FINAL JOINT MANAGEMENT PLAN
CHACO ARCHEOLOGICAL PROTECTION SITE SYSTEM
NEW MEXICO/ARIZONA/COLORADO

July 1983
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PREFACE

This Joint Management Plan was prepared and recommended for distribution to Congress and the public by the Chaco Culture Interagency Management Group, which includes representatives from the following agencies and tribes:

National Park Service
Bureau of Land Management
Bureau of Indian Affairs
Navajo Nation
State of New Mexico
U.S. Forest Service

The Interagency Management Group and the interagency planning team that prepared this document wish to express their appreciation to the Public Service Company of New Mexico and Mobil Oil Corporation for graciously and willingly providing helpful information that led to the formulation of the plan.

Special thanks are also extended to all the other agencies, groups, and individuals that provided assistance during this planning effort.
INTRODUCTION

The San Juan Basin in northwestern New Mexico is an area of major significance in the cultural history of North America. Chaco Canyon, which was designated as a national monument in this region in 1907, contains spectacular archeological remains of the Native American past, which have long been recognized as representing an architectural peak in Anasazi Indian prehistory.

At the time of the monument's establishment, numerous archeological sites were known outside the boundary, although their relationship to Chaco Canyon was unclear. Over the years increasing numbers of such sites were documented and studied to determine their place in the prehistoric system. In the late 1920s the boundaries of the monument were enlarged to include additional ruins ascertained to be of Chacoan Anasazi affiliation.

During the next 40 years research within and surrounding Chaco Canyon continued. Characteristics unique to the Chacoan culture were identified, and many of the sites lying outside the monument boundary were determined to be part of this culture. The extent of the system also became increasingly apparent as outlying sites (now called outliers) were identified as far as 100 miles from the canyon proper.

In the 1950s and 1960s the mineral potential of the San Juan Basin began to be recognized, and energy exploration and development led to the discovery of additional Chacoan outliers. Mineral activities and a number of laws and policies related to mineral exploration and development, including the National Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969, resulted in the identification and recordation of numerous sites.

In 1969 a memorandum of agreement was signed between the National Park Service and the University of New Mexico establishing the Chaco Center. This multidisciplinary research unit was established to bring about a better understanding of the prehistoric Indian cultures of the San Juan Basin. The center expanded on independent research efforts, coordinating archeological investigations concerning Chaco Canyon and the numerous outlying sites. Through the use of remote sensing, a prehistoric road system was identified, which radiated outward from the canyon and connected numerous Chacoan communities scattered throughout the region.

As research and discoveries by the Chaco Center and others verified the extent of the prehistoric Chacoan system, the need for adequate protection of the outlying sites became increasingly evident. Recognizing the potential for conflicts between resource preservation and energy development, on December 19, 1980, Congress passed title V of PL 96-550 to direct activities pertaining to Chacoan resources in the San Juan Basin (see appendix A). The primary purpose under title V was to provide for
the preservation, protection, research, and interpretation of the Chacoan system by

enlarging the monument boundaries by approximately 12,500 acres and renaming the monument Chaco Culture National Historical Park

authorizing a system of 33 outlying archeological protection sites (totaling approximately 9,000 acres) that have been identified as part of the Chacoan system, and providing for the addition of other sites that may be discovered

authorizing a continuing program of archeological research in the San Juan Basin

To provide for the preservation of archeological resources while recognizing the valid existing rights of private landowners, Congress defined allowable uses under the intent of the law and identified the primary land protection methods to be pursued in managing the park and the archeological protection sites. For the protection sites, many of which are currently in complex multiple ownership with numerous private lands, the first land protection method specified was the cooperative agreement rather than fee acquisition. In implementing these and other provisions of the law, Congress called for continued cooperation among the public and private entities with interests in the area to achieve coordinated preservation, research, and development efforts throughout the San Juan Basin.

As a first step in coordinating activities regarding the archeological protection sites, PL 96-550 required that a "joint management plan" be developed by those agencies having jurisdiction over or interest in lands containing the sites. The plan was to provide guidelines for identification, preservation, protection, and research at the archeological sites. In response to that mandate, the Chaco Culture Interagency Management Group (IMG) was established in January 1981. The group, which included representatives from the Bureau of Land Management, the Bureau of Indian Affairs, the state of New Mexico, the Navajo tribe, and the National Park Service, met in February 1981 to establish procedures for planning. An interagency planning team was set up to accomplish the project, and during 1981 that team completed data gathering and field work, prepared reconnaissance studies evaluating the sites, and developed recommended guidelines and procedures for the joint management plan. During plan preparation, the team contacted the Forest Service concerning a potential protection site in the San Juan Forest. In March 1982 a Forest Service representative was formally added to the IMG.

This document is the result of the planning team investigations. It is intended to direct planning, management, and use of the designated archeological protection sites as well as any new sites that may be added to the system. Site-specific strategies for administration, research, stabilization, and interpretation at individual sites will be detailed in site management plans, which will be prepared following approval of the joint management plan.
DESIGNATED PROTECTION SITE
CHACOCULTURE NATIONAL HISTORICAL PARK

VICINITY
CHACO ARCHEOLOGICAL PROTECTION SITE SYSTEM
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

DESIGNATED PROTECTION SITE
CHACO CULTURE NATIONAL HISTORICAL PARK

North 0 10 20 30 Miles
0 10 20 30 Kilometers

CAPS 20004
DSC FEB 82
The earliest evidence of human occupation in the San Juan Basin dates to about 10,000 years ago, when Paleo-Indian hunters roamed the area. After thousands of years of occupation, inhabitants began to cultivate crops and establish permanent dwelling sites, and by approximately A.D. 500 they had adopted a subsistence economy based in part on agriculture. This shift marked the beginning of a sedentary lifestyle, common to much of the Colorado Plateau region and termed the Anasazi cultural complex.

The period from A.D. 500 to 900 witnessed the gradual evolution of architectural styles at Anasazi sites. The early clusters of subterranean pithouses were replaced by more complex groupings of surface room units with associated plazas, ceremonial pithouse/kivas, and refuse areas. Regional differences between sites were relatively minor during this period, but after A.D. 900 they became increasingly substantial, and three distinct Anasazi subareas developed—Kayenta, Mesa Verde, and Chaco.

In the area of northwest New Mexico drained by the Chaco River—the heartland of the Chacoan Anasazi culture—development progressed more rapidly than in adjacent Kayenta and Mesa Verde areas. This surge is best exemplified by the appearance of half a dozen large pueblos, or Chacoan structures, in the early to mid 900s. Although conceptually similar to other Anasazi architecture, the scale of these structures was much greater in terms of overall size, construction units, and individual rooms. Distinct characteristics associated with Chacoan architecture included multiple stories (up to five), core-veneer walls, Chaco-style kivas, and tabular, banded masonry. Other massive construction projects—irrigation systems, roadways, and great kivas—were also completed. Notably these projects and architectural innovations preceded their more limited appearance in the Kayenta and Mesa Verde areas by as many as 150 years.

Archaeological discovery and research over the past several years has revealed that the achievements of the Chacoan people were even more sophisticated and extensive than previously imagined. In addition to their architectural distinctions, the unusually fine workmanship exhibited in Chacoan structures and evidence of large-scale planning, large labor forces, and craft specialization suggest a ranked society headed by a social elite. Although evidence is incomplete and conclusions must remain tentative, it now appears that Chaco Canyon was the economic, administrative, and perhaps ceremonial center of a trade network involving as many as 75 outlying communities, which were spread over an area of 30,000 square miles and connected by an extensive system of roads and possible signal sites.

Research indicates that even from the early periods of Chacoan development, people throughout the region maintained a high degree of interaction, exchanging ideas and actual items between pueblos. However, at some time between A.D. 900-1150 this interaction became more formalized and centralized. Goods from one part of the San Juan Basin were moved into the Chaco Canyon, perhaps stored as necessary,
then redistributed to other parts of the basin to meet local demands. At the peak of Chacoan development, this network of communities evolved into a social system that supported craft specialists and possibly full-time administrative specialists (politicians and chiefs). Artifacts and trade items from 10th-12th century Chacoan outliers include a variety of luxury items, including turquoise mosaics and necklaces, jet or gilsonite inlays, tall cylindrical vases, painted sandstone, parrots, macaws, and copper bells.

To cope with the harsh and unpredictable environment of the San Juan Basin, the Chacoan Anasazi relied heavily on a wide range of available natural resources. Various shrubs, pinyon, juniper, pine, and cottonwood were utilized for building and firewood, and agriculture was practiced in a variety of settings using any means possible to channel rainfall runoff to field areas.

Chaco Canyon flourished until the mid-1100s, when it lost its position as a major regional center, possibly because of social conflicts and resource depletion. This resulted in rapid depopulation of Chaco Canyon and the southern basin area. Notably, at this time incipient social ranking and larger sites occurred in the Kayenta and Mesa Verde areas.

By A.D. 1300 the entire Four Corners area was abandoned. The primary reason for abandonment appears to have been the imbalance created by a quickly expanding population and exhausted natural resources.

After the Anasazi disappeared from the San Juan Basin, the area was inhabited only sporadically until the Navajo began settling the northeast corner of the basin in the 1500s. During the 16th and 17th centuries, the Navajo resisted Spanish expansion in the region. In the 1690s their population was augmented by Pueblo refugees fleeing the Spanish reconquest after the Pueblo Revolt of 1680. Raiding and war with the Spanish continued until the American entrance into the Southwest and the Navajo impoundment at Fort Sumner in 1863.

In 1868 the Navajo were released from Fort Sumner, and they returned to the Four Corners area to adapt to life on the newly established reservation. Here they began to develop a more sedentary lifestyle based on agriculture, stock raising, wool production, and home industry. Other changes also took place as Anglo ranchers, homesteaders, and businessmen settled along the south and north peripheries of the basin and adventuresome traders plied their goods in the interior. The construction of the railroad in the early 1880s along the south edge of the basin resulted in the establishment of the towns of Grants and Gallup and stimulated logging and coal mining in the area.

The exhaustion of grazing lands in the 1930s precipitated the BIA stock reduction program, which ultimately resulted in greater Navajo reliance on off-reservation wage work. This trend was reinforced during World War II and the early 1950s when irrigation projects, natural gas development, and the Grants uranium boom brought new opportunities for employment. In the last 30 years energy development, population growth in San Juan Basin cities, and improved transportation and communication have brought the modern world even closer.
EXISTING CONDITIONS

The resources of the San Juan Basin are subtle, often hidden or not easily recognized. The basin is generally a semiarid region of mesas, volcanic remnants, canyons, cliffs, plains, and badlands; there are few forests, flowing streams, or rivers. Beneath the basin's sandy soil lie vast reserves of uranium, natural gas, oil, and coal, which are important for the future energy needs of the country. These deposits, trapped in specific layers of sedimentary rocks, are distributed throughout the basin (see Energy Resources map). Atop the mineral reserves are the area's other significant resources, including the numerous archeological remains from the Chacoan culture. These two resources—and the problem of preserving one while developing the other—have precipitated the need for cooperative planning and management.

To most observers the physical remains of the Chacoan outliers are difficult to discern. At some of the 33 archeological protection sites, masonry walls and doorways still stand, providing visible evidence of the architectural skill and craftsmanship of the Chacoans. More commonly, however, the upper walls and roofs of structures have long since collapsed, covering the lower walls and floors with tons of masonry rubble. These rubble mounds have in turn been covered by a protective mantle of sand, accumulated over several hundred years. Below the masonry and sand debris, in the rooms, kivas, plazas, and refuse mounds of the Chacoan sites are the remaining architectural features, household items, and refuse that testify to the day-to-day life of these people.

Because the significance of the Chacoan outliers has only recently been appreciated, many of the archeological features now included in the protection sites have received little protection in the past. While some sites remain relatively undisturbed because of isolation, inaccessibility, or vigilant landowners, others have suffered minor to substantial vandalism. Several of the outliers show the impacts of a variety of sanctioned activities, including pipeline, powerline, and road construction, mining and energy development, and previous archeological investigations. A few of the sites under federal administration have been partially restored and/or stabilized in the past 10 years.

The environment of the protection sites varies from wooded uplands to dry, wind-scoured saltbush plains. There are few perennial streams. Two dominant vegetation types occur in the region—pinyon/juniper woodland and what is generally referred to as desert/scrub. Pinyon/juniper is the dominant habitat type on only about 24 percent of the protection sites; desert/scrub covers the majority of the remaining 76 percent. Numerous grasses and forbs are part of the desert/scrub community, including Indian ricegrass, which was harvested and eaten by the Anasazi, and Russian thistle, an exotic invader of disturbed sites and an indicator of the changes wrought by time and human impact.

Wildlife in the basin is not abundant. Human predation and more than 100 years of competition with domesticated animals have drastically altered and reduced historical wildlife populations to the point that they reflect little of what was present during Anasazi times.
NOTE: The areas shown represent a generalized scheme of current high interest lands for given resources, as represented either by leasing or development activity. As exploration continues and new data is uncovered in the basin, many of these resource zones may expand.
Most of the protection sites are in isolated rural areas where subsistence grazing is the most common land use, Native Americans (primarily Navajo) make up the majority of the residents, and population densities are low. However, the entire region is currently experiencing activities associated with the development of energy resources. Coal, uranium, natural gas, crude oil, and geothermal steam are either being developed or explored and mapped for future development. Active uranium mining and milling is taking place in the southern part of the basin near Crownpoint, large coal strip mines are operating in the northwestern portion, and producing natural gas and oil fields have been located in the northeast. This trend toward energy development has caused concern over the protection of the basin's valuable archeological remains.

