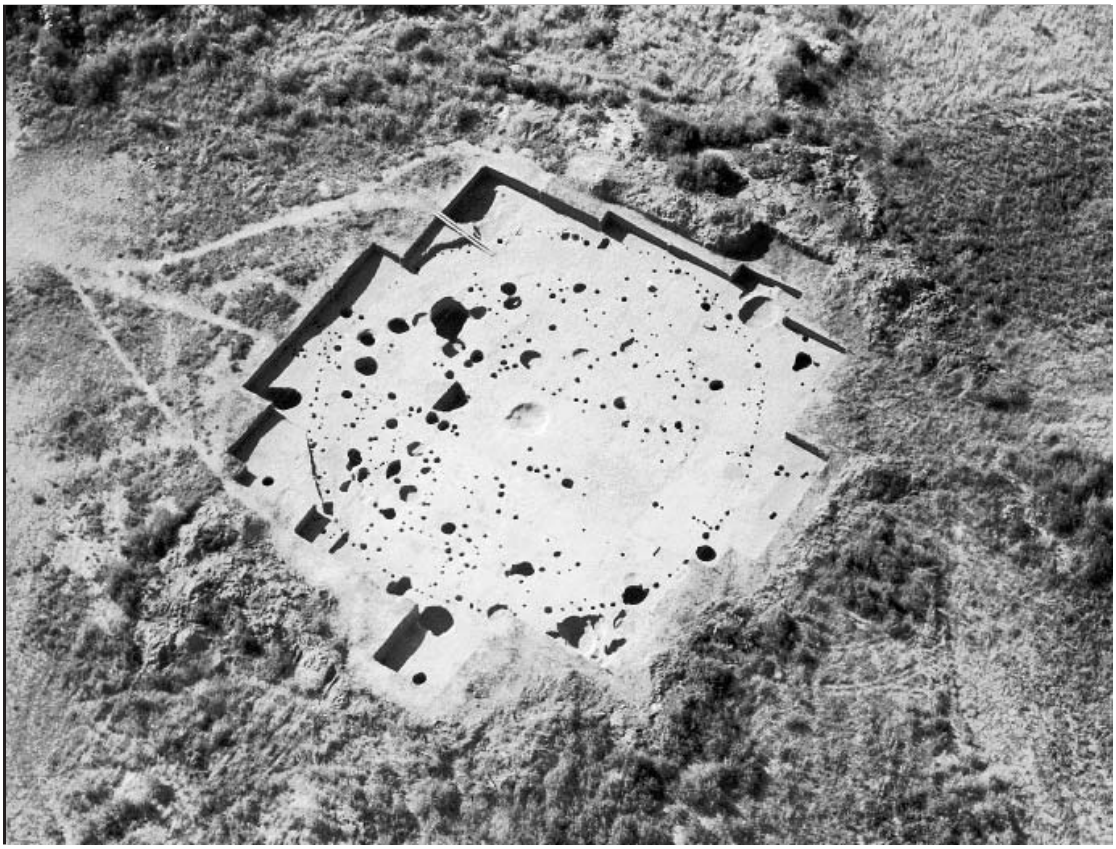
The Smithsonian Institution's spokesman at the 1973 CRAR meeting, Clifford Evans, did, however, offer a sort of *post facto* explanation of the reason for the Smithsonian's standing down from the salvage program:

> As reported last year, the Department [i.e., the National Museum of Natural History] is no longer directly involved in salvage archeology... The reason for this is quite clear: The Smithsonian Institution does not have the staff; the Smithsonian does not have the space; other organizations already charged with salvage, such as State archeologists, seem more logical to support such activities; if a national program of salvage archeology (or public archeology) is contemplated, it must have local backing and State support even if the funds are Federal; Congress requested the Smithsonian Institution to end some of its programs originally proposed for short-term, and from past experiences it would appear as if centralized coordination in a Federal agency, such as the Smithsonian Institution, is not the best solution when other Federal bodies are charged with the recording of sites of historical and scientific significance, etc.[20]

Notes

1 A. DuTeau to Tomsyck, April 1, 1969, in MWAC files.
2 Thiessen 1992.
3 *Lincoln Evening Journal and Nebraska State Journal,* April 2, 1969; *Omaha World-Herald,* April 3, 1969; National Park Service, Midwest Region press release dated April 4, 1969; Lincoln Journal, April 8, 1969; Smithsonian Institution 1969a:1; all in MWAC files.
4 *Omaha World-Herald,* May 13, 1969; and the *Lincoln Evening Journal and Nebraska State Journal,* May 13, 1969.
5 Ibid.
6 Anonymous cost comparison sheet in MWAC files.
7 Memorandum from Joe Riha to Robert Giles, June 4, 1969; and General Services Administration, Record of Space Acquired, July 1, 1969; both in MWAC files.
8 Midwest Region memorandum 69-67, July 8, 1969.
9 Monthly reports of the Division of Archeology, National Park Service, for February and March, 1969; and interview with Wilfred D. Logan, February 5, 1990 (Thiessen 1992).
10 Monthly reports of the Division of Archeology, National Park Service, for February and March 1969.
11 Midwest Region, Accounting Office Memorandum No. 54, July 9, 1969.
12 Leonard B. Pouliot, Smithsonian Institution, to James D. Workman, National Park Service, May 1, 1969, in MWAC files. See also the monthly report of the Division of Archeology, National Park Service, for June 1969, page 8. The SI retained all the former RBS positions, and the NPS had to find enough new positions for the transferring personnel (J.J. Hoffman, personal communication, June 1991).

[13] U.S. Department of the Interior, National Park Service n.d.d:62, 65-66; see also the monthly report of the Division of Archeology, National Park Service, for July, 1969.
[14] Smithsonian Institution 1969b:683.
[15] U.S. Department of the Interior, National Park Service n.d.a:37.
[16] U.S. Department of the Interior, National Park Service n.d.c:48.
[17] U.S. Department of the Interior, National Park Service n.d.d.
[18] U.S. Department of the Interior, National Park Service 1969b:70.
[19] U.S. Department of the Interior, National Park Service 1970:18.
[20] Evans 1973:132-133. The allusion to the previous year's report to the CRAR refers to a brief mention of the fact that the Smithsonian no longer participated in the salvage program, but no details were recorded in the minutes of the 1972 meeting.



An excavated prehistoric house floor at the Lower Grand site in the Oahe Reservoir area near Mobridge, Corson County, South Dakota. These excavations were made by University of Missouri personnel working under contract to the National Park Service (courtesy of W. Raymond Wood).

Concluding the Salvage Mission, 1969–1975

After its formal establishment on July 1, 1969, the Midwest Archeological Center's primary mission was the identification and "salvage" of archeological resources on water-development project lands administered by bureaus other than the National Park Service. In that role, the Center continued both the functions of the MBP and the contracting activity previously overseen by the NPS Chief of Archeological Research in the Midwest Region. Consequently, the Center's salvage work was performed through a combination of field investigations conducted directly by Center staff and research contracts awarded to local institutions for needed investigations in reservoir areas. Transfer of the experienced staff and specialized facilities of the MBP to the NPS virtually created an "instant" capability for the NPS to conduct extensive field research in reservoir areas, a type of activity not previously undertaken by the archeological staff in Omaha.[1]

When the Midwest Archeological Center was established, there was precedent in the NPS for pooling archeological expertise. The Southwest Archeological Center was formed at Globe, Arizona, in 1954.[2] It later underwent name and location changes, at times being called the Arizona Archeological Center and the Western Archeological Center, and today it exists as the Western Archeological and Conservation Center in Tucson, Arizona. The Service's second archeological center, today known as the Southeast Archeological Center, originated at Ocmulgee National Monument, Macon, Georgia, in the fall of 1966 and was moved to Tallahassee, Florida, in 1972.[3] The Midwest Archeological Center was the Service's third archeological center to be established, and was soon followed by the fourth, the Chaco Archeological Center, which was established in late 1969 to conduct research at Chaco Canyon National Monument, New Mexico.[4] Headquartered in Albuquerque, New Mexico, the Chaco Center was absorbed into the multi-disciplinary Southwest Cultural Resources Center in Santa Fe in 1976.[5] With the exception of the Chaco Archeological Center, which existed to implement a research program focused largely on a single park, these centers were of a generalized nature and provided a range of archeological services. All three carried out Interagency Archeological Salvage Program responsibilities.

