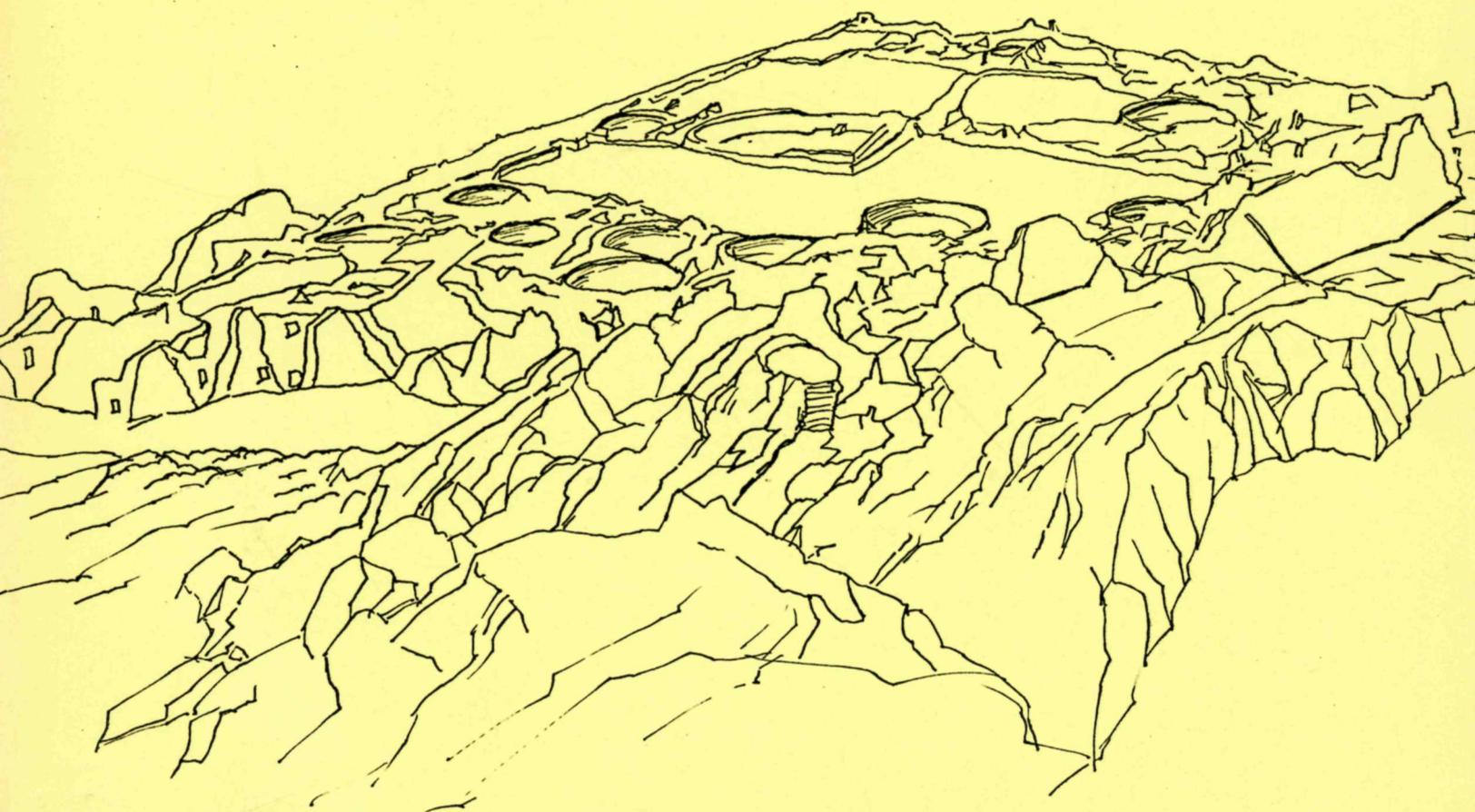


CHACO CENTER

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

May 1981



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

National Park Service, Southwest Region
Division of Cultural Research

Program for Continuation of Research and Data Gathering Activities
(As required by Public Law 96-550)

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 archeology, 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 archeology.