From an ownership and jurisdiction standpoint, the basin is one of the most complex regions in the country, especially in the "checkerboard" area where a mixture of federal, state, Indian, and private lands exist. This area is generally east and south of the Navajo Reservation and includes 22 of the 33 designated protection sites. Most of the sites are in multiple ownership, with federal, state, private, and/or Indian interests; 19 are affected by Indian interests. The status of Indian lands is further complicated by a number of subcategories, including tribal trust, allotted, and tribal fee lands (see definitions of these terms in appendix B). Allotted lands frequently involve complex title chains, with 10-50 people having interests. Finally, the combination of surface and subsurface ownerships sometimes creates overlapping and undefined property rights and jurisdictions. At present there are only two sites where the surface rights are exclusively in federal ownership and only five sites where the subsurface rights are totally federally owned.

At the present time almost half of the acreage in the 33 designated protection sites contains mineral leases, licenses, or permits, and one-third are located over known recoverable coal resource areas (KCRAs), where future coal leasing can be expected. In addition, 40 percent of the sites have mineral development activities (leasing, mining, prospecting, etc.) taking place on lands immediately adjacent to the protection site boundaries.

Jurisdictional authority is as complex as ownership patterns. On the federal level, two agencies have land administration responsibilities (Bureau of Land Management and Bureau of Indian Affairs), and four have lease, license, or permitting responsibilities (Office of Surface Mining, Geological Survey, Minerals Management Service, and Environmental Protection Agency). In addition, tribal, state, regional, county, and city governments have jurisdictional responsibilities. There are 1,879.5 acres of state trust lands. Of these, 1,769.5 are in Chaco Culture National Historical Park, 20 are in the designated protection sites, and 90 in the potential protection sites. More than three-fourths of the sites are under the jurisdiction of the BIA, the Navajo tribal government, and Navajo allottees.

All these factors illustrate that continuing cooperation will be required among federal, state, tribal, and private interests to effectively implement planning and management at the archeological protection sites.
When Congress enacted title V of Public Law 96-550, the mandates it placed on planning and management were based on the following premises:

Archeological research and discoveries in the past several years indicate that the scope of the Chacoan system is much broader than previously recognized and the physical remains of the system constitute a nationally significant resource that requires protection.

Public knowledge of and interest in the Chacoan system has increased greatly in recent years.

The San Juan Basin is currently undergoing changes related to a variety of energy exploration and development activities.

Development and preservation efforts need to be coordinated to ensure protection of valuable cultural resources while recognizing the valid existing rights of private property owners.

In recognition of these facts, PL 96-550 included the following provisions:

The boundaries of Chaco Canyon National Monument will be enlarged to 33,989 acres to include additional Chacoan resources, and the name of the monument will be changed to Chaco Culture National Historical Park. The historical park will continue to be managed by the National Park Service as a unit of the National Park System.

An archeological protection site system will be established to protect and preserve 33 sites totaling 8,768 acres in the San Juan Basin that have been identified as outlying communities within the Chacoan system. These sites will not be included in the National Park System; rather, they will be managed primarily by the BLM, BIA, and Navajo tribe for resource protection and preservation. The Park Service will participate in an interagency planning effort to ensure coordinated planning and management of the park and protection sites.

Under PL 96-550, land uses such as energy exploration and development will continue to be permitted on and adjacent to the archeological protection sites as long as they do not endanger the cultural values on the upper surface. Other laws and agency policies may place limitations on allowable activities, and these factors will be taken into consideration when planning for future management and use of individual sites.

Cooperative agreements will be the primary land protection method to be pursued in preserving, protecting, maintaining, and administering the archeological protection sites.

Research and data gathering will continue in order to further knowledge of the Chacoan system. Recommendations for additions to or deletions from the protection site system will be submitted to Congress by 1982 and thereafter as needed.
A joint management plan for identification, research, and protection of the archeological protection sites will be developed by an interagency team and will be submitted to Congress by October 1984.

In response to congressional mandates, the Chaco Culture Interagency Management Group (IMG) was established in January 1981. This group, chaired by the National Park Service, met in February and March to determine the objectives to be achieved in planning for the archeological protection sites. The objectives, all of which are being addressed in this cooperative planning effort, are as follows:

- Identify, manage, protect, and interpret a representative sample of the prehistoric Chacoan cultural system
- Achieve a balance between energy exploration/development and protection of the Chacoan system
- Develop a systematic approach for resolving potential conflicts between cultural resource preservation, visitor use, and energy development on and near the protection sites
- Develop guidelines for preparing individual site management plans (including resource management, interpretation and visitor use, and land protection emphasizing less-than-fee acquisition methods)
- Establish a step-by-step procedure for dealing with newly discovered sites—frpm discovery through evaluation and designation to implementation of management and protection measures

Planning for the archeological protection sites began in February 1981 with the establishment of the interagency planning team by the IMG. The team completed field reconnaissance and data gathering in September and, based on their findings and evaluations, prepared site reconnaissance studies for each of the 33 sites. These studies evaluated both the significance and the condition of the sites and included recommendations for interim stabilization efforts as well as alternatives for long-term management and use. Copies of the final reports are available at the offices of local land-managing agencies and the Navajo tribal headquarters in Window Rock.

After completion of the reconnaissance studies, the planning team and IMG developed guidelines to direct overall management of the archeological protection site system and procedures for designating any new sites that may be discovered in the San Juan Basin. This Joint Management Plan contains the results of that effort. Recommendations for administration of the designated protection sites are included in the following section. The "Guidelines for Future Site Selection and Designation" section contains the procedures for evaluating, selecting, and designating any new sites that may be discovered. A third plan section is included to describe the legislative and administrative actions necessary to implement the Joint Management Plan.

Following approval of the Joint Management Plan, a site management plan will be prepared for each of the designated protection sites, based on the
concepts of the JMP and the information contained in the reconnaissance study. The site management plan will indicate site-specific proposals for administration, resource management (protection, stabilization, research, energy development), and visitor use and interpretation. All site management plans will be made available for public review before implementation. These plans and the results of public involvement will be reviewed by the IMG before the final proposals are implemented.
RECOMMENDATIONS FOR THE DESIGNATED ARCHEOLOGICAL PROTECTION SITE SYSTEM

The findings and recommendations included in this section are based on planning team investigations of the 33 archeological protection sites designated in PL 96-550. A list of these sites and their authorized acreages is contained in the Findings and Recommendations table; site locations are shown on the Chaco Archeological Protection Site System map. When the Joint Management Plan is approved by the IMG, representing the secretary of the interior and the secretary of agriculture, the recommendations will also apply to any new protection sites that have potential for addition to the system.

ADMINISTRATION

As indicated previously, the IMG has overall coordinating responsibility in matters related to planning and managing the archeological protection site system. However, each of the sites currently involves one or more public agencies or tribes with jurisdiction over or interests in the lands within the designated boundary. The planning team recommends that the agency or tribe with primary jurisdiction or interest in each site be established as the lead planning/managing entity for that site and that it be responsible for preparing, gaining approval of, and implementing the site management plan. (The Bureau of Land Management will be responsible for coordinating planning on sites that are predominantly in private, other than tribal fee, ownership; the Bureau of Indian Affairs will have the same responsibility on sites that contain Indian trust lands.) On sites where several jurisdictions or interests are involved, administrative agreements may be established to identify the responsibilities of all involved agencies/tribes in initiating emergency protection measures on lands administered by them and in reviewing, approving, and implementing proposals in the site management plan. In the case of the Navajo tribe, a cooperative agreement will be established with the federal government to implement this plan and any actions concerning administration, land protection, resource management, and visitor use. Specific amendments may be added to this agreement as the site management plans are prepared.

In any situation where the involved agencies/tribes cannot agree on proposals, the lead planning/managing entity will attempt to resolve differences. If agreement cannot be reached, position papers will be prepared and forwarded to the IMG for review and attempted resolution. If the IMG cannot achieve consensus among the involved agencies/tribes, it will forward the position papers of all involved agencies/tribes, along with the IMG opinion, to the secretary of the interior for final determination. Where Forest Service lands are involved, papers will be sent to the secretary of the interior and the secretary of agriculture for joint decision. The IMG will provide the forum for selecting the lead planning/managing entity for each site. Preliminary recommendations are included on the Findings and Recommendations table in this plan.
To ensure that protection, research, and management activities at the protection sites are coordinated, the planning team also recommends that the IMG be established as the approval authority for the Joint Management Plan and as the monitoring/coordinating/review authority for future activities at the protection sites (see the "Joint Management Plan Implementation" section). The latter function will involve overseeing the establishment of cooperative agreements or other land protection measures, the preparation and implementation of site management plans, and the evaluation/designation of any new Chacoan outliers that are recommended for addition to the protection site system.

Upon approval, the Joint Management Plan will direct and be binding upon planning and management for the individual sites. The lead planning/managing entity will be responsible for ensuring concurrence in the legal mandates, policies, and procedures identified in that plan. All involved agencies/tribes will continue to have management authority over their lands, in accordance with the guidelines and proposals established in the Joint Management Plan and in the subsequent approved site management plan.

LAND PROTECTION

The protection site system and the provisions of PL 96-550 that apply to it are intended to provide protection for the significant archeological resources on these sites without adversely affecting private rights, including those involving future energy exploration and development, in the San Juan Basin. It is important to note that the term site, as used here and in PL 96-550, refers to the total area of each archeological protection site and should not be confused with the many individual archeological sites or features that may be present within the protection sites boundaries.

Section 506(c) of the law states that surface disturbance, e.g., from energy exploration and development, grazing, or similar uses, is permitted as long as it does not endanger the cultural values of the sites. (Surface disturbance applies to all lands extending to a depth of 20 meters below the ground surface). The planning team recommends that such disturbance be considered only after it has been demonstrated to the IMG that reasonable alternatives do not exist outside the boundaries of the protection sites. Further, it must be demonstrated that the cultural values of the sites will not be endangered.

The term cultural values is critical to decisions regarding adequate land protection for the sites, but it is not defined in the legislation. The planning team recommends that the following definition be accepted by the IMG and that it be applied when pursuing land protection methods for the sites: "Cultural values include but are not limited to Chacoan archeological structures or features, including roadways and water control systems, and concentrations of pottery, weapons, tools, refuse, perishable material culture, and human materials." As the site management plans are prepared, it is possible that additional values will be identified and documented on a site-by-site basis.
PL 96-550, the hearing record, and a series of solicitors' opinions have established, in priority order, the land protection methods that are to be pursued in managing the archeological protection sites. The law states, and interpretations concur, that cooperative agreements are to be sought before attempting any other land protection method, particularly for private lands within the site boundaries (secs. 504(c)(2) and 505). If acquisition of fee title is deemed necessary, donation and land exchange are the first techniques to be attempted (sec. 504(c)(1)). The Bureau of Land Management was established as the lead agency for any land exchanges. Section 504(d) requires the secretary of the interior to designate a pool of public lands of at least three times the private acreage described within the boundaries of Chaco Culture National Historical Park and the archeological protection sites. Public lands in McKinley and San Juan counties that have been identified for disposal in BLM's "Chaco Management Framework Plan" may be considered for exchanges and will be considered as the pool. At this time, there are 73,000 acres of public land in the pool. Any exchanges involving lands outside the pool will be considered on a case-by-case basis if it can be shown that the public interest is being served. This designation of a pool does not preclude the pool lands from being used or considered for other purposes until the lands are transferred from federal ownership.

The law states that the purpose of cooperative agreements is to ensure protection, preservation, and proper management of the archeological resources and associated sites regardless of who owns title to the lands. In this regard, the agreements must contain provisions to ensure 1) that there is reasonable access for resource protection and research, 2) that no changes or alterations to cultural resources (values) take place without the written consent of the secretary of the interior, and 3) that no actions are taken that will prevent continuation of traditional Native American religious uses on the sites (sec. 505).

In pursuing land protection methods for the sites, the administering agencies/tribes will first seek to establish cooperative agreements under the intent of the law. Acquisition of fee title will be sought only when necessary to prevent "direct and material damage to, or destruction of, Chaco cultural resources [values]" and when cooperative agreements cannot be effected (see 504(c)(2)).

RESOURCE MANAGEMENT

Preserving and protecting the cultural resources of the archeological protection sites is one of the primary purposes of PL 96-550. The following guidelines will direct resource management efforts during the preparation and implementation of the site management plans.

Emergency Protection Procedures

Emergency protection guidelines have been developed to direct land use and protect cultural values on federally administered lands within the protection sites until the site management plans are prepared and approved (these guidelines are included in appendix C). The planning
team recommends that the guidelines be followed by all involved entities in order to ensure the preservation of site integrity as well as the protection of identified cultural values. Cooperative agreements will be sought with private owners to ensure concurrence in protection policies and procedures. The emergency protection guidelines will be applied at all existing sites and at any newly discovered sites that are being evaluated for possible protection site status (see the "Procedures for Selection/Designation/Implementation" section of this report).

Under the guidelines, on federally administered lands where valid prior rights or encumbrances exist (e.g., mineral leases and claims, grazing permits), the administering agency(s) will immediately seek the establishment of cooperative agreements with the holders of such rights to ensure that any surface-disturbing activities will be compatible with site preservation and that they will not endanger the cultural values under the intent of PL 96-550, sec. 506(c). During the period prior to establishment of cooperative agreements, ongoing activities will be permitted to continue--based on a case-by-case evaluation by the administering agency(s)--unless it is determined that they will damage or destroy the site's cultural values. If such conditions exist and a satisfactory agreement with the holders of valid prior rights cannot be achieved, other land protection methods to obtain fee title or less-than-fee interest will be explored. If fee or less-than-fee acquisition is not possible, the administering agency(s) will submit its findings and recommendations to the IMG for review, and the IMG will consider the possibility of salvage mitigation and/or deauthorization of all or part of the protection site.