The establishment of such research centers was in contradiction to a long-standing NPS disinterest in conducting research. As late as 1940, an NPS spokesman, A.R. Kelly, then Chief, Archeologic [*sic*] Sites Division of the Branch of Historic Sites, stated unequivocally that "no considerable research staff in archaeology is practicable, probable, or desirable in the National Park Service."[6] Why, then, did the Service later reverse that position by pooling archeological expertise in formal research centers, a practice virtually unique among the nation's land-managing agencies? The reasons are not clear, but Logan and Calabrese have suggested that it was due to the large size and complexity of the research efforts undertaken in parks and elsewhere after the Second World War.[7] To increase the Service's knowledge of its resources and improve its interpretive programs, large research projects were necessary; large research projects, in turn, required the establishment of logistical and administrative bases, some of which evolved into permanent archeological research facilities to serve the Service's continuing archeological needs. Certainly, the salvage program was the immediate impetus for establishment of the Midwest Archeological

Center, which was not unusual in light of the salvage mission of its direct predecessor, the MBP, and the fact that the other NPS archeological centers also administered the interagency salvage program in their respective regions. In fact, it was common practice for the archeological centers to both oversee the interagency salvage work in their regions and conduct park-related research as well. The Midwest Archeological Center was no exception to this, although the salvage program dominated the Center's activities prior to 1975.

To conduct salvage investigations, the Midwest Archeological Center maintained a staff of archeologists, a fleet of vehicles (several Suburban-style two-wheel-drive vehicles and a two-ton stakebed Dodge truck, all inherited from the MBP), and a quantity of field equipment (likewise inherited from the MBP) sufficient to equip multiple field crews simultaneously, in the MBP tradition. In the early years, many of the archeologists on the Center's staff were individuals with research interests and experience in the Middle Missouri subarea of the Great Plains, again, a legacy of the attention devoted to the Missouri Basin during the salvage program. Many of these individuals, such as Richard B. Johnston and J.J. Hoffman, were former staff members of the MBP, and others, such as Carl R. Falk and F.A. Calabrese, had acquired Middle Missouri experience as student participants in research conducted by institutions working under contract to the NPS. Later, as the Center's mission evolved more and more toward research in park areas, personnel with other professional orientations were added to the Center's staff.

In addition to supporting its own staff research capability, a portion of the Center's annual funding for salvage research was used to fund contracts with local colleges, universities, museums, and state historical societies for salvage investigations within and outside the Missouri Basin.

Although the establishment of the Midwest Archeological Center was little heralded at the time, the Center took off to a running start with its field activities. Ironically in light of the traditional salvage mission of the Missouri Basin Project, the first field investigation conducted by the newly formed Center occurred in a park. The first Center field crew was already excavating at Fort Union Trading Post National Historic Site when the transfer to the NPS became effective. Led by RBS archeologist Wilfred M. Husted, a party of RBS excavators began work at Fort Union on June 12, 1969, and continued through August 20.[8] The crew automatically became NPS personnel when the changeover occurred on July 1.[9]

Another in-progress project that the Center inherited at the time of its establishment was continuing supervision of the excavation of the sunken steamboat *Bertrand*, which had begun the previous year. The *Bertrand* work blended aspects of both a treasure hunt (by private individuals from Omaha, who sponsored the work) and an archeological salvage excavation, but was not related to any water resource development program, as typically characterized the federal archeological salvage effort at that time. Excavation of the *Bertrand* proved to be a major salvage undertaking.[10]

Archeologist Wilfred M. Husted's 1969 crew at Fort Union Trading Post National Historic Site, North Dakota and Montana. This was the first Midwest Archeological Center field project and the last fieldwork undertaken by a River Basin Surveys crew. These excavators started work at Fort Union as River Basin Surveys employees in June, and transferred to the National Park Service when the Center was established on July 1, 1969. Standing, left to right: Husted, Ellet Hoke, Martin Nickels, John Mortenson. Seated on fallen flag pole: Donna Slatin. In front, on ground, left to right: Mary Szymkowiak, Cynthia Vann, Kevin Anderson (courtesy of Wilfred M. Husted).

Nancy Osborn treating textiles from the steamboat Bertrand *at the Midwest Archeological Center laboratory in the early 1970s (NPS photograph).*

Filled with supplies for communities in the Montana mining fields, the *Bertrand* sank in the Missouri River in 1865 on what is today the De Soto National Wildlife Refuge. The vessel's hold constituted a priceless time capsule of mid-nineteenth century material culture. The search for the wreck's location and the subsequent excavation project were primarily funded by two private individuals from Omaha, who wished to salvage the *Bertrand's* cargo. NPS was required to oversee and guide the excavations because the wreck was discovered on federal land, which brought into play the Antiquities Act of 1906 and its implementing regulations. The excavation was initially overseen by Wilfred D. Logan from the NPS Omaha office and, from early 1968 through 1969, by Jerome E. Petsche, a writer-editor with archeological training who was on the Missouri Basin Project staff and who transferred into a similar position at the Midwest Archeological Center. In addition to supervising excavation of what remained of the vessel's hull and cargo, the NPS established a conservation laboratory on the Refuge to preserve a portion of the recovered objects. Portions of the collection were also treated at the Center's laboratory in Lincoln. Eventually, the NPS turned over the collection and laboratory to the Fish and Wildlife Service and today the *Bertrand* collections are housed and interpreted in an impressive museum on the Refuge.

The RBS program was implemented during the early stages of planning and constructing large reservoirs throughout the country. In the Missouri Basin, RBS archeologists worked in advance of, or sometimes alongside, Corps of Engineers construction crews building dams on the Missouri River mainstem. By the time the Center was established, however, dam construction was completed and the mainstem reservoirs were in operational status. Consequently, most of the reservoir salvage effort was ostensibly at an end by that time, and many archeological sites lay underwater or at water's edge. Researchers at the University of Missouri, as well as Center management and staff, realized that erosion from wave action and fluctuating pool levels in the mainstem reservoirs was having, and would continue to have for the foreseeable future, a destructive effect on the archeological resources located along the ever-changing shorelines.

Consequently, the Center's salvage efforts in the Missouri River mainstem reservoirs were focused on either: (1) excavations at sites known to be experiencing shoreline erosion, or (2) surveys to locate and inventory archeological resources undergoing erosion. The first of these efforts resulted in excavations at the Lower Grand, Walth Bay, and Helb sites during what came to be called the "Upper Oahe Project." The latter effort — shoreline surveys — was initiated in portions of the Oahe Reservoir in 1971 and 1972, but these site visits were primarily inspections of known sites suspected to be undergoing attrition from erosion rather than searches for new sites being exposed by erosion.[11] In 1973, Center personnel conducted limited shoreline reconnaissance in the Fort Randall Reservoir, South Dakota,[12] while University of North Dakota personnel under contract to the Service initiated a shoreline survey of Garrison Reservoir, North Dakota.[13] The Garrison Reservoir survey was continued in 1974 and 1975 through two subsequent contracts between the Service and the University.[14]

Wilfred Logan (third from left), NPS Regional Archeologist and Chief of Archeological Research of the Midwest Region (1962-1969) and first Chief of the Midwest Archeological Center (1969-1972), conferring with U.S. Fish and Wildlife officials about the steamboat Bertrand, *which was excavated on De Soto National Wildlife Refuge land (NPS photograph).*

Table 6. Archeological and paleontological assistance rendered to the National Park Service by the Missouri Basin Project of the River Basin Surveys, 1948-1969.

Nature of Assistance *Date(s)* Source(s)	Nature of Assistance *Date(s)* Source(s)
J. Joseph Bauxar detailed to Homestead National Monument for excavations. *4 Apr to 26 Jun 1948* Stirling 1949:72 Wedel 1953a:12	Charles H. McNutt detailed to Fort Laramie National Historic Site for excavations. *23 Sep to 15 Nov 1958* Roberts 1960:69, 87
Thomas R. Garth detailed to NPS to complete report of earlier work at Whitman Mission NHS. *27 Nov 1950 to 27 Feb 1951* Roberts 1952b:77-78	Robert W. Neuman detailed to George Washington Carver National Monument for excavations. *4-21 Dec 1958* Roberts 1960:69, 88
Theodore E. White examined paleontological remains at the South Unit of Theodore Roosevelt NP. *Jul 1952* Roberts 1954:80	Artifacts loaned for display at Jefferson National Expansion Memorial. *Fiscal Year 1959* Roberts 1960:84
Theodore E. White conducted paleontological survey at Badlands National Monument. *1-7 Jun 1953* Roberts 1954:80	G. Hubert Smith detailed to Colonial National Historical Park for excavations. *2 Apr to 1 Jun 1960* Roberts 1961b:58, 75
G. Hubert Smith detailed to National Capitol Parks to investigate the "Old Stone House." *Feb-Mar 1957* Roberts 1958:60	Wilfred M. Husted detailed to Fort Laramie National Historic Site for excavations. *21 Oct to 4 Nov 1963* Stephenson 1965:96, 104
Artifacts loaned for display at Wind Cave National Monument. *Fiscal Year 1958* Roberts 1959:68	Wilfred M. Husted detailed to Fort Laramie National Historic Site for excavations. *9-22 May 1969* Smithsonian Institution 1969b:91
G. Hubert Smith detailed to Fort McHenry National Monument and Historic Shrine for excavations. *2 Jan to 1 Oct 1958* Roberts 1959:71-72 Roberts 1960:69, 89	Wilfred M. Husted detailed to Fort Union Trading Post National Historic Site for excavations. *12-30 Jun 1969* Smithsonian Institution 1969b:91 Hunt 1986:18

A Midwest Archeological Center field crew excavating at the Bendish site in 1969. Bendish is a prehistoric village site adjacent to the Oahe Reservoir in Morton County, North Dakota. Several of the crew members were Native Americans from the nearby community of Cannonball on the Standing Rock Reservation. Throughout the life of the salvage program, Native Americans were often employed on field crews (NPS photograph).