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 be supported by BICR, 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 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 GMP, 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):

| <u>Position</u> | <u>No.</u> | <u>Man Years</u> |
|--------------------------------|------------|------------------|
| Permanent, full time | 4 | 4.0 |
| Permanent, Less than full time | 2 | 1.8 |
| Term appointments | <u>10</u> | <u>4.9</u> |
| Total | 16 | 10.7 |

- 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 inventory: FY-1983.
Archeological resource testing: FY-1984

2) Analysis of resource base information: FY-1985.

3) Completion of computerized data base management system (new areas): FY-1985.

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

5) Final report and recommendation to management: FY-1987.

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):

| <u>Position</u> | <u>No.</u> | <u>Man Years</u> |
|--------------------------------|------------|------------------|
| Permanent, full time | 4 | 4.0 |
| Permanent, less than full time | 5 | 3.9 |
| Other (term, temporary) | 3 | 2.7 |
| Total | 12 | 10.6 |

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 Programmatic 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.

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 Navajo
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
11. Studies of Human Remains in Chaco Canyon.
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 1971-19791. Fieldwork

| | | |
|---|---------|---------|
| Archeological sites inventoried | 2,528 | |
| Archeological sites excavated or tested | | |
| Archaic | 3 | |
| Anasazi | 23 | |
| Navajo | 1 | |
| Artifacts recovered | | |
| Ceramic sherds | 255,000 | |
| Chipped stone | | |
| Debitage | 36,759 | |
| Tools | 2,254 | |
| Ground stone | 5,625 | |
| Bone tools | 500 | |
| Ornaments/Minerals | 7,032 | |
| Miscellaneous stone | 1,000 | |
| Total Artifacts | | 308,170 |
| Other materials recovered | | |
| Faunal remains | 109,000 | |
| Egg shell | 4,900 | |
| Pollen samples | 2,058 | |
| Flotation samples | 1,936 | |
| Plant specimens | 835 | |
| Other | 211 | |
| Total | | 118,940 |
| Total items recovered | | 427,110 |

2. Records

| | | |
|--|-------------|--------|
| Field notes, forms, catalog sheets, etc. | 9,856 pages | |
| Field maps, drawings, etc. | 2,750 | |
| Field photos (B/W) | 15,987 | |
| Field photos (color slides) | 2,257 | |
| Total field records | | 30,850 |

3. Documents, etc.

| | | |
|----------------------------|-------|-------|
| Archival documents | 3,452 | |
| Library books, periodicals | 3,064 | |
| Total | | 6,516 |

4. Manuscripts, reports, publications, etc.

| | | |
|------------------------------|----|--|
| Manuscripts, reports on file | 78 | |
| Reports published | | |
| Reports of the Chaco Center | 4 | |
| Reports published elsewhere | 15 | |