On federally administered lands where no valid prior rights or encumbrances exist, the administering agency(s) may temporarily close those lands to public entry to protect archeological resources until the site management plan is approved. As part of the site management plan, the administering agency(s) will decide whether or not to permanently withdraw and/or close the site to future mineral entry. If it is decided to permit future entry, the site management plan will identify the lease stipulations, restrictions, and/or regulations for claims, leases, or permits. If a site on federal land is deauthorized, it will still be protected under the National Historic Preservation Act and the Archeological Resource Protection Act and can also be considered for National Register status.

The site management plans will present in detail the short- and long-range decisions concerning energy exploration and development on the protection sites. Where valid prior rights exist, the administering agencies may develop new surface protection stipulations or cooperative agreements based on the decisions in the site management plan or may extend the agreements enacted under the emergency protection guidelines. In all cases, stipulations and cooperative agreements will define allowable methods of exploration and development to ensure protection, preservation, and management of the site's cultural values.
Site Protection and Patrol

The protection policy for the sites will be one of primary reliance on agency/tribe patrol and local resident monitoring. Fencing and posting or other protective devices may be used at the discretion of the administering agencies/tribes. Patrols and/or resident monitoring will be implemented by the administering agencies and tribes. All protection sites will be patrolled at regular intervals as defined in the site management plans, and a site condition checklist will be completed during each visit. If feasible, payment of a moderate fee to local residents is probably the most cost-effective means of providing around-the-clock surveillance. Because the safety of local monitors is a primary concern, they will not be required to confront violators; rather, their function will be to observe and then notify the administering agency or the local authorities. An efficient method of communication between the monitors and the enforcement officials will be established.

Because most of the protection sites are in remote locations and have no onsite staff, the administering agencies/tribes will coordinate with county, state, federal, and tribal law officers to familiarize them with the sites and with relevant federal, state, local, and tribal antiquity laws and to establish response priorities and jurisdictions.

Resource Preservation

Although immediate and long-range preservation needs at the archeological protection sites have been identified and cost-estimated by the planning team, implementation of preservation measures and all future regular examination and maintenance for preservation purposes will be the responsibility of the administering agencies/tribes. The administrators will ensure that preservation is carried out in a timely manner and that it adheres to stabilization levels, specifications, materials, and fabric treatment guidelines established by a stabilization team to be appointed by the IMG. Stabilization training and assistance will be provided on request. Except at sites where emergency stabilization is required, the administering agencies/tribes will prepare historic structure reports that analyze and make recommendations for treatment before preservation work is carried out.

Site-specific preservation guides will be prepared by the agencies/tribes as necessary to regulate and manage preservation efforts at sites where extensive and continued measures are anticipated.

Research

As stipulated in section 501(b) of PL 96-550, one of the main purposes in establishing the archeological protection sites is "to facilitate research activities." Section 507(a) of the law directs the Division of Cultural Research (Chaco Center) of the Southwest Cultural Resources Center to "continue research and data gathering activities as may be appropriate to further the purposes of this title and knowledge of the Chaco culture." As directed, the division has prepared a research plan for continuation of these studies, and it has been submitted to Congress (see appendix D).
Although additional Chacoan research is mandated in PL 96-550, preservation of the archeological protection sites is one of the primary purposes of the legislation, and given the finite and irreplaceable nature of the resources, all research must be carefully controlled. To fulfill the intent of the legislation, no archeological research will be permitted on any of the designated protection sites unless it has been fully justified as essential to provide relevant new knowledge of the Chacoan or other archeological components of the sites or unless archeological salvage/mitigation is deemed necessary in response to threats from uncontrollable influences (natural or man-caused) that will eventually destroy cultural values. The IMG will coordinate review of all research proposals concerning archeological protection sites in the San Juan Basin and will forward recommendations to the appropriate agency(s) for action.

Although some baseline data for the protection sites is available, much more information needs to be collected for proper management and interpretation of the sites. Anticipated needs are listed below in order of importance, although many activities can and should be performed simultaneously.

- Cadastral Survey and Monumentation
- Archeological Inventory
- Historic Structure Reports
- Remote Sensing
- Chacoan Road Studies
- National Register Data
- Environmental Data
- Computer Data Base
- Native American Use
- Collections

A more detailed discussion of data requirements is included in the site management plan outlined in the appendixes.

VISITOR USE/INTERPRETATION

Chaco Canyon can no longer be viewed in isolation. It was an integral part, probably the center, of a complex economic, administrative, and perhaps ceremonial network involving at least 75 widely scattered outlying communities. Communities with multistory dwellings, dozens of smaller dwellings, irrigation systems, connecting roads, and signaling stations indicate an elaborate system of commerce and communication. Neither Chaco nor the outlying communities can be accurately understood if viewed as isolated units. If interpreted as individual sites, the canyon and outliers remain a random collection of major pueblos, small villages, and individual homesites. It is only when the Chacoan culture is interpreted as an integrated whole that its magnitude and extent can be fully appreciated. Herein lies the primary interpretive objective of this plan--to create an awareness that the canyon and its outliers constituted a complex and far-reaching social, economic, and cultural system that was greater than the sum of its parts.
Chaco Canyon, the heart of the national historical park, provides the logical starting place for interpretation. The canyon already has interpretive facilities and programs, which can be expanded to explain the broad theme of the Chacoan cultural system. Guided tours and multimedia presentations can be developed to effectively present the larger story, giving life, form, and function to the integrated system—the canyon and its ruins as well as the numerous roads and outlier communities scattered throughout the basin.

Although the canyon should be the primary location for telling the expanded Chaco story, the outliers may prove to be the visitors' first contact with the culture. Thus, an effective interpretive presentation for the outlying sites is critical. Although the specific attributes and probable functions of individual outliers should be related, interpretation should focus on the Chacoan system as a whole, hopefully generating enough questions and interest to encourage visitors to travel to Chaco Canyon itself. Those choosing not to visit the canyon should at least leave outlier sites with an understanding of the larger system.

The majority of interpretation will continue to occur at sites that already have interpretive programs. Four outliers—Pueblo Pintado, Kin Bineola, Kin Klizhin, and Kin Ya'a—within the authorized boundary of Chaco Culture National Historical Park are identified as part of the park's visitor use programs. A fifth, Aztec Ruins National Monument, is a separate National Park System unit, which has an established interpretive program. In addition, three outliers under consideration for protection site designation are currently being interpreted—Chimney Rock (Forest Service), Salmon (San Juan County, New Mexico), and Casamero (BLM). These areas constitute a significant and varied archeological resource and provide a representative sample for relating the expanded Chaco story.

In evaluating the archeological protection sites for visitor use and interpretation, two criteria were applied:

1. The presence of visually distinctive architectural features dating from the Chacoan period
2. Proximity to population centers and/or major tourist travel routes/attractions (i.e., accessibility)

Because of the reduced (collapsed) condition and remote locations of most protection sites, only one met the above criteria. That site—Las Ventanas (Candelaria site)—is recommended for further study and interpretive planning.

Interpretive/visitor use concepts will be defined in the site management plans and implemented by the administering agencies and tribes. The various entities will coordinate efforts to avoid a piecemeal approach to interpretation. The interpretive media (exhibits, audiovisuals, and publications) will be designed to create a "family resemblance," a continuity of design that can be easily identified by visitors, reinforcing the fact that these sites are part of the same system.
The canyon and all outliers currently being interpreted will be recommended for additional treatment. The remaining outliers recommended for interpretation will be developed using low-key methods (self-guiding systems, pamphlets, and/or outdoor exhibits) to describe individual site attributes as well as the system as a whole. Visitor contact buildings, guided tours, and multimedia presentations may be used to create the desired impression, if the site management plan determines that they are justified based on anticipated use, type of resource, and interpretive themes.

This interpretive recommendation does not preclude agencies or organizations from interpreting outliers not included in the proposal. Outliers not meeting the identified criteria may have other attributes that justify interpretation. For example, sites near small communities or schools may provide excellent interpretive opportunities for local needs.

**LEGISLATIVE/ADMINISTRATIVE COMPLIANCE**

Because site-specific recommendations for management and use of the protection sites will be included in the site management plans, most compliance requirements will be met during the preparation of those plans and will be the responsibility of the lead planning/managing entity. The following procedural requirements will guide compliance efforts.

**Cultural Resources**

Because all of the archeological protection sites will undoubtedly yield information important in the study of prehistory, it is anticipated that most, if not all, will be eligible for listing on the National Register of Historic Places. Therefore, section 106 of the National Historic Preservation Act of 1966 (as amended), which directs federal agencies to consider the effects of any proposed undertaking upon cultural resources on or eligible for the National Register, will apply. In accordance with agency guidelines and the Advisory Council on Historic Preservation's regulations for "Protection of Historic and Cultural Properties" (36 CFR 800), federal agencies preparing site management plans or proposing other actions (permits, licenses, etc.) that may directly or indirectly affect an archeological protection site must comply with the following general procedures:

In consultation with the state historic preservation officer (SHPO), apply the National Register criteria, and nominate or request a determination of eligibility if site appears eligible.

In consultation with the SHPO, determine the extent of the undertaking and its effect upon the cultural values that make the site eligible for the National Register.

If the undertaking will affect those qualities, allow the Advisory Council on Historic Preservation proper opportunity to comment.
Based on the archeological protection sites' significance, consideration should also be given to nominating them to the National Historic Landmark Program and perhaps the World Heritage List. These actions would commemorate their national significance but would not place additional constraints on management beyond normal compliance procedures.

Agencies preparing several site management plans may choose to complete compliance requirements on their total program, rather than on a case-by-case basis.

Agencies must follow their own guidelines in considering the effects of an undertaking on the religious freedom of Native Americans. The American Indian Religious Freedom Act of 1978 (PL 95-341) points out that it is the policy of the United States to protect and preserve for Native Americans their first amendment rights concerning freedom of religion. This includes access to sites of religious importance, freedom to conduct ceremonies and traditional rites, and freedom to maintain traditional religious attitudes toward prehistoric ruins and specific Chacoan sites.

Natural Resources

In preparing site management plans several federal environmental laws and regulations must be taken into account, particularly if construction of visitor or protection facilities or other ground-disturbing activities are proposed. Four regulations have procedural requirements that should be met during the planning process before implementation. These are the National Environmental Policy Act, the Endangered Species Act, and executive orders 11988 and 11990 concerning floodplain and wetland management. Threatened and endangered plants and animals will be inventoried and analyzed during individual site management plan preparation. Managers should consult departmental and agency guidelines for applicability and compliance procedures. Individual agency mandates will also apply in planning for the sites.

ADDITIONS TO AND DELETIONS FROM THE SYSTEM

As mandated in section 503 of PL 96-550, the secretary of the interior is to identify sites to be added to or deleted from the archeological protection site system and is to submit a list of recommended sites to Congress for final determination. Based on planning team evaluations, it is recommended that 32 of the 33 designated protection sites remain in the system; the, Ute Mountain Ute tribe and the BIA, Albuquerque Area Office, recommend that Squaw Springs be deleted from protection site status. During the planning effort the owner of Andrews Ranch requested that it be deauthorized; however, the site is still listed because of its resource values. Three new sites--Chimney Rock, Guadalupe, and Casamero--are recommended for addition to the system, and five others--the Holmes group, Stairway, Manuelito Canyon, Hunters Point, and Salmon--are recommended for further study (these eight sites are shown on the Chaco Archeological Protection Site System map). Site reconnaissance studies have already been completed for the first four sites.
The procedures for identifying, selecting, and designating potential protection sites on public and private lands are included in the following section. The IMG and administrating agency/tribe(s) will follow these procedures in evaluating the six potential additions to the system as well as any future sites that are being considered for inclusion.

BOUNDARY ADJUSTMENTS

To ensure that all of the significant archeological remains of the Chacoan outliers were within the legislated boundaries of the protection sites, a boundary reconnaissance was conducted in June and July 1981. Based on the findings, certain boundary adjustments are now recommended by the planning team for consideration. The recommended adjustments have been made to include portions of outlier communities that are not within the site boundaries or to exclude portions where no archeological features are present. More specifically:

Only high-density portions of outlier communities, with major archeological features, are recommended for addition. Areas with low densities and/or ephemeral features are generally not included, even if they are part of the community.

Only minimum buffer areas are included. Thus, boundaries do not always necessarily conform to visual or natural boundaries.

Modern developments (roads, houses, corrals, fields, etc.) are excluded wherever possible to minimize impacts and land use conflicts.

Deletions are recommended only in areas where reconnaissance revealed no significant features.

The 33 designated protection sites currently total 8,768 acres. Boundary adjustments would affect 19 sites. Additions would total 2,861 acres, deletions 1,137 acres (the latter figure includes the 870-acre Squaw Springs site, which is recommended for deletion from protection site status). The adjustments recommended at each site are shown in the Findings and Recommendations table. Additional data on the sites are contained in the site reconnaissance studies available at local land-managing agency offices and Navajo tribal headquarters.
### FINDINGS

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**NOTE:** These figures reflect current estimated costs, and they may be revised as the site management plans are completed and costs are reevaluated. Costs are based on establishing a single cooperative agreement with the Navajo tribe and on emphasizing cooperative agreements, exchanges, transfer of development rights, and easements rather than fee acquisition.

*On trust lands where the tribe is beneficial owner and on lands where there is a combination of tribal trust, allotment, and fee ownership, the Navajo tribe and the BIA will share the responsibility for planning and management.
GUIDELINES FOR FUTURE SITE SELECTION AND DESIGNATION

To ensure proper evaluation and review of any new Chacoan sites that may be discovered in the San Juan Basin, identification and selection criteria have been defined and selection/designation/implementation procedures have been established for use by the public and private entities involved.