Midwest Archeological Center excavators working in 1973 at the Helb site, a prehistoric village in the Oahe Reservoir area, Campbell County, South Dakota (NPS photograph).

Reservoir-related salvage excavations were undertaken by the Center at two Plains Village period sites during the summer of 1969. The first was initiated in June by a University of Missouri field crew working under the terms of a contract with the Midwest Region. This work, which was directed by then-graduate students Carl R. Falk and Stanley A. Ahler with Professor W. Raymond Wood as principal investigator, was conducted at the Lower Grand (aka Davis) site (39CO14) along the shore of the Oahe Reservoir in Corson County, South Dakota, near the town of Mobridge.[15] The other reservoir salvage excavation conducted in 1969 took place at the Bendish (aka Fort Rice) site (32MO2) in Morton County, North Dakota, also on the shore of the Oahe Reservoir.[16] Former RBS archeologist Richard B. Johnston directed the field work and served as principal investigator. Both projects were necessitated by ongoing or anticipated impacts from the operation and/or development of the reservoir by the Corps of Engineers. The Lower Grand site, located in a maintained Corps of Engineers area, was being (and continues to be) eroded by the fluctuating reservoir pool, while recreational facilities were planned for construction in the vicinity of the Bendish site.

In terms of field methods, the 1969 work at the Bendish site represented a continuation of methods and techniques routinely applied by the RBS program to investigation of large village sites in the Middle Missouri subarea, by which name the Missouri River valley in North and South Dakota is known to archeologists.[17] However, the 1969 work at the Lower Grand site was the first application of a rigorous, innovative field methodology devised by Falk and Ahler to investigate certain problems not emphasized during the earlier RBS work, such as definition of inter- and intra-site variability and delineation of prehistoric patterns of faunal and floral resource utilization. To that end, precise horizontal and vertical provenience controls were maintained throughout the excavations, and virtually all excavated soil from both general and feature contexts was waterscreened to achieve consistent and systematic recovery of artifacts and other cultural debris.[18] Prior to 1969, no excavations had taken place in the Middle Missouri with such meticulous field methodology. Since then, such techniques have come to be more broadly applied in the Middle Missouri and elsewhere, but the collections and data gathered under Center auspices by Falk and Ahler and their colleagues from Lower Grand and two other, nearby sites continue to be among the most systematic and most fully documented archeological collections made in nearly three decades of Middle Missouri archeological salvage research.

No further work was conducted at the Bendish site, but in the summer of 1970 another University of Missouri crew returned to the Oahe Reservoir near Mobridge to begin excavations at the Walth Bay site (39WW203). This work, conducted under the immediate field direction of Kerry A. Lippincott assisted by Falk, and again with Wood as principal investigator, was also carried out in accordance with a second contract awarded by the Midwest Region. The field research strategy, which had been initially applied to the Lower Grand site, was incorporated in the research design for the Walth Bay investigation.[19] As at Lower Grand, Walth Bay was a large village site undergoing erosion from the Oahe Reservoir pool. Two weeks of excavations

were conducted at the Walth Bay site in 1972 under the direction of Ahler. This work was directed toward the investigation of preceramic components discovered during the 1971 fieldwork.

Falk joined the Center's staff as an archeologist in September 1970 and, subsequently to that, directed Center crews at the Walth Bay site in 1971 (in collaboration with Ahler) and at the Helb site (39CA208) north of Mobridge in 1972 (in collaboration with F.A. Calabrese) and 1973 (with John E. Ehrenhard and Robert K. Nickel as field directors). Together, the Center-conducted or Center-sponsored investigations at these three sites — Lower Grand, Walth Bay, and Helb — were collectively regarded as the Center's "Upper Oahe Project" in recognition of the specific research objectives and methodologies which were essentially common to the 1969-1973 investigations at all three sites.

The Center's shoreline erosion investigations have contributed significantly to scientific knowledge of the prehistory of the Middle Missouri. Studies which resulted from the Upper Oahe Project investigations, or which utilized data from that work, are cited in Table 7. The 1970-1971 work at the Walth Bay site resulted in the discovery and partial excavation of two stratified Archaic horizons underlain by an intact Paleoindian-age horizon, some of the first substantial preceramic manifestations reported for the Missouri valley in the Dakotas.[20] The 1973 and later Garrison Reservoir work resulted in the documentation of one of the earliest known archeological sites in the state of North Dakota[21] and the discovery of dozens of other preceramic sites which, prior to reservoir erosion, were for the most part buried and virtually undetectable.

Together, these early sites suggest a far more widespread and sustained human use of the Missouri River valley in pre-Woodland times than previously believed. These shoreline investigations, limited in extent as they were, only "scratched the surface" in terms of the preceramic resources that lay under the Missouri River valley terraces in the Dakotas.

The salvage program activities of the Center were not restricted solely to Corps of Engineers project lands, although the Corps' Missouri River mainstem reservoirs in North and South Dakota were a major focus of the salvage efforts of the Center (and previous to that, of the RBS). Survey and excavation projects were also conducted on Bureau of Reclamation project lands[22] or on private lands that would be affected by Bureau of Reclamation undertakings, such as transmission line corridors and reservoirs and water diversion canals for irrigation purposes.[23] These projects were generally undertaken at the request of the Bureau of Reclamation and with funds provided by the Bureau for that purpose. The work was conducted through research contracts administered by the Center.

Another bureau served by the Center's salvage program activities was the Soil Conservation Service (SCS; renamed Natural Resources Conservation Service) of the U. S. Department of Agriculture. The SCS administered the Small Watershed Program to assist farmers with the

Table 7. Oahe Reservoir salvage excavations conducted or contracted by the Midwest Archeological Center, 1969-1973.

Name, Site Number	Year(s)	Research Director(s)	References
Bendish, 32MO2	1969	R.B. Johnston	Semken and Falk 1987 Thiessen 1975, 1976, 1995
Helb, 39CA208	1972 1973	C.R. Falk and F.A. Calabrese	Ahler 1976, 1977 Falk and Ahler 1988 Falk and Calabrese 1973 Nickel 1977 Rosebrough 1994, 1995 Semken 1976 Semken and Falk 1987 Thiessen and Nickel 1975 Zalucha 1977, 1983
Lower Grand, 39CO14 (aka Davis)	1969	W.R. Wood, C.R. Falk, and S.A. Ahler	Ahler 1975a, 1975b, 1976, 1977, 1979, 1989a, 1989b, 1992 Falk and Ahler 1988 Morey 1986 Nickel 1974, 1977 Peterson 1980 Semken 1976 Semken & Falk 1987
Walth Bay, 39WW203	1970 1971 1972	W.R. Wood, C.R. Falk, and S.A. Ahler	Ahler 1975a, 1975b, 1976, 1977, 1979, 1989a, 1989b, 1992 Ahler et al. 1974 Falk and Ahler 1988 Morey 1986 Nickel 1974, 1977 Peterson 1980 Semken 1976 Semken and Falk 1987, 1991 Weymouth 1976

Excavated postholes where timbers once stood in the palisaded fortification around the prehistoric Helb village site in the Oahe Reservoir area, Campbell County, South Dakota (NPS photograph).

planning and implementation of soil conservation practices for their lands. An important part of the Small Watershed Program was the construction of numerous small dams to retard erosion in the upper reaches of creeks and other small watersheds. Beginning in 1972, information was systematically gathered on the Small Watershed Program in order to assess the need for archeological survey and salvage investigations to be conducted in areas planned for installation of dams. By means of its own staff and through research contracts, the Center funded and implemented several archeological surveys in SCS Small Watershed projects, principally in Nebraska.[24] Two projects, located within the Waubonsie Creek Watershed in Mills and Fremont Counties, Iowa, were concerned with paleontological resources, specifically micro-mammalian remains.[25] Paleontological resources had been treated as being within the purview of the Antiquities Act of 1906 long before the Center was established;[26] consequently, it was logical to interpret the authority of the Reservoir Salvage Act (the principal authority for the Interagency Archeological Salvage Program) as applying to fossil remains as well.