| <u>Title</u> | <u>Authors(s)</u> | <u>Series</u> | <u>Page</u> | <u>Compl. Date</u> | <u>Pub. Date</u> |
|---|-------------------|---------------|-------------|--------------------|------------------|
| 1. Archeological Surveys of Chaco Canyon, New Mexico | Hayes, et al. | NPS | | 1979 | 1981 |
| 2. Tsegai: Archeological Ethnohistory of the Chaco Region | Brugge | NPS | 359 | 1980 | 1982 |
| 3. Architecture of the Bonito Phase, Chaco Canyon | Lekson | NPS | 250 | 1981 | 1982 |
| 4. Outlier Survey: Regional View of Settlement. | Powers, et al. | Reports | 600 | 1981 | 1982 |
| 5. Architecture of Chetro Ketl | Lekson | Reports | 350 | 1981 | 1982 |
| 6. 29SJ1360: A P-II Site in Chaco Canyon | McKenna | Reports | 400 | 1981 | 1982 |
| 7. Village Archeology of Chaco Canyon | Truell | NPS | 250 | 1982 | 1983 |
| 8. Environment and Subsistence in the Chaco Area | Gillespie, et al. | NPS | 750 | 1982 | 1983 |
| 9. Settlement Archeology of the Chaco Area | Schelberg | Reports | 250 | 1982 | 1983 |
| 10. 29SJ627: A Multicomponent Site in Chaco Canyon | Truell | Reports | 600 | 1981 | 1983 |
| 11. Studies of Human Remains: Chaco Canyon | Akins | Reports | 250 | 1982 | 1983 |
| 12. Early Anasazi Sites in Chaco Canyon | Windes | Reports | 500 | 1982 | 1983 |
| 13. 29SJ633: Test of Non-Destructive Techniques | Jacobson, et al. | Reports | 150 | 1982 | 1983 |
| 14. The Archeology of Pueblo Alto | Windes | NPS | 900 | 1983 | 1984 |
| 15. The Analysis of Chacoan Artifacts | Judge (compiler) | NPS | 750 | 1983 | 1984 |
| 16. Atlatl Cave: Archaic-Basketmaker in Chaco Canyon | Judge, et al. | Reports | 150 | 1983 | 1984 |
| 17. 29SJ629: A Village Site in Chaco Canyon | Windes | Reports | 400 | 1983 | 1984 |
| 18. Late Period Sites in the Chaco Area | Windes (compiler) | Reports | 500 | 1983 | 1984 |
| 19. Chacoan Road and Communications System | Windes, et al. | Reports | 150 | 1983 | 1984 |
| 20. Synthesis of Chaco Project Results | Judge | NPS | 200 | 1983 | 1984 |
| 21. Bibliography of Chacoan Archeology | Gillespie | Reports | 200 | 1982 | 1984 |

FY-1 FY-2 FY-3 FY-4 FY-5 FY-6 FY-7

Full-Time

Chief ————— Normal Duties —————>

Scientific Illustrator ————— Current Project —————> | ————— Continuation Project —————>

Supvr. Archeologist ————— Current Project —————> | ————— Continuation Project —————>

Administrative Technician ————— Normal Duties —————>

Less Than Full-Time

Archeologist ————— | ————— Current Project —————> | ————— Continuation Project —————>

Programmer (part-time) ————— Current Project —————> | ————— Continuation Project —————>

Secretary ————— Normal Duties —————>

Clerk-steno (part-time) ————— | ————— Normal Duties —————>

Term Appts. (1979-1982)

Archeologist ————— Task Directive —————> |

Archeologist ————— Analysis —————> |

Archeologist ————— Editing —————> |

Archeologist (6) ————— Research —————> (?)

Archivist-Librarian ————— Normal Duties —————> |

Term Appts (1983-1986)

Supvr. Archeologist ————— Supervise Continuation Project —————> |

Archeologist (2) ————— Inventory —————> | ————— Test —————> | ————— Analyze —————> | ————— Report —————> |

Curatorial Tech/Archivist ————— Normal Duties —————> |

Editor ————— Chaco Reports —————> | ————— Continuation Reports —————> |

Division of Cultural Research
Continuation of Data-gathering Activities
San Juan Basin

Budget Estimate for First Fiscal Year of Continuation Project

(based on FY-81 Salary Table)

1. Personal Services

| Staff | No. | Man Years | Cost |
|---------------------------|----------|------------|---------------|
| Permanent, full-time | 4 | 4.0 | \$102,935 |
| Perm, less than full-time | 5 | 3.9 | 61,820 |
| Other (term, temporary) | <u>3</u> | <u>2.7</u> | <u>50,181</u> |
| | 12 | 10.6 | 214,936 |
| Benefits | | | 22,639 |
| Total Personal Services | | | 237,575 |

2. Travel and Transportation 6,000

3. All Other 21,000

Total 264,575