IDENTIFICATION CRITERIA

Chacoan outliers are defined as Anasazi communities and/or individual sites outside of Chaco Canyon, dating from the time span A.D. 500-1300, and distinguished by one or more of the following characteristics during the Chacoan period. Any outlier that has these characteristics can be considered for designation as an archaeological protection site.

- Presence of one or more Chacoan structures distinguished by specific architectural attributes, including planned building, multistoried construction, core-veneer masonry, large rooms, and Chaco-style kivas
- Presence of archeological features indicating the existence of a Chacoan community, including small habitation sites, great kivas, and various special use sites
- Evidence that the site or community was connected with other outliers and major Chaco Canyon sites by prehistoric roadways

These criteria should be applied to any new sites that are discovered on public or private lands in the San Juan Basin.

SELECTION CRITERIA

Because it is neither practical nor desirable to designate all Chacoan outliers as archeological protection sites, a sample must be selected that will best represent the known diversity in the outlier system. Seven criteria have been developed to ensure systematic selection and to avoid duplication of attributes already represented by the designated archeological protection sites. The criteria allow for significant differences that are present or may be expected among the archeological remains at Chacoan outliers, and at the same time they reflect the attributes that should be represented in the archeological protection site system. The criteria are as follows:

- Road System Affiliation--Six major prehistoric road systems have been identified in the vicinity of Chaco Canyon, radiating from the canyon proper like spokes from the hub of a wheel. Current research findings, although tentative, suggest that these road systems and their associated outliers may have functioned as semi-independent economic, religious, and political subunits, each within the domain and under the direction of a single major Chaco
Canyon pueblo. To allow comparison in future study, it is considered important that a representative sample of outliers affiliated with each road system be selected as protection sites. Therefore, the following six criteria should be applied independently for each road system.

**Distance from Chaco Canyon**—It is well known that archeological remains at outliers vary subtly but significantly over short distances. This may in part reflect the varying intensity and degree of interaction between people at Chaco Canyon and the outliers in close, intermediate, and distant localities. Thus, it is essential that the sample of outliers chosen as archeological protection sites include sites ranging in distribution from the center to the periphery.

**Vegetative Context**—It is accepted that the Chaco Anasazi adapted hunting, gathering, and agriculture techniques, construction materials, and other aspects of their material culture according to local environmental constraints. Thus, the subsistence practices and construction techniques of an outlier in one environmental zone might be quite different from those in another. In order to recognize these differences, three vegetative zones reflecting a range of environments have been identified.

**Time Period**—The Chacoan system evolved over the time span A.D. 500-1300. To understand the origins, development, and collapse of the Chacoan system, both as a whole and at individual Chacoan outliers, the representative sample should include sites from a range of time periods.

**Outlier Type**—Recent investigations indicate that there are at least four types of Chacoan outlier communities, each with a separate function or importance in the Chacoan system. The types recognized are large communities (25-50 habitation sites), small communities (1-25 habitation sites), isolated ceremonial structures, and isolated way stations. For the protection site sample to be representative, examples of each of these site types is necessary.

**Chacoan Structure Size**—New findings suggest that size differences among Chacoan structures at outlying communities may be indicative of the relative importance of the site within the political and economic hierarchy of the Chacoan system. Accordingly, a representative sample should include examples of large (5,900-9,000 sq.m.), medium (1,400-3,550 sq.m.), and small (100-1,200 sq.m.) Chacoan structures.

**Unusual Structural Features**—A variety of distinctive and in some cases unique structural or architectural features occur at outlying sites, such as dams, irrigation systems, and curbed roadways. If all other criteria variables between two protection sites are similar, these features are of considerable importance. For the sample to be representative, it should include sites with distinctive or unique features.
Although the above criteria provide the best available means for selecting a Chacoan outlier sample, they are not without limitations. First, they reflect only the most important attributes of the Chacoan system. Second, they are based on current archeological interpretations, which may change as knowledge increases. Finally, because most sites are unexcavated, rendering it impossible to identify additional differences that may be concealed below the surface, the criteria only distinguish archeological differences that are now visible.

It is important to emphasize that the criteria are not intended as a means for justifying the designation of large numbers of outliers as archeological protection sites. In fact, if they are applied carefully and judiciously, the criteria should act to limit the number of sites recommended for designation. A major factor in evaluating any newly discovered sites should be the representation of the existing system. As shown on the Selection Criteria chart, the designated archeological protection sites provide a fairly diverse and representative outlier sample in the close and intermediate ranges along the north, northwest, west, south, and southeast road systems. Although additional outliers will undoubtedly be identified in these areas in the future, the number of new sites recommended for designation will probably be relatively few, since most new sites are not expected to vary significantly from those already selected. It is equally probable that some characteristics will never be represented in these areas, simply because a particular vegetative context or outlier type does not occur along a particular road system.

Areas that are poorly represented in the existing protection site system include the entire east road system and the more distant portions of the other five road systems. If Chacoan outliers are present in these areas, their addition to the protection site system should take priority over the addition of sites in already well-represented sample areas.

Practical considerations such as costs, willingness of owner, previous vandalism, or incompatible land uses may preclude designation of an outlier as an archeological protection site, regardless of its qualifications in meeting the selection criteria.

The application of selection criteria for any newly discovered Chacoan outliers will occur at the site reconnaissance stage, as described in the following "Procedures" section.

**PROCEDURES FOR SELECTION/DESIGNATION/IMPLEMENTATION**

Two step-by-step procedures have been established for selecting, designating, and implementing plans for future archeological protection sites. The first procedure should be referred to when dealing with sites located primarily on lands administered by federal, state, or tribal governments (including tribal fee lands), the second should be used for sites on private lands. All administrative and management actions for sites on federal, state, or tribal lands will be carried out by the agency(s) and/or tribe(s) with jurisdiction over the lands where the site is located. Actions taken for sites on private lands will be the responsibility of the Bureau of Land Management.
# Selection Criteria

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<th>Time Period</th>
<th>Outlier Type</th>
<th>Chacoan Structure Size</th>
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## SELECTION CRITERIA

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<th>Outlier Type</th>
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<th>Unusual Structural Feature</th>
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<tr>
<td></td>
<td>0-40 (close)</td>
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<tr>
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<tr>
<td></td>
<td>Pinyon/juniper woodland</td>
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### Southwest Road

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<td>X</td>
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</tr>
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<th>Outlier Type</th>
<th>Chacoan Structure Size</th>
<th>Unusual Structural Feature</th>
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</thead>
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<td>X</td>
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</tr>
<tr>
<td>Andrews Ranch</td>
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</tr>
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</tr>
<tr>
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<tr>
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</table>

### East Road

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<td>X</td>
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</table>
Sites on Federal, State, or Tribal Lands

When a potential Chacoan outlier is discovered on lands administered by a federal or state agency or a tribal government (including tribal fee lands), that agency/tribe is responsible for completing all steps in the following procedure. If two or more agencies or tribes have jurisdiction over lands at the site, the IMG meets to identify the lead planning/managing entity(s) that will coordinate subsequent activities. The person discovering the site contacts the administering agency/tribe(s), which in turn contacts the Chaco Center. A team is then formed, representing the involved agency/tribe(s) and the Chaco Center and including the disciplines of planning and archeology. This team conducts a data search as well as field reconnaissance at the site. (Where New Mexico state lands are involved, the Historic Preservation Division represents the state and participates in site reconnaissance under state permit.) Using available information, the team makes a determination as to whether or not the site is a Chacoan outlier and, if so, whether it meets the selection criteria (see previous section). If the site meets the criteria, a site reconnaissance study is prepared; this study includes, to the extent possible, all the components described in the outline (in appendix E) and provides all the information necessary for recommending the site for designation as an archeological protection site. If the site is not a Chacoan outlier or if it does not meet the criteria, the reconnaissance study is an abbreviated report containing a statement of findings and a recommendation that the site be dropped from consideration. Any site determined to be a Chacoan outlier is immediately recommended to the state for nomination to the National Register of Historic Places and the state register of cultural properties.

After the reconnaissance study is prepared, the planning team presents it to the administering agency/tribe(s) with a recommendation to add the site as a protection site under PL 96-550 or to drop the site from consideration. If the administering agency/tribe(s) decides to drop the site from consideration at this stage, the decision is reviewed at the next scheduled meeting of the IMG. If the administering agency/tribe(s) recommends the Chacoan outlier for addition, the emergency protection guidelines are immediately instituted (see appendix C). At the same time the administering agency/tribe(s) initiates inquiries concerning cooperative agreements with private entities having surface and subsurface interests (leases, rights-of-way, permits, grants, licenses, and mining claims) within or near the site, as necessary to protect the site's cultural values (see the "Land Protection" and "Resource Management" sections of the Joint Management Plan).

When preliminary protection measures have been initiated, the planning team and administering agency/tribe(s) present the following to the IMG:

The reconnaissance study (including alternatives and impacts if the site is recommended for designation)

The decision as to whether the site should be designated as an archeological protection site

The status of cooperative agreement initiatives
Procedure for Site Selection/Designation/Implementation on Federal, State, or Tribal Lands

Potential Chacoan Outlier Discovery

Administering Agency/Tribe and Chaco Center Contact

Data Search/Field Reconnaissance

Site Reconnaissance Study (SRS) Preparation

Agency/Tribe Determination on Designation

Decision Not to Seek Designation

IMG Review and Comment

IMG Concurrence/ Site Elimination

IMG Nonconcurrence/ Position Papers

IMG Nonconcurrence/ Position Paper

Site Elimination

Decision to Seek Designation

Implementation of Emergency Protection Procedures/Initiation of Cooperative Agreement Inquiries

IMG Review of SRS and Cooperative Agreement Proposals

IMG Concurrence/ Finalizing of Cooperative Agreements

IMG Submission of Recommendation to DOI/OMB/Congress

Site Designation by Congress

Preparation and Approval of Site Management Plan

Plan Implementation

1. The SRS is to be completed within 60 days of the date of discovery.
2. The agency decision on site designation is to be made within 90 days of the date of discovery.
3. The site management plan is to be finalized within two years of the date of designation.
4. Position papers are forwarded to the department for a determination on whether or not to seek designation.
The IMG reviews the agency/tribe decision on site designation and records a concurring or dissenting opinion regarding the decision. (If two or more administering agencies/tribes cannot agree on a decision or if the IMG disagrees with the agency/tribe decision, a paper indicating the positions of the parties is forwarded to the secretary of the interior, and to the secretary of agriculture if Forest Service lands are involved.) If the IMG concurs in a decision to recommend the site for designation, the administering agency/tribe(s) finalizes the cooperative agreements. The chairman of the IMG pursues site designation through the Department of the Interior, the Office of Management and Budget, and the Congress. If the Congress designates the site as an archeological protection site under PL 96-550, the lead planning agency/tribe(s) completes a site management plan, which includes strategies for resolving issues and achieving identified objectives for management, protection, and use of the site (see the site management plan outline in appendix F).

Sites on Private Lands

When a potential Chacoan outlier is discovered on private (other than tribal fee) lands, the Bureau of Land Management is responsible for completing the following procedure. As a first step in this procedure, a representative of BLM contacts the landowner for permission to gain access to the property. If BLM is denied access, the site is dropped from consideration. (This decision is reviewed by the IMG during its regular biannual meeting, at which time a second request for access may be sought.) If access is permitted, a team, representing the BLM and the Chaco Center and including disciplines of planning and archeology, is formed to conduct a data search and field reconnaissance at the site. Using existing information, the team makes a determination as to whether or not the site is a Chacoan outlier and, if so, whether it meets the selection criteria. If the site meets the criteria, a site reconnaissance study is prepared containing the components outlined in appendix E. If the site is not a Chacoan outlier or does not meet the criteria, the study is an abbreviated report containing a statement of findings and a recommendation that the site be dropped from consideration. Sites determined to be Chacoan outliers are immediately recommended to the state for nomination to the National Register of Historic Places and the state register of cultural properties.

After the reconnaissance study is completed, the team presents it to the BLM with a recommendation that the site be designated as an archeological protection site or that it be dropped from consideration. If the BLM decides to eliminate the site from consideration, the decision is reviewed at the next scheduled meeting of the IMG. (Sites previously dropped because the landowner denied access are also reviewed by the IMG at these meetings.) If the BLM recommends the site for addition to the system, BLM makes an inquiry to determine if the landowner is willing to consider less-than-fee land protection measures (e.g., easements, transfer of development rights) to ensure the protection, preservation, maintenance, and administration of the site. The inquiry begins with an attempt to enter into a cooperative agreement with the owner (PL 96-559, sec. 504(c)(2)). If no cooperative agreement can be achieved and if there is a threat of damage or destruction to the site, BLM may seek to
Procedure for Site Selection/Designation/Implementation on Private Lands

1. The SRS is to be completed within 60 days of the date of discovery.
2. The agency decision on site designation is to be made within 90 days of the date of discovery.
3. The site management plan is to be finalized within two years of the date of designation.
4. Position papers are forwarded to the department for a determination on whether or not to seek designation.
acquire fee title. Title to the land must first be sought through exchange or donation (sec. 504(c)(1)).

After protection measures have been initiated, the team and BLM present the following to the IMG:

- The reconnaissance study (including alternatives and impacts if the site is recommended for designation)
- The decision as to whether the site should be designated as an archeological protection site
- The status of the inquiry about the landowner's willingness to accept less-than-fee land protection measures

The IMG then reviews the BLM decision on site designation and records a concurring or dissenting opinion. (If the IMG disagrees with the agency decision, a position paper is forwarded to the secretary of the interior.)