After passage of the National Environmental Protection Act, federal agencies and the archeological community increasingly realized that federal historic preservation law extended to a wider range of federal and federally sponsored or permitted undertakings than water development projects. As a consequence, the Midwest Archeological Center sponsored a few investigations necessitated by actions of other federal bureaus unrelated to water resource development. In particular, emergency salvage projects were funded through contracts at a sewage treatment facility construction project at Cherokee, Iowa,[27] and at a sewer main installation project at La Pointe on Madeline Island in the Apostle Islands archipelago of Lake Superior, Wisconsin.[28]

While engaged in IASP activities, the Center operated with funds provided through a special Congressional appropriation called Preservation of Historic Properties (PHP), which was intended to fund a wide range of federal historic preservation activities, including the IASP.[29] PHP monies were used both for the Center's staffing and operating needs and for funding research contracts administered by the Center. Because of the nature of the PHP appropriation, PHP funds could not be used for park-related investigations. Funds for that purpose had to come from construction or other NPS funding sources, as the expenditure of PHP funds on projects within National Park System areas would constitute a conflict of interest for the bureau. No ONPS funds (i.e., money used for the "Operation of the National Park System"), however, were provided to finance the management and general operation of the Center until 1975. Over time, Congress and NPS Washington officials became concerned that PHP funds were sometimes used for in-park work that was inappropriate to the authorized purpose of the appropriation. This ultimately became one of the factors that propelled a reorganization of NPS archeological programs to ensure the integrity of the "internal" versus "external" funds used by the NPS.

With the passage of the Archeological and Historic Preservation Act of 1974, also known as the "Moss-Bennett Bill" after its Congressional sponsors, the National Park Service archeological programs were realigned to more clearly separate the internal and external programmatic

An aerial view of the prehistoric Helb village site in the Oahe Reservoir area, Campbell County, South Dakota. The Midwest Archeological Center conducted excavations here in 1972 and 1973. This once-extensive village has been virtually destroyed by shoreline erosion since this photograph was taken (courtesy of Robert K. Nickel).

responsibilities. In anticipation of this change, the Interagency Archeological Services Division was established in 1973 within the Office of Archeology and Historic Preservation in the Washington Office.[30] By mid-1975, the Interagency Archeological Services Division had established three field offices to administer its responsibilities by dividing the nation into three parts along the boundaries of federal water resource development bureaus, principally the U.S. Army Corps of Engineers.[31] The new law authorized all federal bureaus to expend funds for the purpose of mitigating the effects of their programs on archeological resources. Faced with this new authority, several land-managing bureaus — including both the Corps of Engineers and the Bureau of Reclamation — began staffing their offices with cultural resource specialists, including archeologists. Beginning in 1975, the Center was reoriented to serve the archeological resource management needs of the parks exclusively and no longer received PHP funding to conduct or contract for reservoir salvage investigations. Consequently, the Center's role in the Interagency Archeological Salvage Program, i.e., its reservoir salvage work, essentially concluded in 1975, six years after the RBS ended. Interest on the part of the NPS and academically based researchers in arranging for the analysis and reporting of old salvage program collections made during the RBS days continued for a few years,[32] but RBS and Center field parties no longer returned to reservoirs within the Missouri River Basin to salvage tangible evidence of the past. The nearly three-decades-long story of what Robert Silverberg has aptly characterized as men racing against time to save an irreplaceable archeological heritage from imminent destruction was over.[33]

Notes

1 At the time of the establishment of MWAC, two archeological positions existed in the Omaha office: the Chief of Archeological Research (also designated as Regional Archeologist in earlier years) and an assistant (Thiessen 1992). Prior to 1969, occasional field research projects had indeed been performed by NPS personnel under the direction of the Regional Archeologist/ Chief of Archeological Research in Omaha. However, these were conducted within park areas, usually for purposes of mitigating development impacts or obtaining information and artifacts for public interpretation. Regional Archeologist Paul Beaubien conducted limited excavations in several parks (e.g., Beaubien 1952, 1953a-b, 1957). Jackson W. Moore, Jr., Logan's assistant in the Omaha office, directed excavations at Bent's Old Fort National Historic Site between 1963 and 1966 (Moore 1973), at Fort Union Trading Post National Historic Site in 1968 (Hunt 1986), and elsewhere. In addition to these park-related investigations by NPS personnel, Missouri Basin Project personnel were sometimes detailed to perform work in National Park System areas of the Midwest Region and elsewhere (see Table 6).

2 Logan and Calabrese 1979:59.

3 Ibid.; Richard D. Faust, Southeast Archeological Center, personal communication to John E. Ehrenhard, Southeast Regional Office, December 21, 1989; U.S. Department of the Interior, National Park Service n.d.b:49.

4 Logan and Calabrese 1979:60.

[5] Calvin R. Cummings to the author, personal communication, June 17, 1998.
[6] Kelly 1940:277. Jesse D. Jennings, formerly Regional Archeologist in NPS Region Two in the late 1940s, explained to the author (personal communication, October 3, 1991) that Newton Drury, Director of the NPS from 1940 to 1951, did not envision research as one of the three basic missions of the NPS: preservation, protection, and interpretation. Evidently, Drury's philosophy guided the Service's position toward research for quite some time.
[7] Logan and Calabrese 1979:59-60.
[8] Husted n.d.:1.
[9] Technically, they became National Park Service employees a couple of days earlier, at the beginning of a formal pay period.
[10] Petsche 1974.
[11] Thiessen 1989.
[12] Kay 1973.
[13] Schneider 1975a.
[14] Haberman and Schneider 1975; Leaf 1976.
[15] Falk and Ahler 1988.
[16] Thiessen 1975, 1976, and 1995.
[17] River Basin Surveys excavations at Plains Village sites in the Middle Missouri were typically oriented to excavation of entire house structures as analytical units, with less attention paid to inter-house areas or other features of community patterning (Rogers 1990:121-122). Little or none of the excavated soil was systematically screened and faunal remains were often sorted and partially discarded after excavation; both practices tended to bias the collections that resulted.
[18] Details of the excavation strategy can be found in Falk and Ahler 1988:2-5, 24-28.
[19] The research objectives and results for the 1970 Walth Bay work are also summarized in Falk and Ahler 1988. In addition to archeological excavations, the investigation of the Walth Bay site included an experimental application of proton magnetometer surveying, conducted in 1974 by John W. Weymouth of the University of Nebraska, Lincoln (Weymouth 1976).
[20] Ahler et al. 1974; Stanley A. Ahler, personal communication, November 9, 1998.
[21] Schneider 1975b; Stanley A. Ahler has stated (personal communication to the author, November 9, 1998) that the preceramic remains at the Walth Bay site are of "equal or greater antiquity" compared to the Moe site in the Garrison Reservoir area.
[22] Davis 1974; Roll 1978; Roll and Deaver 1978.
[23] Sigstad 1973a, b; Sigstad and Hannus 1973; Schneider n.d.; Schneider and Treat n.d.
[24] See, for example, Hunt 1973.
[25] Hotopp et al. 1973, 1975.
[26] U.S. Department of the Interior, National Park Service 1969a:3.23.
[27] Shutler et al. 1974; Anderson and Shutler 1978; Anderson and Semken 1980.
[28] Birmingham and Salzer 1984.
[29] Earlier during the IASP, program funding came from several sources, including the "Management and Protection" portion of the NPS annual budget, which was partly used for salvage investi-

gations outside the MRB; funds transferred from the Bureau of Reclamation under the authority of the Historic Sites Act of 1935, which were used for recreational studies and salvage work in the MRB; and, for a brief time, the Corps of Engineers. See "Archeological Program Fiscal Year 1960," draft dated July 1959 by T. Homer Black, Branch of Archeology, Division of Interpretation, National Park Service, in MWAC files.

[30] Olsen 1985:97.

[31] The field offices were located in Atlanta, Georgia; Denver, Colorado; and San Francisco, California. See U.S. Department of the Interior, National Park Service 1976:14-42 for an explanation of the newly established Interagency Archeological Services program in the NPS.

[32] At the time of the changeover from the RBS to the NPS, the persistent problem of publication lag, which had plagued the RBS program through most of its lifespan, was seen as a continuing problem for the Midwest Archeological Center. On the first day of the Center's existence, July 1, 1969, Center Chief Wilfred D. Logan issued a directive which established the policy that "all fieldwork carried out during a given field season will be reported on fully before the next field season" (memorandum to the staff, Midwest Archeological Center, from Wilfred D. Logan, Chief, Midwest Archeological Center, July 1, 1969; copy in MWAC files). Nevertheless, the problem persisted to a substantial degree. Despite intensive and long-term efforts to analyze and report many classes of data that resulted from the work at the Lower Grand, Walth Bay, and Helb sites (see Table 7), no site-specific reports have yet been produced for these sites that comprehensively describe the fieldwork as well as the analysis and interpretation of the full range of data recovered (Stanley A. Ahler, personal communication, November 9 and 12, 1998). When the Center was established, it inherited from the RBS a large number of unanalyzed and unreported collections. In the years that followed, Center and other researchers independently undertook the preparation of reports on several of these collections. When the 1975 program shifts within the NPS removed the reservoir salvage function from the Center, continuing NPS responsbility for the analysis and write-up of RBS collections housed at the Center was recognized. The NPS Washington office requested estimates of: (1) how many unanalyzed collections remained at the Center; (2) how long would it take to complete reports on them; and (3) how much would it cost (memorandum to the Regional Director, Midwest Region, from the Associate Director, Professional Services, Washington, April 1, 1975; copy in MWAC files). The reply indicated that 60 collections remained, 16 of which were sizeable, and five years and at least $290,000 would be required to analyze and report them if a concerted effort were made (memorandum to the Associate Director, Professional Services, Washington, from the Regional Director, Midwest Region, May 1, 1975; copy in MWAC files). Though the requested funding was not forthcoming from Washington, some money was made available periodically from the NPS Interagency Archeological Services office in Denver to contract for analysis and write-up of selected collections beginning in 1976 and lasting through 1985. Despite this considerable effort, several large and important RBS collections remain unreported to this day.

[33] Silverberg 1967.

Waterscreening excavated soil through mesh screens for consistent recovery of artifacts was an innovative method employed during the Midwest Archeological Center's Upper Oahe Project. This waterscreening operation was at the Helb site in 1973 (NPS photograph).

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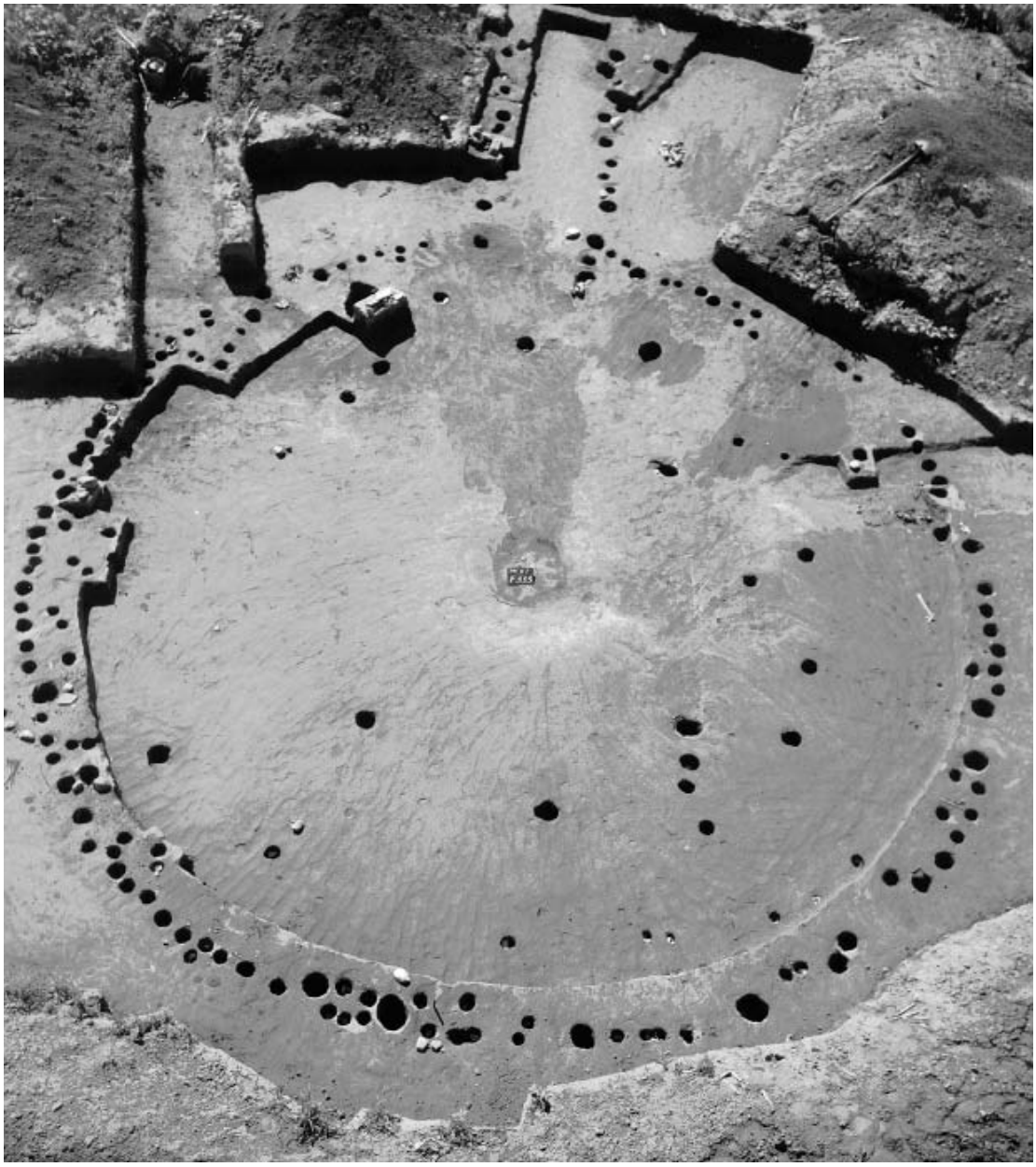
An improvised ladder for taking elevated photographs over excavations at the Oldham site in Charles Mix County, South Dakota. Such contrivances, once commonly employed at Plains excavations, are seldom used today because of the obvious risk of falling (RBS photograph 39CH7-405).



An elevated view of an excavated earthlodge at the Oldham site, taken with the aid of an improvised ladder platform, such as shown in the preceding illustration (RBS photograph 39CH7-398).

The Midwest Archeological Center's first home (1969-1975) on North 27th Street, Lincoln, Nebraska (NPS photograph).

The Midwest Archeological Center laboratory on North 27th Street, Lincoln, Nebraska, ca. 1970. Workers are (left to right) Nancy Osborn, Susan D'Amato, Ed Dodd, Gaillard Jackson, Clarence Johnson, and Lee Madison. Textiles from the cargo of the historic steamboat, Bertrand, are visible on several of the tables (NPS photograph).

Appendix A

MEMORANDUM OF UNDERSTANDING BETWEEN THE SMITHSONIAN INSTITUTION AND THE NATIONAL PARK SERVICE, U. S. DEPARTMENT OF THE INTERIOR [1945]

The National Park Service of the U.S. Department of the Interior has been requested by the Bureau of Reclamation of the Department and by the Corps of Engineers of the War Department to make investigations to appraise the recreational opportunities that may result from the multi-purpose reservoirs resulting from the construction of flood-control, irrigation, and power dams in river basins located throughout the United States, and, when requested to do so, to develop plans for recreational purposes.

In many of the river basins, the proposed reservoirs will inundate known and now unknown archeological and paleontological sites, including evidence of ancient man in America in association with bones of extinct animals. The destruction of these sites will result in the loss of invaluable cultural and scientific knowledge to the nation.

Accordingly, the National Park Service, in the course of its recreational studies of the proposed reservoir areas will call to the attention of the Smithsonian Institution the locations of all of the proposed dams and reservoirs; and the Smithsonian Institution will advise the National Park Service as to the number and importance of the known archeological or paleontological sites located within such reservoir areas, and recommend such surveys in the field as seem indicated.

The National Park Service will inform the respective agency responsible for the creation of the proposed reservoirs as to the cultural and paleontological remains that would be lost if thorough investigation and excavation of the sites are not undertaken sufficiently in advance of the flooding of the reservoirs.

The National Park Service, in its plans or recommendations relating to recreational areas in river basins in which important archeological or paleontological sites are located, shall provide for an exhibition room and a museum laboratory where excavated materials may be cleaned, classified, studies [*sic*], photographed, and prepared for preservation and exhibition. The Smithsonian Institution will recommend to the National Park Service locations for, and sizes of, these laboratories and exhibition buildings.

It is understood that materials considered to be important by the Smithsonian Institution for future research are to be sent to the U.S. National Museum. A duplicate collection, when collections permit, will be retained at a local exhibition building. Any surplus material may be sent to other museums or institutions when recommended by the Smithsonian Institution and the National Park Service.

It is understood that this memorandum of understanding is to remain in effect until the Smithsonian Institution and the National Park Service mutually agree that it is no longer needed, and that the extent to which its provisions can be carried out depends upon the availability of the necessary funds and personnel.