If the IMG concurs in a BLM decision to recommend the site for designation, the BLM, with assistance from the IMG, meets with the landowner to select, implement, and finalize the appropriate less-than-fee land protection measure. The chairman of the IMG pursues site designation through the Department of the Interior, the Office of Management and Budget, and the Congress. If the Congress designates the site as an archeological protection site under PL 96-550, the BLM prepares a site management plan, which includes strategies for resolving issues and achieving objectives for management, protection, and use of the site (see the site management plan outline in appendix F).
JOINT MANAGEMENT PLAN IMPLEMENTATION

Public Law 96-550 was written in general terms, requiring that the details of balancing resource preservation with energy exploration and development be resolved cooperatively through this interagency planning effort. The Joint Management Plan has developed the strategies for achieving a balance, but to ensure that the strategies are implemented, the planning team recommends that the existing law be amended and/or administrative agreements be established.

The law established a somewhat conflicting policy for the protection sites. The legislative history clearly indicated that the sites are not congressionally withdrawn from mineral entry and are therefore open to entry and to mineral leasing under PL 96-550 and appropriate mining and mineral leasing laws. (Other legislative and administrative mandates pertaining to mining and minerals will continue to apply, and agencies will have the option of withdrawing sites from mineral entry for other reasons, if mandates require or permit such action.) Section 501 of PL 96-550 carried this point further by stating that valid existing private rights, including those involving energy exploration and development, will not be adversely affected by the protection of the archeological resources. However, section 506(b) required the secretary to preserve the protection sites and provide for interpretation and research. Congress attempted to reconcile this dual policy in section 506(c) by prohibiting any surface disturbance on the protection sites that would endanger the sites' cultural values. Because the definition of the term "cultural values" greatly influences the manner in which the protection sites will be managed and administered, the planning team recommends that the following definition be adopted and added to the law:

Cultural values include but are not limited to Chacoan archeological structures or features, including roadways and water control systems, and concentrations of pottery, weapons, tools, refuse, perishable material culture, and human materials.

Section 507(a) of the law called for the establishment of a committee to advise the secretary of the interior on matters related to the park and archeological protection sites. The planning team recommends that the Chaco Culture Interagency Management Group be formally established to serve that need. The IMG could hold scheduled meetings twice a year, and on an as needed emergency basis, as the monitoring, review, and coordinating authority on all matters relating to PL 96-550 and the archeological protection site system. The group could advise the secretary of the interior, and the secretary of agriculture as appropriate, concerning management, protection, and use of the cultural resources within Chaco Culture National Historical Park and the archeological protection sites. Specific functions of the group could include the following: submitting recommended boundary adjustments to Congress; pursuing archeological protection site designation (through DOI, OMB, and Congress) and making recommendations for deletions from the system; reviewing interim actions on designated protection sites; approving the Joint Management Plan (if delegated as the representative of the secretary of the interior and the secretary of agriculture); reviewing and
commenting on the site management plans; prioritizing projects and possibly channeling and distributing funds for site management plan implementation; monitoring plan implementation; coordinating research and interpretive efforts at the park and the protection sites; and reviewing and commenting on the park's general management plan and any action plans that may modify that plan. The IMG should include, as a minimum, representatives from the Bureau of Land Management, Bureau of Indian Affairs, Forest Service, state of New Mexico, Navajo tribe, and National Park Service. The San Juan Interagency Archeological Group will advise and consult with the IMG on matters relating to archeology.

The majority of the protection sites require varying amounts of funding depending on the type of resource and the level of protection required. The following table shows a cost estimate for implementing the Joint Management Plan using average costs per site.

At the present time, there appear to be three ways of generating funds. First, funding could be requested by each involved agency through existing channels based on priorities established by the IMG (funds for the Navajo tribe would be channeled through the BIA); the IMG agencies plan to begin this process next fiscal year. Second, a private trust could be established that relied on funds from the private sector, including conservation groups and the energy companies. Third, base funding from Congress could be sought, for example, from revenues generated from mining claims and leases. It is also possible that two or more sources be combined. Under the latter two options the funds could be channeled through the IMG for distribution.
NOTE: After completion of the site management plans, the IMG will evaluate the funds needed for tribal assistance in management, protection, and maintenance of the designated protection sites. Estimated costs will range between $50,000 and $75,000 per year.

*If the Chaco Center continuation plan (see appendix G) is fully funded by Congress, this estimate can be reduced by approximately $600,000.
APPENDIXES

A: LEGISLATION
B: DEFINITION OF LAND USE TERMS
C: EMERGENCY PROTECTION GUIDELINES
D: CHACO CENTER CONTINUATION PLAN
E: SITE RECONNAISSANCE STUDY OUTLINE
F: SITE MANAGEMENT PLAN OUTLINE
TITLE V—CHACO CULTURE NATIONAL HISTORICAL PARK

Sec. 501. (a) The Congress finds that—

(1) archeological research in the San Juan Basin conducted over the past several years has greatly increased public knowledge of the scope of the prehistoric culture referred to as Chacoan Anasazi;

(2) the discoveries and the increased general interest in the Chaco phenomenon have come at a time when the San Juan Basin is experiencing extensive exploration and development for a wide variety of energy-related resources, including coal, uranium, oil, and natural gas;

(3) development of the San Juan Basin's important natural resources and the valid existing rights of private property owners will not be adversely affected by the preservation of the archeological integrity of the area; and

(4) in light of the national significance of the Chacoan sites and the urgent need to protect them, continued cooperation between Federal agencies and private corporations is necessary to provide for development in the San Juan Basin in a manner compatible with preservation and archeological research.

(b) It is the purpose of this title to recognize the unique archeological resources associated with the prehistoric Chacoan culture in the San Juan Basin; to provide for the preservation and interpretation of these resources; and to facilitate research activities associated with these resources.

Sec. 502. (a) There is hereby established in the State of New Mexico, the Chaco Culture National Historical Park comprising approximately thirty three thousand nine hundred and eighty nine acres as generally depicted on the map entitled “Chaco Culture National Historical Park”, numbered 810/80,032-A and dated August 1979. The Chaco Canyon National Monument is hereby abolished, as such, and any funds available for the purpose of the monument shall be...
available for the purpose of the Chaco Culture National Historical Park.

(b) Thirty three outlying sites generally depicted on a map entitled “Chaco Culture Archeological Protection Sites”, numbered 310/80,033-A and dated August 1980, are hereby designated as “Chaco Culture Archeological Protection Sites”. The thirty three archeological protection sites totaling approximately eight thousand seven hundred and seventy one acres are identified as follows:

Name: Acres

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<th>Name</th>
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<tr>
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<td>40</td>
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<tr>
<td>Bia'ani</td>
<td>131</td>
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<td>Casa del Rio</td>
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<td>Coolidge</td>
<td>15</td>
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<td>Dalton Pass</td>
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SEC. 503. The Secretary of the Interior shall continue to search for additional evidences of Chacoan sites and submit to Congress within two years of date of enactment of this Act and thereafter as needed, his recommendations for additions to, or deletions from, the list of archeological protection sites in section 502(b) of this title. Additions to or deletions from such list shall be made only by an Act of Congress.

SEC. 504. (a) The Secretary is authorized to acquire lands, waters, and interests therein within the boundaries of the Chaco Culture National Historical Park (hereinafter referred to as the “park”) and the archeological protection sites as identified in section 502 of this title by donation, purchase with donated or appropriated funds, or exchange. Property owned by the State of New Mexico or any political subdivision thereof, may be acquired by exchange or donation only. Property held in trust for the benefit of any Indian tribe or for the benefit of any individual member thereof may be acquired only with the consent of such owner or beneficial owner as the case may be.

(b) The respective tribal authorities are authorized to convey by exchange, purchase, or donation the beneficial interest in any lands designated by section 502 of this Act and held in trust by the United States for the respective tribes, to the Secretary, subject to such terms
and conditions as the tribal authority deems necessary and which the Secretary deems consistent with the purposes of this title.

(c)(1) The Secretary shall attempt to acquire private lands or interests therein by exchange prior to acquiring lands by any other method authorized pursuant to section 504 of this Act.

(2) The Secretary shall attempt to enter into cooperative agreements pursuant to section 505 of this Act with owners of private property for those archeological protection sites described in section 502(b) of this Act. The Secretary shall acquire fee title to any such private property only if it is necessary to prevent direct and material damage to, or destruction of, Chaco cultural resources and no cooperative agreement with the owner of the private property interest can be effected.

(d)(1) For purposes of completing an exchange pursuant to subsections (a) and (b), the Secretary shall designate a pool of at least three times the private acreage described in subsections (a) and (b), comprised of Federal property interests of a similar resource character to property to be exchanged. Federal property shall, whenever possible, be designated in blocks of at least one section in size, but in no event shall the blocks designated be less than one-quarter of a section in size.

(2) The Secretary may include within the pool any Federal property under his jurisdiction except units of the National Park System, National Forest System, or the National Wildlife Refuge System that are nominated by the owner of the private property to be exchanged. Exchanges shall be on the basis of equal value, and either party to the exchange may pay or accept cash in order to equalize the value of the property exchange, except that if the parties agree to an exchange and the Secretary determines it is in the public interest, such exchange may be made for other than equal values.

(e) All Federal lands, waters, and interests therein excluded from the boundaries of Chaco Canyon National Monument by this title may be exchanged for non-Federal property to be acquired pursuant to this title. Any lands so excluded shall be managed by the Secretary under the provisions of the Federal Land Policy and Management Act of 1976. Transfer of administration of such lands to the Bureau of Land Management shall not be considered a withdrawal as that term is defined in section 103(j) of the Federal Land Policy and Management Act of 1976.

Sec. 505. The Secretary shall seek to enter into cooperative agreements with the owners, including the beneficial owners, of the properties located in whole or in part within the park or the archeological protection sites. The purposes of such agreements shall be to protect, preserve, maintain, and administer the archeological resources and associated site regardless of whether title to the property or site is vested in the United States. Any such agreement shall contain provisions to assure that (1) the Secretary, or his representative, shall have a right of access at all reasonable times to appropriate portions of the property for the purpose of cultural resource protection and conducting research, and (2) no changes or alterations shall be permitted with respect to the cultural resources without the written consent of the Secretary. Nothing in this title shall be deemed to prevent the continuation of traditional Native American religious uses of properties which are the subject of cooperative agreements.

Sec. 506. (a) The Secretary shall administer the park in accordance with the provisions of this title and the provisions of law generally applicable to the administration of units of the National Park

(b) The Secretary shall protect, preserve, maintain, and administer the Chaco Culture Archeological Protection Sites, in a manner that will preserve the Chaco cultural resource and provide for its interpretation and research. Such sites shall be managed by the Secretary in accordance with the provisions of this title and the provisions of law generally applicable to public lands as defined in section 103(e) of the Federal Land Policy and Management Act of 1976: Provided, however, That lands held in trust by the Secretary for an Indian tribe or any individual member thereof, or held in restricted fee status shall continue to be so managed or held by the Secretary.

(c) No activities shall be permitted upon the upper surface of the archeological protection sites which shall endanger their cultural values. For the purposes of this title, upper surface shall be considered to extend to a depth of twenty meters below ground level. Nothing in this title shall be deemed to prevent exploration and development of subsurface oil and gas, mineral, and coal resources from without the sites which does not infringe upon the upper surface of the sites.

(d) Nothing in this title shall be deemed to prevent the continuation of livestock grazing on properties which are the subject of cooperative agreements.

(e) Within three complete fiscal years from the date of enactment, the Secretary shall transmit to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate, a general management plan for the identification, research, and protection of the park, pursuant to the provisions of subsection (12)(b) of the Act of August 18, 1970, to be developed by the Director, National Park Service, in consultation with the Directors, Bureau of Land Management and Bureau of Indian Affairs and the Governor, State of New Mexico, and a joint management plan for the identification, research, and protection of the archeological protection sites, to be developed by the Director, National Park Service, in consultation and concurrence with the Directors, Bureau of Land Management and Bureau of Indian Affairs, and the Governor, State of New Mexico.

Sec. 507. (a) Consistent with and in furtherance of the purposes of the Division of Cultural Research of the Southwest Cultural Resources Center, operated by the National Park Service, the Secretary shall continue such research and data gathering activities as may be appropriate to further the purposes of this title and knowledge of the Chaco culture. The Secretary shall submit in writing within six months of the effective date of this section, to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate, a plan for the continued operational program of the Division. The Secretary is authorized and encouraged to establish a committee composed of professional archeologists and others with related professional expertise including the designee of the Governor of the State of New Mexico to advise the Secretary in matters related to the surveying, excavation, curation, interpretation, protection, and management of the cultural resources of the historical park and archeological protection sites.

(b) The Secretary shall, through the Division of Cultural Research of the Southwest Cultural Resources Center of the National Park Service, be responsible for the development of a computer-generated...
data base of the San Juan Basin, and make such information available to Federal and private groups when to do so will assist such groups in the preservation, management, and development of the resources of the basin.

(c) The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking with respect to the lands and waters in the archeological protection sites, and the head of any Federal agency having authority to license or permit any undertaking with respect to such lands and waters, shall prior to the approval of the expenditure of any Federal funds on such undertaking, or prior to the issuance of any license or permit, as the case may be, afford the Secretary a reasonable opportunity to comment in writing with regard to such undertaking and its effect upon such sites, and shall give due consideration to any comments made by the Secretary and to the effect of such undertaking on the purposes for which such sites are established.

Sec. 508. Effective October 1, 1981, there are authorized to be appropriated such sums as may be necessary to carry out the provisions of this title but not to exceed $11,000,000 for acquisition and $500,000 for development.
In reviewing the land status for each of the 33 archeological protection sites designated in PL 96-550, the following definitions of Indian lands, which appear in identified sections of 25 CFR, have been used:

**Tribal Trust:** These lands include all lands or any interest therein held by the United States in trust for a tribe, band, community, group, or pueblo of Indians. The Bureau of Indian Affairs (BIA) is the administering agency for the federal government with responsibility for Indian trust lands. Any interest in these lands can be granted with the approval of the secretary of the interior. Lands in this status can only be sold where specific statutory authority exists and then only with the approval of the secretary (25 CFR 121.22). Tribal trust lands include all reservation lands and most treaty lands that have been added to existing reservations.

**Indian Allotment:** These lands include all lands or any interest therein held in trust by the United States for the benefit of individual Indians. These lands are also trust lands administered by the BIA. Approval from the secretary of the interior or his authorized representative and written authority from the individual Indian are necessary before any interest in the land can be granted (25 CFR 131.2). These lands may be sold with consent of the individual Indian (25 CFR 121.17).

**Tribal Fee:** These lands are owned in fee simple by the respective tribes. Unlike restricted tribal lands, land owned in fee simple by a tribe may be leased, sold, or otherwise disposed of by the sole authority of the tribal council without federal restrictions. These lands do not fall under the authority of the BIA, and although they are shown separately in the context of this plan, they are the same as any other private land.

Mineral rights on tribal trust lands are leased under the Mineral Leasing Act of 1938 (25 USC 396) and the regulations under 25 CFR 171. Tribal lands are controlled under 25 CFR 177 affecting surface exploration, mining, and reclamation of lands. The unallotted lands within an Indian reservation may be leased for mining purposes by authority of the tribal council or other authorized spokesman with the approval of the secretary of the interior.

Allotted lands may be leased for mining purposes under 25 USC 396 and regulations in 25 CFR 172 and 25 CFR 177. The basic requirements applicable to tribal lands also apply to allotted lands, except that rather than approval by the tribal council, approval must be obtained from the individual Indian allottees or his heirs and the secretary of the interior.

Most leases issued on Indian lands have a 10-year primary term. Exclusive mineral prospecting permits with options to lease extend the 10-year period.
C: EMERGENCY PROTECTION GUIDELINES

These guidelines contain policies and procedures to be followed by federal agencies that are responsible for administering Chacoan outliers designated or being recommended for designation as Chaco archeological protection sites. They will also apply to state-owned and privately owned lands if cooperative agreements for emergency protection are established between the federal government and these entities. The guidelines are recommended for use by all administrators and owners in order to ensure preservation of site integrity and protection of the cultural values of the outliers.

For any newly discovered outliers the procedures should be initiated at the time a federal agency documents its decision to pursue designation. The guidelines will then remain in effect for the area until final approval of the site management plan. Routine management and maintenance actions will be allowed to continue in the interim.

The emergency protection guidelines supplement existing laws and regulations for the management of cultural resources on public lands in compliance with the Antiquities Act of 1906, as amended (16 USC 431), the Historic Sites Act of 1935 (16 USC 461), the National Historic Preservation Act of 1966 (16 USC 470), Executive Order 11593 (May 13, 1977), the Archeological Resources Protection Act of 1979 (93 Stat. 721), and the Surface Mining Control and Reclamation Act of 1977.

Management Policies

Valid Existing Prior Rights. Prior rights include such entitlements as grants, leases, rights-of-way, permits, licenses, and mining claims issued prior to the decision by the administering agency(s) to seek designation of a site. Case-specific determinations of prior rights will be made by the agency(s) in consultation with the IMG.

Where federal lands and/or interests are involved, the management of existing and proposed protection sites with valid existing prior rights will include the following (valid existing Indian homesite leases will be exempt from these provisions):

Surface-disturbing actions on an existing or proposed protection site that do not endanger the cultural values (as defined in the "Land Protection" section of the Joint Management Plan) may be permitted, based on case-specific evaluations. Cooperative agreements will be established, where necessary to identify allowable activities.

Reclamation will be required following all approved surface-disturbing activities on the site and will be the responsibility of the administering agency(s).

Preservation of cultural values within the boundary of an existing or proposed protection site is mandatory for designation and protection status. If all land protection measures fail to ensure preservation of
those values, salvage mitigation will be considered as a last option. If salvage mitigation is required, the site will be recommended for deauthorization (existing site) or dropped from consideration (proposed site).

No Prior Rights. For sites where no valid existing rights are identified, surface-disturbing actions may temporarily be prohibited on federally administered lands (pursuant to 43 CFR 8364.1(e)) until the site management plans are approved. Any exceptions will be evaluated and approved by the administering agency(s) in consultation with the IMG.

Procedures

Potential Surface-Disturbing Actions. Prior to approval of a proposal for surface-disturbing actions affecting an existing or proposed protection site, the administering agency(s) will

- ensure that any proposed decision is consistent with the policies set forth above
- advise the IMG of the proposed action and allow ten working days for written comment

The Interagency Management Group (IMG) will be considered the secretary's authorized representative body, as set forth in section 507(c) of PL 96-550. If conflicts arise during the consultation phase, the administering agency(s) will and attempt to resolve the issue through the IMG. If resolution cannot be achieved, final decision will rest with the administering agency(s). This procedure differs from the procedures established for long-term planning and management of the protection sites because of regulatory requirements and time frames for minerals proposals.

Emergency Stabilization. The need for emergency stabilization will be identified during site reconnaissance by the lead planning/managing entity in consultation with the Chaco Center and IMG. Recommendations concerning the nature and extent of the proposed work will be provided to the administering agency(s).

Patrol and Surveillance. The lead planning/managing entity, in consultation with the IMG, will coordinate the development of a patrol and surveillance program. The following opportunities will be explored:

- Employment of local residents as custodians
- Use of tribal rangers in patrolling
- Use of field employees of respective agencies
- Coordination with state and county law enforcement agencies

Further recommendations may be made subject to the results of the initial reconnaissance by the lead planning/managing entity.

Research. Approved archeological research will be allowed within the boundaries of the protection sites during the period in which the
emergency guidelines are in effect. The IMG will review and comment on all work proposals for conformance with the following standards:

Proposed research shall adhere to the highest standards of the profession and shall address research priorities established in regional research designs (one design is in preparation by the Interagency Archeological Committee).

To the extent possible, proposed research shall be minimally destructive.

Proposals shall demonstrate that research to be undertaken within the boundaries of the protection sites will contribute significantly to the understanding of the Chacoan system or of other important archeological questions and that alternative areas outside the boundaries are unsatisfactory for such research.

The IMG will be given the opportunity to provide written comments on the research proposals before agency approval.

Effective Period

The emergency guidelines will remain in effect from the date of the decision to seek protection site designation until such time as the site management plan is completed and approved. The guidelines may be reviewed and amended by the IMG.
CHACO CENTER

CONTINUING
RESEARCH & DATA GATHERING ACTIVITIES
P.L. 96-550

May 1981

Division of Cultural Research
National Park Service · Southwest Region
Santa Fe, New Mexico
INTRODUCTION

On August 13, 1969, a Memorandum of Agreement between the National Park Service and the University of New Mexico created the Chaco Center, a multi-disciplinary research unit designed to bring about better understanding of the prehistoric cultures in Chaco Canyon National Monument and its immediate environs. In 1971, the Center embarked on a full program to inventory the cultural resources of the Monument, and to undertake excavations as necessary to gain an understanding of the Chaco culture. The objectives were to assist management in the development of a long-range cultural resource management program for Chaco Canyon, and to make the results of the research known to the profession, management, and the public through published reports and an updated interpretive program. To facilitate interaction with management, the development of a computerized data base management system was also planned.

As a result of the Center's work, in cooperation with private and other public organizations, it is now believed that during the eleventh and twelfth centuries AD, Chaco Canyon was the economic, administrative, and possibly ceremonial center of a complex trade network involving more than 40 dispersed communities, known as outliers, covering most of the 26,000 square miles of the San Juan Basin. Further, there is evidence that the system was integrated by an extensive network of roads and possibly signal stations. Although poorly understood at present, the whole system may well have been unique in prehistoric times north of Mexico.

Knowledge of this highly significant cultural system and the fact that the San Juan Basin is also the scene of intensive energy exploration, led to the enactment of P.L. 96-550 on December 19, 1980. This law provides for the protection of a sample of 33 of the outlying communities; it enlarges and adjusts the boundaries of the Monument, renaming it Chaco Culture National Historical Park; and, additionally, it calls for the continuation of archeological research in the San Juan Basin, and for the maintenance of a computerized data base.

Specifically, section 507(a) of the Act states that "consistent with and in furtherance of the purposes of Division of Cultural Research of the Southwest Cultural Resources Center, operated by the National Park Service, the Secretary shall continue such research and data gathering activities as may be appropriate to further the purposes of this title and knowledge of the Chaco culture." Section 507(b) makes the Division of Cultural Research responsible for the computerized data base. By
June 1, 1981, the Secretary is to submit to Congress "a plan for the continued operational program of the Division." The requisite plan is presented in the following sections.

CONTINUATION PLAN

1. Purpose of Continued Research and Data Gathering Activities.

As specified in the Act, there are two objectives in continuing the research and data gathering activities of the Division. The first is to "further the purposes of this title," defined as 1) recognizing "the unique archaeological resources associated with the prehistoric Chacoan culture," 2) providing for the "preservation and interpretation of these resources," and 3) facilitating "research activities associated with these resources." As such, the goal is to gather sufficient baseline data to permit the development of recommendations for the long-term management of the Chacoan cultural resources. Management will include other land-managing entities in addition to the National Park Service (e.g., BLM, BIA, State of New Mexico, Navajo Tribe) which have or will have jurisdiction over the Park and Archeological Protection Site areas. Such recommendations will be intended to further the protection, preservation, interpretation, and insured wise use of the Chacoan cultural resources.

The second objective is to "further knowledge of the Chaco culture." As such the goal of the research will be to acquire and analyze data relevant to various cultural models which address the issues of the origin, growth, function, and decline of the Chacoan System. The implicit obligation to disseminate the results of such research through reports to public as well as professional audiences is fully recognized.

2. Character of the Planned Studies.

The continuation of research and data gathering activities will include literature search, background studies, paleoenvironmental studies, remote sensing, archeological survey, limited archeological testing through controlled excavation, and data analysis and interpretation. These activities will be carried out in conformance with the General Management Plan and the Joint Management Plan also mandated by P.L. 96-550, and scheduled for approval and adoption by January 1983.

A detailed research program, which will specify the degree, nature, and scheduling of the research and testing to be undertaken at each of the areas to be studied, will be developed by the Division of Cultural Research following the completion of the information currently being gathered by the Planning Team for the development of the GMP and JMP. Prior to its implementation, full consultation, review, and concurrence of this research program will be sought from the relevant agencies involved in developing the JMP and GMP.
The studies will conform to the conservation ethic in modern archaeology, that is, only those activities will be undertaken which are non-destructive or minimally-destructive to the archeological resource. This will be achieved primarily through the employment of carefully-planned sampling strategies.

The studies undertaken will be fully professional in every sense. That is, they will be in full conformance to currently accepted research practices in American archaeology.

The studies will result in the generation of research reports which will be distributed to the Federal, State, and private entities involved; to the archeological profession; to industry, and to the public.

The materials collected and/or developed by the studies, such as artifacts, maps, field notes, photo records and other information, will be adequately and permanently curated following the termination of the studies.

3. Duration of the Planned Studies.

The duration of research and data gathering activities on the Chacoan system will be the direct function of a number of elements, including starting date, funding levels, staffing levels, interagency support, and, importantly, environmental conditions. Given full support and favorable conditions it is possible that adequate data and research materials could be compiled to address both management and professional needs in a period of four to seven years. It should be made clear, however, that the intent at this point is that research need not and should not be carried on indefinitely; that instead it should have a programmed duration, and that serious effort be made to meet established deadlines once adequate data for management and interpretation have been acquired.

With regard to the starting date, full effort to the continuation studies cannot be initiated until the current project has reached an appropriate stage of completion (see Section 1 of the Continuation Schedule below).

4. Location

It is anticipated that the administrative and laboratory facilities of the Chaco Center on the campus of the University of New Mexico in Albuquerque will continue as the base of operations for the planned studies. Field locations will be maintained at either Chaco Canyon or other locations close to specific areas of work in the San Juan Basin. The computer facilities of the NPS/BICR in Santa Fe will be used to maintain the data base, with the remote terminal/plotter facilities at the Chaco Center providing the detailed, Chaco-specific information needed for management and research purposes. If in the future the
computer facility can no longer by supported by RICR, it should be placed under the auspices of the Division of Cultural Research.

CONTINUATION SCHEDULE

1. Completion of current project.

The current project of the Division of Cultural Research, begun in 1971, must reach a sufficient stage of completion before full efforts of the Division can be directed to further research and data gathering activities in the San Juan Basin.

a. Objectives:

Complete the analyses currently underway at the Chaco Center and undertake those analyses yet necessary to achieve adequate interpretation of data recovered by the Project.

Complete, review, edit, and publish the project reports scheduled for publication in the NPS Archeological Series and in the "Reports of the Chaco Center" Series (see Attachment A for list of scheduled reports).

Complete the development of the computerized park management system for those original Monument areas in which research was undertaken by the Project.

Develop, with N.P.S. management, a Cultural Resource Management Plan for Chaco Culture National Historical Park. This plan will include action recommendations for the protection, preservation, interpretation, and wise use of the cultural resources in the areas studied.

b. Current status of Project:

Attachment B summarizes the status of the project through 1979, when field work ended.

Since 1979, emphasis has been placed on analysis of recovered materials, on interpretation of the analyses, and on report writing. An additional volume in the Reports Series was published, and two volumes in the NPS Series are in press. Five additional articles have been published in professional journals.