Smithsonian Institution
By

September 8, 1945
(Date)

(Snd) Alexander Wetmore
Secretary

National Park Service
By

August 7, 1945
(Date)

(Snd) Newton B. Drury
Director

Approved: October 9, 1945

(Snd) Harold L. Ickes

_____
Secretary of the Interior

The combined field crews led by River Basin Surveys archeologists J.J. Hoffman (who appears fourth from left) and Robert Neuman at their joint field camp in Dewey County, South Dakota, during the summer of 1962 (photograph by Robert Neuman; courtesy of W. Raymond Wood).

John L. Champe of the University of Nebraska, an early cooperator in the reservoir salvage program. Champe was known for tape recording presentations at early Plains Anthropological Conferences (RBS photograph 00-L377).

Appendix B

MEMORANDUM OF UNDERSTANDING OF APRIL 27, 1961
BETWEEN THE NATIONAL PARK SERVICE AND THE SMITHSONIAN INSTITUTION
RELATING TO ARCHEOLOGICAL AND PALEONTOLOGICAL SURVEYS
WITHIN RESERVOIR AREAS

The National Park Service has, for many years, sought the advice and assistance of the Smithsonian Institution in the scientific aspects of its operations, and the Smithsonian Institution has served most cooperatively and effectively in this advisory capacity. It is the wish of both agencies that this beneficial relationship be continued with respect to all scientific matters and particularly with relation to the river basin salvage programs.

The National Park Service will call to the attention of the Smithsonian Institution any and all reservoirs, planned or authorized, of which it has information. In turn, the Smithsonian Institution will inform the National Park Service of any reservoir areas of which it has knowledge.

Pursuant to the Act of August 21, 1935 (49 Stat. 666) (Historic Sites Act), and the Act of June 27, 1960 (74 Stat. 220) (Public Law 86-523), the National Park Service will seek from Congress the necessary funds to carry on both the survey and excavation work involved in recovering the archeological and paleontological remains in these reservoir areas. The Smithsonian Institution will furnish the National Park Service with any salvage cost estimate data it has available on reservoir areas.

The Smithsonian Institution will act in an advisory capacity to the National Park Service for evaluation and coordination of the scientific aspects of the salvage program. The National Park Service will administer the funds and accomplish the objectives of the program through its own staff services, through research contracts with qualified educational and scientific institutions, and through transfer of working funds to the Smithsonian Institution.

The Smithsonian Institution, as a major cooperating agency in the coordinated salvage program, will, within the limits of the funds transferred to it, carry out its designated part of the program of archeological survey, excavation, laboratory analysis, and reporting.

The Smithsonian Institution will furnish to the National Park Service copies of all reservoir survey and excavation reports resulting from work undertaken with transferred funds. In turn, the National Park Service will furnish to the Smithsonian Institution copies of reports by its own staff members or by contracting institutions which are pertinent to the research undertaken by the Smithsonian Institution under terms of this Memorandum of Understanding.

Upon completion of the study of the archeological and paleontological remains recovered by it from reservoir areas, the Smithsonian Institution will deposit the remains in the U.S. National Museum for safe-keeping. Should the National Park Service need any of these recovered materials for display or other appropriate purpose, the Smithsonian Institution will provide that agency with the items or representative collections requested.[1]

To further a close cooperation and understanding with exchange of all possible information between the National Park Service and the Smithsonian Institution, each agency shall furnish a liaison officer whose function it will be to keep both agencies informed of all phases of River Basin salvage archeology and paleontology.

This Memorandum of Understanding shall be brought up for review every three years so that it can either be revised to fit new conditions or be terminated if it is no longer desirable. It may be terminated at any time by mutual agreement.

National Park Service
By (SGD) E. T. SCOYEN
MAR 14 1961 [*sic*] Acting Director

Smithsonian Institution
March 27, 1961 By (SGD) LEONARD CARMICHAEL
Secretary

Approved: APR 27 1961 [*sic*]
(SGD) JOHN A. CARVER, JR.
Acting Secretary of the Interior

[1] In paragraph 7, both organizations will continue to interpret the provision for the deposition of specimens in the U.S. National Museum as meaning that all unique specimens and all specimens which have been illustrated in published reports will be retained by the Museum. So far as providing items for the National Park Service is concerned, the Museum will be pleased to make representative collections available as and when requested. (Footnote supplied.) [footnote and parenthetical phrase appear in the original — TDT]

A lonely River Basin Surveys tent camp near the Oahe Reservoir in Dewey County, South Dakota (RBS photograph 39DW233-97).

River Basin Surveys archeologists mapping excavations at historic Fort George in 1962. Foreground figures include William Bass (left) and G. Hubert Smith (right, holding stadia rod). Fort George was a 19th-century trading post in the Big Bend Reservoir area, Stanley County, South Dakota (RBS photograph 39ST202-189).

Appendix C

MEMORANDUM OF UNDERSTANDING OF APRIL 30, 1965
BETWEEN THE NATIONAL PARK SERVICE AND THE SMITHSONIAN INSTITUTION
RELATING TO ARCHEOLOGICAL AND PALEONTOLOGICAL SURVEYS
WITHIN RESERVOIR AREAS

The National Park Service has, for many years, sought the advice and assistance of the Smithsonian Institution in the scientific aspects of its operations, and the Smithsonian Institution has served most cooperatively and effectively in this advisory capacity. It is the wish of both agencies that this beneficial relationship be continued with respect to all scientific matters and particularly with relation to the river basin salvage programs.

The National Park Service will call to the attention of the Smithsonian Institution any and all reservoirs, planned or authorized, of which it has information. In turn, the Smithsonian Institution will inform the National Park Service of any reservoir areas of which it has knowledge.

Pursuant to the Act of August 21, 1935 (49 Stat. 666) (Historic Sites Act), and the Act of June 27, 1960 (74 Stat. 220) (Public Law 86-523), the National Park Service will seek from Congress the necessary funds to carry on both the survey and excavation work involved in recovering the archeological and paleontological remains in these reservoir areas. The Smithsonian Institution will furnish the National Park Service with any salvage cost estimate data it has available on reservoir areas.

The Smithsonian Institution will act in an advisory capacity to the National Park Service for evaluation and coordination of the scientific aspects of the salvage program. The National Park Service will administer the funds and accomplish the objectives of the program through its own staff services, through research contracts with qualified educational and scientific institutions, and through transfer of working funds to the Smithsonian Institution.

The Smithsonian Institution, as a major cooperating agency in the coordinated salvage program, will, within the limits of the funds transferred to it, carry out its designated part of the program of archeological survey, excavation, laboratory analysis, and reporting.

The Smithsonian Institution will furnish to the National Park Service copies of all reservoir survey and excavation reports resulting from work undertaken with transferred funds. In turn, the National Park Service will furnish to the Smithsonian Institution copies of reports by its own staff members or by contracting institutions which are pertinent to the research undertaken by the Smithsonian Institution under terms of this Memorandum of Understanding.

Upon completion of the study of the archeological and paleontological remains recovered by its parties from reservoir areas, the Smithsonian Institution will deposit in the U.S. National Museum a representative series of artifacts, all unique specimens, and all specimens which have been illustrated in published reports. Should the National Park Service need any of these materials for display or other appropriate purpose, the Smithsonian Institution will lend that agency the items or a representative collection, as and when requested, except for those materials that are on exhibition, that are unique, or that are illustrated in published reports.

To further a close cooperation and understanding with exchange of all possible information between the National Park Service and the Smithsonian Institution, each agency shall furnish a liaison officer whose function it will be to keep both agencies informed of all phases of River Basin salvage archeology and paleontology.

This Memorandum of Understanding shall be brought up for review every three years so that it can either be revised to fit new conditions or be terminated if it is no longer desirable. It may be terminated at any time by mutual agreement.