Current budget cut restraints affect the status of the project, requiring extension of the projected 1981 completion date. This is reflected by the following schedule.

c. Completion Schedule:

The majority of analyses currently underway should be completed by January 1982. A few, however, will continue through FY-82.
A total of 22 professional monographs have been scheduled for publication. Two have been published and two are currently in press. It is anticipated that from six to eight per year will be submitted for publication for FY-82, 83, and 84. (See Attachment C for projected publication schedules for these reports.)

The computerized data base management system for the areas previously studied by the current project should be operational by 10/82, subject to the availability of funds.

The final report to management, in the form of a professionally acceptable Cultural Resource Management Plan with recommendations for the CMP, JMP, and an interagency interpretive program, will be submitted in 1985.

d. Staffing requirements for completing current project (through FY-82) (See Attachment D for detailed breakdown):

<table>
<thead>
<tr>
<th>Position</th>
<th>No.</th>
<th>Man Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent, full time</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Permanent, Less than full time</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Term appointments</td>
<td>10</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>10.7</td>
</tr>
</tbody>
</table>

e. Budget:

The completion of the current project can be achieved within the Division's programmed FY-82 budget.

2. Continuation of research and data gathering in the San Juan Basin.

a. Objectives:

As stated above, PL 96-550 specifies the continuation of research and data gathering activities in order to further the purposes of the Act and to further knowledge of the Chaco cultures. More detailed objectives include the following:

Gather resource base information for new areas added to Chaco Canyon National Monument by PL 96-550, and for those areas designated as Archeological Protection Sites by the same Act.

Gather additional information on Chacoan roads of use to management, industry, and public interpretation. Such studies will complement those currently being undertaken by the BLM.

Gather information relevant to understanding the Chacoan phenomenon, including its origin, function, and collapse, and prepare reports addressing these issues. This interpretive program will address
directly the need to transfer the results of the research performed to the public sector.

Based on the data gathered, provide management with information relevant to the development of an interagency interpretive program for Chacoan sites.

Develop a computerized park resource management system, equivalent in detail to the one developed by the current project, for the new Park areas and Archeological Protection Sites.

Develop a research design to serve as a guideline for the evaluation of proposals for future archeological studies on Archeological Protection Sites and other Chaco-related sites.

Make recommendations to interagency management regarding the long-term management and conservation of Chacoan resources.

Following completion of data gathering activities, continue to act in a professional and technical advisory capacity on Chacoan cultural resources.

b. Current status:

One staff member is now assigned full-time (0.9 man years) to provide archeological assistance to the interagency team which is carrying out the task directive designed to implement Public Law 96-550. The Chief of the Division and other staff continue to provide input as needed into the development of the GMP/JMP.

c. Completion schedule:

The targeted beginning date for the Division to devote full effort to the studies is FY-83 (subject to the availability of funds). Until then, the levels specified under "current status" in (b) above will be maintained. It is anticipated that most of the planned objectives can be accomplished in four years (normal project duration), as per the following schedule:

1) Collection of resource base information:

   Archeological resource testing: FY-1984


4) Completion (draft stage) of reports: FY-1986.

Following the completion of this schedule, the decision will be made whether it is necessary to continue research on Chacoan sites in the San Juan Basin, or whether to initiate data gathering activities in another Park Service area. The decision will be made on the basis of the research results at that time.

d. Staffing funding requirements, (See Attachments D and E for detailed breakdown):

<table>
<thead>
<tr>
<th>Position</th>
<th>No.</th>
<th>Man Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent, full time</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Permanent, less than full time</td>
<td>5</td>
<td>3.9</td>
</tr>
<tr>
<td>Other (term, temporary)</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Relationship of the Division of Cultural Research to other entities.

Through legislation, existing agreements, organizational structure, and operation needs, the Division has to maintain close working relationships with a number of entities. The organizations and the nature of the relationships anticipated are addressed below.

a. The Parks:

The park is the basic management entity in which the Division works and it is the resources of the park with which the Division works and studies. A close interlocking, self supporting relationship between the Division and the Park must be maintained.

b. Southwest Regional Office (NPS):

The Division of Cultural Research will cooperate to the fullest extent possible with other entities of the Regional Office in the accomplishment of planning and resource management objectives related to cultural resources in the San Juan Basin.

c. Southwest Cultural Resources Center:

The Division of Cultural Research is one of six Divisions of the Center. As such, it is directly responsible to the Chief of the Center.

The Division will coordinate activities closely with the other Divisions in the Center, particularly with the Division of Anthropology, in order to avoid redundancy and to work most effectively to serve management in those areas being studied.

The Division will also coordinate closely with the Division of Remote Sensing on those matters dealing with the use of remote sensing as a tool in data gathering and resource management.
d. The University of New Mexico:

Currently, the relationship with the University of New Mexico is specified in a formal cooperative agreement renewed every five years. Though details of the agreement may be altered to serve the best interests of both parties, it is anticipated that the relationship will continue in this manner, and the Division will continue to operate from its present location on the University campus.

e. Branch of Indian Cultural Resources (NPS)

During the Division's period of activity in the San Juan Basin, particularly close coordination will be maintained with BICR due to its heavy involvement with legislative compliance and cultural resource management in the Basin.

f. The Interagency Archeological Committee (IAC):

An Interagency committee, consisting of professional archeologists and others from land-managing and other agencies involved in the San Juan Basin, was formed in 1979 by the Secretary of Interior's Field Representative in order to foster coordinated management of all cultural resources in the San Juan Basin during the period of intensive energy development. The Division of Cultural Research will work closely with the IAC to insure activities undertaken and recommendations made are in conformance with guidelines developed by the IAC, and with the policies established by the Programatic Memorandum of Agreement being developed with the Advisory Council on Historic Preservation.

Further, Sec. 507(a) of PL-96-550 authorizes and encourages the Secretary of Interior to establish an advisory committee relating to research and management in the Park and Archeological Protection Site areas. The IAC can provide the basic structure for such an advisory committee to be augmented as necessary by professionals from related areas of expertise.

g. Other agencies:

With the primary land-managing agencies in the San Juan Basin (BLM, BIA, State of New Mexico, Navajo Tribe), the Division will maintain close coordination and communication to insure that relevant agency policies are conformed to, and that agency goals related to research and data gathering are met when studies are carried out in areas of their jurisdiction. Effectively, the Division will be undertaking management-oriented research as a service for these agencies, and recommendations resulting from such studies will be developed within the framework of the JMP and applicable agency policies.

With regard to other federal and state agencies, academic institutions, private contractors, and the energy industry in the San Juan Basin, the Division will continue to act in a "clearinghouse"
capacity to foster increased communication regarding research and other matters relating to Chacoan sites. In addition, on request, the Division will provide professional expertise in the evaluation of research proposals relating to investigation of Chacoan sites.

Funding

1. Funding of the Division will be sought through the regular National Park Service budget process.

2. Cooperative support will be sought from other land-managing agencies involved in the Archeological Protection Sites in the form of direct project funds, staff and/or technical support, travel support, etc., as studies are undertaken in areas of their jurisdiction.
Attachment A

Chaco Canyon Studies (NPS Archaeological Series No. 17)

A. Archaeological Surveys of Chaco Canyon, New Mexico
B. Tsegai: Archaeological Ethnohistory of the Chaco Region
C. Architecture of the Bonito Phase: Chaco Canyon
D. Village Archaeology of Chaco Canyon
E. Environment and Subsistence in the Chaco area
F. The Archaeology of Pueblo Alto
G. The Analysis of Chacoan Artifacts
H. Synthesis of Chaco Project Results

Reports of the Chaco Center

4. History of the Chaco Navaio
5. Stone Circles of Chaco Canyon, New Mexico
6. Outlier Survey: Regional View of Settlement in the San Juan Basin
7. The Architecture of Chetro Ketl
8. 29SJ1360: A Pueblo-II Site in Chaco Canyon
9. 29SJ627: A Multicomponent Site in Chaco Canyon
10. 29SJ633: A Test of Non-Destructive Techniques in Archaeology
12. Settlement Archaeology of the Chaco area
13. Early Anasazi Sites in Chaco Canyon
14. 29SJ629: A Village Site in Chaco Canyon
15. Atlatl Cave: Archaic and Basketmaker II Evidence in Chaco Canyon
16. Chacoan Road and Communications Systems
17. Late Period Sites in the Chaco area
18. Bibliography of Chacoan Archaeology

Note: Reports Nos. 1-3 deal with remote sensing in archeology.
# Summary of Chaco Project 1971-1979

## 1. Fieldwork

<table>
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<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Archeological sites inventoried</td>
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</tr>
<tr>
<td>Archeological sites excavated or tested</td>
<td></td>
</tr>
<tr>
<td>Archaic</td>
<td>3</td>
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<tr>
<td>Anasazi</td>
<td>23</td>
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<tr>
<td>Navajo</td>
<td>1</td>
</tr>
<tr>
<td>Artifacts recovered</td>
<td></td>
</tr>
<tr>
<td>Ceramic sherds</td>
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</tr>
<tr>
<td>Chipped stone</td>
<td></td>
</tr>
<tr>
<td>Debitage</td>
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</tr>
<tr>
<td>Tools</td>
<td>2,254</td>
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<td>Ground stone</td>
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<tr>
<td>Bone tools</td>
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<tr>
<td>Ornaments/Minerals</td>
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<tr>
<td>Miscellaneous stone</td>
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<tr>
<td><strong>Total Artifacts</strong></td>
<td><strong>308,170</strong></td>
</tr>
<tr>
<td>Other materials recovered</td>
<td></td>
</tr>
<tr>
<td>Faunal remains</td>
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<tr>
<td>Egg shell</td>
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<tr>
<td>Pollen samples</td>
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<tr>
<td>Flotation samples</td>
<td>1,936</td>
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<tr>
<td>Plant specimens</td>
<td>835</td>
</tr>
<tr>
<td>Other</td>
<td>211</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118,940</strong></td>
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<tr>
<td><strong>Total items recovered</strong></td>
<td><strong>427,110</strong></td>
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## 2. Records

<table>
<thead>
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<th>Quantity</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Field maps, drawings, etc.</td>
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<td>Field photos (B/W)</td>
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<tr>
<td>Field photos (color slides)</td>
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<tr>
<td><strong>Total field records</strong></td>
<td><strong>30,850</strong></td>
</tr>
</tbody>
</table>

## 3. Documents, etc.

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival documents</td>
<td>3,452</td>
</tr>
<tr>
<td>Library books, periodicals</td>
<td>3,064</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,516</strong></td>
</tr>
</tbody>
</table>

## 4. Manuscripts, reports, publications, etc.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscripts, reports on file</td>
<td>78</td>
</tr>
<tr>
<td>Reports published</td>
<td></td>
</tr>
<tr>
<td>Reports of the Chaco Center</td>
<td>4</td>
</tr>
<tr>
<td>Reports published elsewhere</td>
<td>15</td>
</tr>
<tr>
<td>Title</td>
<td>Authors(s)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>6. 29SJ1360: A P-II Site in Chaco Canyon</td>
<td>McKenna</td>
</tr>
<tr>
<td>12. Early Anasazi Sites in Chaco Canyon</td>
<td>Windes</td>
</tr>
<tr>
<td>15. The Analysis of Chacoan Artifacts</td>
<td>Judge (compiler)</td>
</tr>
<tr>
<td>17. 29SJ629: A Village Site in Chaco Canyon</td>
<td>Windes</td>
</tr>
<tr>
<td>18. Late Period Sites in the Chaco Area</td>
<td>Windes (compiler)</td>
</tr>
</tbody>
</table>
## Budget Estimate for First Fiscal Year of Continuation Project

(based on FY-81 Salary Table)

1. **Personal Services**

<table>
<thead>
<tr>
<th>Staff</th>
<th>No.</th>
<th>Man Years</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent, full-time</td>
<td>4</td>
<td>4.0</td>
<td>$102,935</td>
</tr>
<tr>
<td>Perm, less than full-time</td>
<td>5</td>
<td>3.9</td>
<td>61,820</td>
</tr>
<tr>
<td>Other (term, temporary)</td>
<td>3</td>
<td>2.7</td>
<td>50,181</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>10.6</td>
<td>214,936</td>
</tr>
</tbody>
</table>

Benefits: 22,639

Total Personal Services: 237,575

2. **Travel and Transportation**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.</td>
<td>6,000</td>
<td>21,000</td>
</tr>
</tbody>
</table>

3. **All Other**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.</td>
<td>21,000</td>
<td>21,000</td>
</tr>
</tbody>
</table>

Total: 264,575
E: SITE RECONNAISSANCE STUDY OUTLINE

Following are the standard components of a site reconnaissance study. It should be noted that the example outline is flexible and can be adapted as necessary to meet agency requirements for format and organization. The level of detail will also vary, depending on available resource data and previous research and analysis at a site.

Criteria*

Identification Criteria. Using the following criteria (these criteria are explained more fully in the Joint Management Plan), determine if the site is a Chacoan outlier. All Chacoan outlier characteristics that the site displays should be described.

In addition to site occupation between A.D. 500-1300, one or more of the following must be identified for the site to be considered a Chacoan outlier:

- Presence of a structure with Chacoan attributes
- Presence of various archeological features (great kivas, small houses, special use sites, etc.) forming an associated community
- Association with a prehistoric roadway

Selection Criteria. Using the seven criteria identified in the Joint Management Plan, determine the characteristics of the prospective site. Compare the characteristics of the site under criteria 3-7 with the characteristics represented by existing protection sites on the same road system and within the same distance zone, and determine if the prospective site displays distinct cultural values that should be represented in the protection site sample. A description of these values, why they are significant or unique, and their importance for research and interpretative purposes must be included.

Site Description and Analysis

Size and Location. Describe the size (acreage) of the proposed protection site, and its location in relation to Chaco Culture National Historical Park and nearby towns or settlements.

*The criteria are the first and most important determinations that must be made for each proposed site. If it is found that the site is not a Chacoan outlier or that it would not add to the representativeness or diversity of the protection site sample under the selection criteria, then a complete reconnaissance study is clearly not necessary, and a no action (alternative I) recommendation should be made.
Description and Significance of Archeological Features. Briefly describe the archeological features, including number, types, periods of occupation, and unusual or significant features. Discuss major features (Chacoan structures, great kivas, roads, etc.), in more detail, including a description of their architectural attributes, periods of occupation, and other significant characteristics. Describe the relative importance of the proposed site (both for research and interpretation) in relation to the road system, other outlying sites, and the Chacoan system as a whole.

Existing Condition of Features. Describe any vandalism and/or erosion that has occurred at the site or is in progress, noting the location and extent of damage. If damage is extensive, estimate the total amount of disturbance, and determine if the site still has adequate archeological value to justify its designation as a protection site.

Natural Setting. Describe the natural environment of the proposed protection site noting surface geology, soils, topography, vegetation, and other relevant attributes such as wildlife, springs, or natural resources that may have played an important role in the life of the prehistoric occupants.

History and Traditional Uses. Briefly describe the history of the site and any Indian, Anglo, Hispanic, or other traditional uses, with emphasis on ceremonial, agricultural, stock-grazing, or residential uses.

Current Land Use and Development. Describe existing and proposed land uses and developments within and adjacent to the proposed protection site, including alterations to the environment such as roads, fields, residences, transmission lines, mining, energy development, or other modifications that affect the archeological features and the natural setting. Determine if stock-raising or other consumptive uses are occurring in the area, and describe these uses and associated features. Discuss the effects of uses and developments on archeological features, and any anticipated impacts.

Landownership. Briefly describe current ownership at the site. In chart form, indicate the following:

- **Legal description** - a description of proposed protection site boundaries and total acreage (accompanied by map)
- **Surface owners** - names of owners and lessees, addresses, acreages of holdings, rights, and encumbrances (accompanied by map)
- **Subsurface owners** - names of owners, addresses, and acreages of holdings
- **Other rights** - all information on easements, rights-of-access, etc.
- **Adjacent ownership** - surrounding public and private ownership
- **Information gaps** - landownership information gaps
Previous Research. Briefly describe previous archeological work at the site, noting date of work, extent, published reports, and location of artifact collections (a chart form is recommended).

Interpretive Potential. Assess the interpretive potential of the proposed site on the basis of its archeological features, natural setting, and accessibility. For example, an archeological site with distinctive architectural features and a scenic natural setting would clearly have interpretive value if factors such as access and current use did not preclude it.

Alternatives and Impacts

This is a summary discussion of the objectives, proposals, needs, and impacts under each management alternative. Staffing and costs to carry out the alternative should be included to the extent possible. (If the site does not have interpretive potential, only alternatives I and II should be presented. If it does, alternatives I, II, and III should be presented).

Alternative I - No Action. State that under this alternative the site would not be recommended for archeological protection site designation.

Alternative II - Preservation and Research. Indicate that under this alternative management would be for purposes of preservation and research, with no interpretation or visitor use. Discuss the following aspects of proposed management:

Land Protection--State options for less-than-fee or fee acquisition (cooperative agreement, exchange, transfer of development rights). Where cooperative agreements are recommended, note number and type of agreements necessary. Discuss preferences of owner (if known) and potential difficulties. Identify any landownership information needs.

Access Right-of-Way--Identify the proposed access route, and discuss the need for cooperative agreements and archeological clearance.

Site Protection--Discuss the types of protection measures required (e.g., patrolling, posting, fencing).

Preservation/Stabilization--Estimate the type of stabilization needed (backfilling, wall capping, wall pointing, wall facing or rebuilding, reexcavation, shoring, erosion control, etc.), workdays required, and the total cost of stabilizing architectural or stratigraphic remains that are being damaged as the result of previous vandalism, excavation, erosion, or current land uses (this estimate should include costs and workdays required for preparation of a historic structure report). Identify all cultural resource management data base needs, including archeological inventory, remote sensing, Chacoan road studies, environmental data, computer data, and National Register information.
Alternative III - Preservation/Research and Visitor Use. Indicate that under this alternative management of the site would be for preservation, research, and visitor use/interpretation. Discuss the following:

- **Land Protection** (as in alternative II)
- **Access Right-of-way** (as in alternative II)
- **Site Protection** (as in alternative II)
- **Preservation/Stabilization** (as in alternative II)

Interpretive story—Outline major themes that lend themselves to interpretation of this site, and state how these may be integrated into the overall Chacoan system interpretive perspective.

Type of Visitor Use—Describe extent and nature of visitor use proposed, specifying scope of development and interpretive mode (self-guiding, guided, multimedia presentation, etc.).

Visitor Use Improvements - describe facilities anticipated for type of visitor use proposed (roads, parking lots, comfort stations, trails).

Summary of Impacts. In table or other graphic form, summarize anticipated impacts on cultural resources, natural resources, and land use and management under each of the management alternatives outlined above. Impacts should identify potential conflicts between other land uses (energy development, grazing, traditional use) and protection site management; mitigating measures to avoid or minimize conflicts should be included wherever possible.
F: SITE MANAGEMENT PLAN OUTLINE

Following are the standard components of a site management plan. The example outline is flexible and can be adapted as necessary to meet agency requirements for format and organization. The level of detail will also vary, depending on available resource data and previous research and analysis at a site.

Summary

Summarize major decisions, goals, priorities, implementation procedures, costs, and staffing necessary to manage the archeological protection site.

Resource Description

Protection Site Size and Location. Self-explanatory

Archeological Features Description. Describe the major archeological features (Chacoan structures, great kivas) and provide a summary description of all other archeological features, indicating their existing condition. If a historic structure report has been prepared, it will provide the necessary information on the major features. If an archeological inventory has been completed, it will contain the necessary documentation for other archeological features (including location, period of occupation, types, etc.). Describe any known or possible prehistoric road features and discuss their relationship to other outlying sites. Indicate the National Register status of the site and explain any boundary differences between the National Register area and the archeological protection site boundaries (a copy of the National Register form should be appended).

Natural Setting. Describe the natural setting; discuss in some detail geology, soils, topography, vegetation, wildlife, and climate, particularly with respect to prehistoric use of the area. The existing SJBRUS data should be used in developing this description.

Site History and Traditional Uses. Discuss the site history, including native lore and significance in local history and events. Provide a complete description of Native American traditional and religious uses of the archeological protection site area, and describe any potential conflicts between Native American use and protection site management.

Current Land Use and Development. Thoroughly describe existing land use and development which has altered the natural environment of the archeological protection site. Discuss stock grazing and other consumptive uses (if applicable), describing intensity of use and associated facilities. Detail the effects of use and development on cultural and natural resources of the area, and note potential conflicts between archeological protection site management and other uses.

Future Development. Describe all proposed developments and alterations within and adjacent to the protection area, and the potential impact of developments on the archeological protection site.
Landownership information. Indicate the total acreage of the site (include a map showing legal boundary). Present all landownership information relevant to the protection site, including the names, addresses, and acreage holdings of all surface and subsurface owners, lessees (mineral, oil and gas, surface, grazing, and residential leases), and other individuals who have rights to or interest in the property. If possible, copies of titles, lease agreements, and all other public legal documents that present the terms, conditions, rights, encumbrances, and other stipulations affecting the property should be appended. Maps should be included to show the area affected by each holding.

Previous Research. Discuss previous archeological work, including what was done, when, and information on the deposition of artifact collections and the extent and location of archival materials.

Plan

This is a summary discussion of the objectives, proposals needs, scheduling, prioritization, staffing, and impacts expected under the chosen management alternative.

If alternative II is selected, include the following components:

Rationale. Explain the rationale behind selection of the preservation and research management alternative.

Land Protection. State the proposed land protection technique(s) (i.e., cooperative agreement, land exchange, fee acquisition). Discuss the provisions required in the cooperative agreement(s) including stipulations concerning protection, preservation, research, restrictions on surface owners, subsurface rights, restrictions, and renegotiation intervals. If additional landownership information is needed, indicate the type of data that is required.

Access Right-of-Way. Identify the proposed access route, and discuss the need for cooperative agreements and archeological clearance.

Site Protection. Discussion of the protection methods (e.g., patrolling, posting, fencing) to be employed at the site. Include staffing and costs.

Preservation/Stabilization. Discuss proposed stabilization work, including workdays, staffing, costs, and scheduling; periodic maintenance requirements should also be included. Identify all cultural resource management data base needs, indicating why the work is required, its scope, priorities and schedule, and estimated staffing and costs. A list of possible needs, including many currently anticipated at the designated archeological protection sites, is included in the attachment to this appendix. Needs are presented in the order of importance with an explanation of what each entails and why it is necessary.

Summary of Impacts. Summarize the impacts that may be expected under the plan.
If alternative III is selected, include the following:

**Rationale.** Explain the rationale behind selection of the preservation/research and interpretation alternative.

**Land Protection** (see alternative II)

**Access Rights-of-Way** (see alternative II)

**Site Protection** (see alternative II)

**Preservation/Stabilization** (see alternative II)

**Interpretive Story.** Discuss major themes to be interpreted, and state how to integrate them into the overall Chacoan system interpretation theme.

**Visitor Use Improvements** - Discuss facilities anticipated for type of visitor use proposed. Scheduling and estimated costs of construction and maintenance should be included.

**Type of Visitor Use.** Describe the extent and nature of proposed visitor use, including scope of development and interpretive mode. Scheduling, staffing, and estimated costs should be included.

**Summary of Impacts** (see alternative II)

**Attachment: Possible Data Base Needs**

**Cadastral Survey and Monumentation.** All archeological protection sites should be surveyed to determine boundary lines and to erect boundary markers. This is necessary for legal management, and cooperative agreement purposes.

**Historic Structure Reports.** Historic structure reports provide detailed administrative, historical, archeological, architectural, and preservation data required for management decisions concerning site preservation and research at specific structures. A historic structure report should be prepared for each protection site, documenting major structures (Chacoan structures, great kivas, etc.) and describing all other structures in brief or to the extent necessary to justify preservation efforts at these sites. These reports should be prepared prior to any disturbance (excavation, stabilization) at a site. An outline for the historic structure report will be generated by a stabilization task force appointed by the IMG.

**Archeological Inventory.** An inventory should be made of all areas within the protection sites to provide information for resource management purposes. Section 110(a)(2) of the National Historic Preservation Act of 1966 (amended 1980) specifically directs agencies to conduct such inventories. At present no protection areas have been completely inventoried.
Remote Sensing. Large-scale (1:3000) black-and-white photographic imagery covering all areas within the protection site boundaries is needed for resource management and research purposes. Once a complete set of imagery is acquired, large-scale photogrammetric contour maps may be produced as needed.

Chacoan Roads Studies. The BLM road study now underway will provide new data and guidelines necessary for management of those portions of the Chacoan roads within the protection sites. However, given the specific nature of the BLM road study, additional road research should be considered.

Environmental Data. Primarily as a result of the SJBRUS studies, general environmental data covering the San Juan Basin and including most protection sites are available. However, more detailed site-specific information on soils, erosion, vegetation, and fauna will be necessary for management and research purposes.

Computer Data Base. Archeological inventory data should be computerized to facilitate retrieval and use for management and research purposes. This data base should be included in and made compatible with the existing SJBRUS and ARMS data bases.

Native American Use. At present only limited information is available on Native American use, lore, religious and sacred sites, and settlements within or near protection sites. Research utilizing current ethnographic techniques should be conducted to elicit this information. This will not only provide increased knowledge of the history of the protection sites, but ensure that management decisions are compatible with native religious values and traditional uses.

National Register Data. Although all of the protection sites have been nominated or are eligible for nomination to the National Register, data refinements and boundary adjustments to National Register data will be necessary in the future.

Collections. All notes, photographs, maps, archival materials, and artifacts are the property of the respective agencies, tribes, or private owners; however, it is recommended that all research and collection materials from archeological protection sites be housed in an interagency repository. All documentary materials should be microfilmed for individual agency use.
PLANNING TEAM

CORE TEAM

Fred Babb          Team Captain/Project Manager
                  National Park Service
Bart Young         Senior Planner
                  National Park Service
Dan Hamson         Environmental Specialist
                  National Park Service
Bob Powers         Archeologist, Chaco Center
                  National Park Service
Mathew Millenbach  Assistant District Manager
                  Bureau of Land Management
John Roney         Archeologist
                  Bureau of Land Management
Daniel Deschinney  Director, Navajo Land Administration
                  Navajo Tribe
Richard Heyser     Assistant Director, Recreational Resources
                  Navajo Tribe
Bruce Harrill      Area Archeologist, Albuquerque Area
                  Bureau of Indian Affairs
Barry Holt         Area Archeologist, Navajo Area
                  Bureau of Indian Affairs
Thomas Merlan      State Historic Preservation Officer
                  State of New Mexico
Walter Werner      Pagosa District Ranger, San Juan National Forest
                  Forest Service
Bob York           Forest Archeologist, San Juan National Forest
                  Forest Service

SUPPORT/TECHNICAL TEAMS

Archeological Support Team                  Chairman, Bob Powers
Mineral and Lands Support Team              Chairman, Dan Hamson
Social/Cultural Chairman, Barry Holt, Art White, Dave Doyel
Support Team

Visitor Use/Socioeconomic Chairman, Bart Young
Support Team

CONSULTING AGENCIES

U.S. Geological Survey Mark Nelson
State of Arizona, SHPO Mike Ramnes
State of Colorado, SHPO Arthur Townsend
Western Historical Arthur Townsend
Advisory Council
Archeologic Social Conservancy

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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