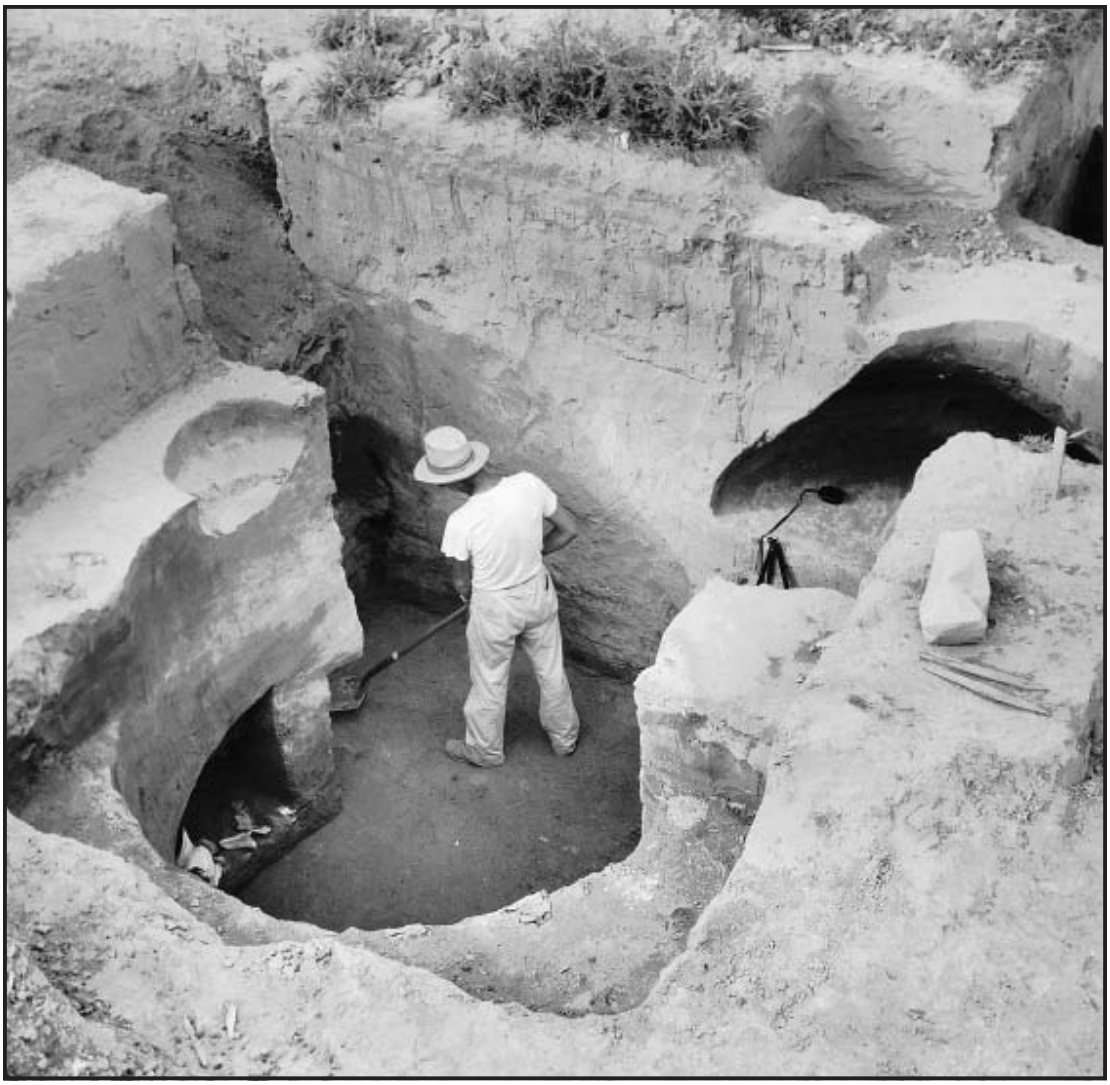
National Park Service
By

[signed] George B. Hartzog, Jr.

Smithsonian Institution
By

[the copy obtained from the NAA carries no signature on behalf of the Smithsonian Institution]

The Kipp's Post site was visited in 1960 by a party that included (left to right) Jon Muller, Walter Birkby (standing), Robert Neuman, W. Raymond Wood, and Fred La Rocque. Muller, Birkby, and Wood excavated at the Huff site in the Oahe Reservoir in Morton County during the summer of 1960. Neuman was a River Basin Surveys archeologist (photograph by Bernard Weinreich; courtesy of W. Raymond Wood).



Deep subfloor storage pits excavated at the Oldham prehistoric village site in the Fort Randall Reservoir area, Charles Mix County, South Dakota (RBS photograph 39CH7-240).

Appendix D

[Report of the 1968 "Ad Hoc" Committee to Evaluate the River Basin Surveys Program]

RIVER BASIN SURVEYS

In 1965, at the request of the Smithsonian Institution, an ad hoc review committee carried out an evaluation of the Smithsonian's River Basin Surveys program. In 1968, the undersigned committee was requested to again review the objectives, administrative organization, and procedures of the RBS program. The review, in part, was necessitated by 1) the changing needs of salvage archeology in the Missouri Basin, and 2) the increased availability of archeological personnel capable of doing salvage work in the area. The present committee was provided with A Review of the River Basin Surveys, which presented the background of RBS and included a series of propositions suggesting a future direction for this unit. These propositions essentially involve two aspects:

1) the scientific or research goals of the program, including the strategy by which the goals might be attained; and

2) the structural or organizational measures facilitating these goals.

The present ad hoc committee addressed itself to major problems and possibilities of both a scientific and organizational nature. This report summarizes the results and conclusions of these deliberations; focusing first on what the committee saw as the major research problem — publication. The bulk of the report, however, deals with administrative organization, which the committee saw as the most far-reaching problem.

Publication

The primary concern of the 1965 ad hoc committee was the problem of "lagging publication," the surprisingly large backlog of unpublished results of RBS field work. In an attempt to alleviate this situation, that committee made six recommendations designed to expedite the publication program of the Survey. The present committee was most interested in the effect of these recommendations. It learned that the RBS staff did initiate some of the changes recommended. They added editorial help to speed manuscript processing. They established new outlets in the form of Publications in Salvage Archaeology but more in response to the demise of the old River Basin Survey series in the Bureau of American Ethnology Bulletin rather than as an addition to existing outlets. They also made a general attempt to reduce the backlog of unpublished manuscripts. However, no concerted effort was made to obtain outside evaluation of the manuscripts in a genuine attempt to improve quality, as had been suggested in the 1965 ad hoc review. The recommendation that the Smithsonian provide additional funds specifically for publication was not acted upon, implying that the Smithsonian had, at that time, no interest in directly aiding the RBS program in the area where it needed the greatest help.

Currently, the publication backlog would appear to be less critical than it was during the time of the first committee review. However, it is still the major scientific problem, and there seems little doubt that the RBS has a noticeably poorer record of publication than the other collaborators in the same general region who also do salvage archeology under funds from the National Park Service.

It is clear that the RBS must in the near future consider several facets of its publication problem: 1) the nature of its manuscript review and quality control procedures; 2) the adequacy of its current publication outlets and whether it might make a concerted effort to place more of its reports in publications other than its own; 3) the wisdom of making each report broadly comparative as well as descriptive, instead of designing special comparative and synthesizing reports on larger regions of its concern; and finally, 4) in the immediate future it must weigh carefully the benefits to be derived from expenditures on further field work, as compared with contributions possible if the same funds are spent on the publication of previously excavated sites.

Organizational Directions

The 1965 ad hoc committee took as a premise for most of its discussions that "the Smithsonian Institution should not withdraw from salvage archaeology." Since that report was written, all of the major reservoirs in the Missouri Basin have been completed and are filling, and many more university-based archeologists are now working in the area. While there will undoubtedly always be a need for archeological salvage activity, the present committee feels that the need for an organization such as the River Basin Surveys is no longer so crucial as it was at the time of its inception. For these and other reasons the present committee felt it more important not to assume that the Smithsonian should continue doing salvage archeology, but rather to carefully examine the total RBS program and structure.

From the beginning the RBS program has been administratively ambiguous. While it is part of the Smithsonian Institution, currently reporting to the Director of the Museum of Natural History, and possesses a yet-to-be clearly defined pattern of liaison with a Smithsonian Advisory Committee, it is at the same time not an integral part of the Smithsonian Institution. It would seem to be much more of an autonomous unit, entirely funded from another governmental agency, the National Park Service. Despite this autonomous status, scientific responsibility for RBS work still should reside within the Smithsonian Institution because of the present formal organization. Funds for the program, exclusively appropriated for salvage archeology, are made available to the National Park Service from federal sources, and transferred by the National Park Service to RBS to completely support its operation. The Park Service, however, has assumed no responsibility for the proper use of such funds, assuming this to be the function of the Smithsonian. Thus, the River Basin Surveys has, in effect, two masters but without clear lines

of authority to either. One can see that this must potentially be a source of conflict, yet such conflict has been kept to a minimum because each agency has assumed that responsibility for the operation and its quality control resides with some other agency.

Reorganization Possibilities

With this understanding as a background, the present committee discussed four possible directions the RBS program might take:

Direction One. The RBS could continue substantially under the present organization; administratively affiliated with the Smithsonian Institution while financially tied to the National Park Service, adding to its salvage operation some new problem-oriented directions, such as those suggested in the Blue Book.

Direction Two. The RBS could phase-out its program after completing its original objectives of major salvage archeology; i.e., when all salvage archeology that cannot be handled by other collaborators in the area has been completed and reports on all its past excavations have been published, RBS could be dissolved.

Direction Three. The RBS could be taken over completely by the Smithsonian Institution with an emphasis on "problem-directed research" of the type suggested in the Blue Book, with the Smithsonian arranging for and providing funds for these new operations.

Direction Four. The RBS activities, as now carried on, could be incorporated organizationally into the National Park Service system and developed into a regional research center such as those which already exist in the Southwest and the Southeast, carrying out salvage archeology in areas where other collaborators are not available as well as additional Service-directed projects.

Evaluation of Reorganization Possibilities

In considering the four possible directions RBS might take, the committee found the first two least desirable. The factors involved in our consideration of the advisability of each are noted below:

Direction One - continuation along present organization lines, adding research and training directions as outlined in the Blue Book review.

1. A continuation of the serious problems generated by an unclarified dual administrative organization.

2. The suggested new research directions were not presented in sufficient detail for the committee to evaluate them adequately, but generally they seemed diffuse and inadequately formulated.

3. The program of education and training presented in the review would inevitably detract from a primary research mission, and there is a major question in the minds of the committee as to whether the RBS should compete with university-based archeological training programs which have the advantage of both students and professional faculty continuously available.

Direction Two. Gradual phase-out of the program.

1. The need for salvage work will continue. Although the large Missouri Basin projects are completed, smaller flood control or irrigation dams, land leveling operations, and constant erosion in the larger reservoirs will continue to require emergency archeological study.

2. Although local university staffs able to carry on much of this work have increased far beyond the level of archeological personnel resources at the inception of the River Basin Surveys program, not all states yet have the necessary staff to carry out the needed work.

While the committee did not feel that either of the first two directions was reasonable in light of the factors outlined, a definite conclusion on the second set of alternatives, described below, was not reached. The committee felt that the ultimate decision depended heavily upon internal policies, mainly of the Smithsonian, regarding funding, objectives, and other related matters. The factors the committee felt important in reaching a choice between directives [sic] three and four are listed below.

Direction Three. Complete absorption of RBS by the Smithsonian Institution.

1. If the River Basin Surveys were to become a truly integral part of the Smithsonian Institution, with salaries and other support provided from the Smithsonian budget, all of the scientific proposals in the Review could be accomplished with no difficulty, disregarding at this point the quality of those proposals.

2. With this kind of organization change, the Smithsonian Institution would have to develop mechanisms for closer quality control over the program.

3. If one of the reasons for a change of this kind would be to allow the RBS to move in the direction of a more "problem-directed" archeology, the Smithsonian administration would have to face the issue of the relationship between the archeology done by RBS and that currently being carried out in the Office of Anthropology.

Direction Four. Absorption of the RBS into the National Park Service.

1. The most important advantage of this alternative is that the distinction between the funding agency and the supervisory agency would finally be clear and could result in greater quality control by the National Park Service.

2. Salvage archeology could continue under the federal agency directly responsible for that activity.

3. Such a change would result in the loss of research flexibility inherent in the affiliation of the RBS with the Smithsonian.

4. Under this arrangement RBS would be in a position to mount a mobile task force not tied to academic schedules and move into areas where emergency excavation needs develop and where no collaborators are available to carry out the necessary salvage work.

While the committee was divided as to the propriety of recommending a specific choice among the several options outlined above, it was the general feeling that the fourth direction would be the more desirable. This would mean that the River Basin Surveys could be completely absorbed by the National Park Service, to be developed as a regional research center, but retaining the responsibility for archeological salvage. Implied in this decision was also the feeling that if the Smithsonian was interested in investing additional funds in "problem-directed" archeology these might more profitably be spent within the framework of the on-going archeological activities of the Office of Anthropology.

[signed]
Douglas W. Schwartz
for the Committee

David Baerreis

Jesse Jennings

W. Raymond Wood

Larry Tomsyck, Administrative Officer for the Missouri Basin Project, manning an early public display about the Interagency Archeological Salvage Program (RBS photograph 00-L197).

Appendix E

Outline of Agreement Reached by Representatives of [the]
Smithsonian Institution and National Park Service
For the Transfer of the River Basin Surveys Project
by June 30, 1969

In accordance with an agreement reached at a meeting held on February 17 attended by Drs. Galler and Cowan of the Smithsonian and Drs. Connally, Corbett and Mr. Bradley of National Park Service, a meeting was held in the offices of NPS on February 26 to develop in greater detail the plans for the transfer of this unit. Dr. Connally opened the meeting by reviewing briefly the understanding reached at the February 17 meeting and emphasizing that it was the hope of the NPS that the close cooperation which had existed between the two agencies in the past on this project would be continued. Responding for SI, Mr. Knierim said that this expressed the view of the Smithsonian also and that it was the desire of the Institution to assist in any way it could in the continuation of the River Basin Surveys project.

In setting the framework for the discussion, Dr. Corbett indicated the NPS would wish to continue to avail itself of the services of SI as a consultant and advisor not only for the River Basin Surveys but for all of its archeological work. Further, it was the hope of NPS that there could be joint participation by the two agencies from time to time on projects of a salvage nature.

The agreements reached with respect to specific matters are:

Transfer of the Lease for the Property at Lincoln, Nebraska

Mr. Tomsyck who is familiar with the terms of this lease in association with the NPS staff will initiate action as specified in the lease to terminate it for SI and will undertake to develop a new lease under which NPS will be the lessee.

Archival Materials

The originals of field records, negatives, photographs, inactive correspondence files, and other archival material will be shipped in one of the Project's trucks to SI prior to June 30.

Collections, Current Records, and Other Working Materials

These will remain the property of SI but will continue to be maintained at Lincoln, on loan to NPS for a two year period, renewable for two years at the end of each such period. Duplicates of the field records now at Lincoln will become the property of the NPS.

Loan of Specimens to Other Institutions

If the NPS believes it appropriate to make loans of specimens to another institution, it will so recommend to SI. Upon agreement by the latter a loan agreement between SI and that institution covering this material will be executed and the loan of the material to NPS terminated. The duration of such loans will be for a two year period, renewable at the end of each successive period, if desired.

Library Materials

The project office at Lincoln will prepare and send to SI a list of the books on hand. SI will review and determine which, if any, of the materials should be added to the SI library. Those items not incorporated into the SI records will be transferred to and become the property of NPS.

Personnel

The transfer of project personnel will be made effective June 26, 1969, and will include all persons on the rolls of the project as of that date. A ceiling position for each employee transferred will also be transferred from SI to NPS. In the event the staff of the project is so depleted by June 26 that it would be impractical to continue the work at that level, the Museum of Natural History will bring the matter to the attention of Secretary Ripley in the hope that sufficient additional ceiling vacancies could be provided so that this project, in which the Smithsonian has a great interest, can be continued in an acceptable fashion. Mr. Falbo of the Office of Personnel will work with the personnel people of NPS to assure an orderly transfer of the project employees, their personnel records and other related necessary matters.

Non Expendable Property

It was indicated by the NPS Representatives that the River Basin Surveys Project will be continued for the forseeable [sic] future at its present level and, hopefully, be expanded. On this basis it was agreed that all non-expendable property required to continue the project as at present will be transferred from the SI to NPS. If the needs of the project as of June 30 or at a later date are such that some of the property is no longer required, such property will be first offered to the Smithsonian before being declared surplus.

Press Release

Dr. Corbett, NPS, will draft a proposed joint press release to be signed by Messrs. Hartzog and Ripley. Dr. Woodbury, SI, will review the draft. Mr. Knierim will initiate whatever action is

required to clear the release in SI. This press release will not be issued, in any event, until Dr. Corbett has had an opportunity to meet with the RBS staff at Lincoln office some day next week.

Publications

Any publications in process as of June 30 will be issued by the Smithsonian in the RBS series. The NPS intends to continue these publications, having its own series and perhaps a somewhat different format.

Memorandum of Agreement

Dr. Corbett and Dr. Woodbury will work together in preparing a proposed memorandum of agreement to cover future cooperative efforts on this project.

Continuing Interest of SI in Archeological Research Projects

The continuing interest of SI in archeological research in the Missouri River Basin is recognized. This interest may be expressed by SI's participation in RBS contracts; by joint projects developed by scientists of both agencies; or by projects of SI scientists conducted with the cooperation of the River Basin Surveys Project and utilizing such of the project's facilities as may be needed and can be made available.

The following individuals participated in the discussion on February 26 summarized above: for the Smithsonian, Dr. Riesenberg, Dr. Woodbury, Dr. Johnson [sic], Mr. Tomsyck, Mr. Falbo, and Mr. Knierim; for the NPS: Dr. Connally, Dr. Corbett, Mr. Bradley, Mr. [*sic*] Logan, together with representatives of the Personnel, Fiscal, and Property Management units.

Prepared by MNH:SI 2/28/69

River Basin Surveys archeologist James Deetz (shirtless) and his crew at the Medicine Crow site near the Big Bend Reservoir in Buffalo County, South Dakota (RBS photograph 39BF2-14).

Cover Photograph: *River Basin Surveys excabators race against the rising water of the Oaho Reservoir at an archeological site in Sully County, South Dakota (RBS photograph 39sl10-5).*