

# Usable Knowledge



A Plan for Furthering  
Social Science  
and the  
National Parks



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## Summary

February 1996

### I. Introduction

Understanding the relationship between people and parks is critical for protecting resources unimpaired and providing for public enjoyment. Hence, social science research is a necessary and important function of the National Park Service (NPS). This report presents a plan for furthering social science in the NPS.

The report was prepared by Gary E. Machlis, NPS Visiting Chief Social Scientist. NPS managers and the scientific community provided significant input through workshops, a survey and review of earlier drafts. The methods used to develop the plan are described in Appendix I.

#### **An Extraordinary Time**

The plan is presented at an extraordinary time. There is growing demand for social science information among NPS managers. There has been significant organizational change — in the NPS,



with the establishment of the National Biological Service (NBS), and in other related agencies. The financial and human resources available for NPS science are increasingly limited. A sustained social science program has been recommended in previous reviews of NPS science (summarized in Appendix II). For all these reasons, a plan for social science is timely.

### **The Social Sciences Defined and Described**

The major academic divisions of human knowledge are the *natural sciences*, *social sciences* and *humanities*. The organization and management of science within the NPS does not neatly fit the academic model. The agency's strategy has been to align scientific disciplines with the management function most dependent upon the research results.

Archeology, anthropology and ethnography programs are located in the Cultural Resource Stewardship and Partnerships directorate. Their organization and management are beyond the assigned scope of this plan.

This plan focuses on the following social sciences: economics, geography, psychology, political science and sociology, as well as interdisciplinary research. In this report, "social science" refers to these disciplines. Under the 1995 NPS reorganization plan, these social sciences are located in the Natural Resources Stewardship and Science directorate, with leadership provided by a Visiting Chief Social Scientist.

### **A Viable Mandate for Social Science**

The NPS does not have a direct legislative mandate to conduct scientific research. At the same time, a viable mandate for science, including social science, does exist. It emerges from the NPS Organic Act, official management policies, individual parks' enabling legislation and formal planning documents.

### **A Vision for NPS Social Science**

NPS managers make many decisions that affect people — visitors, concessionaires, employees, local communities, interest groups and others. Hence, the NPS social science program must provide usable knowledge to managers in the form of research and technical assistance. To be useful, research results must be timely, understandable, relevant to decision-making and defensible. Usable knowledge is best provided by state-of-the-art science. State-of-the-art science deals with important questions, is grounded in sound theory, cost-effective, innovative in design and skilled in execution. It is well-reasoned and subject to peer review.

Hence, a vision statement for NPS social science is:

*The objectives of the NPS social science program are to conduct and promote state-of-the-art social science related to the mission of the National Park Service, and deliver usable knowledge to NPS managers and the public.*

## **II. An Inventory of Current NPS Social Science**

### **Current Infrastructure**

Currently, the NPS has a minimal infrastructure for conducting social science. There is a Visiting Chief Social Scientist, several former NPS social scientists transferred to the National Biological Service, and several Cooperative Park Studies Units (CPSUs) at universities (most with NBS agreements).

The Denver Service Center conducts and contracts social science in support of park planning and design. The Socioeconomic Studies Division (which reports to the Associate Director for Park Operations and Education) collects visitor statistics and conducts visitor surveys, market and economic analyses. The Visitor Services Project conducts visitor surveys, and customer service evaluations for the NPS. Parks, park clusters and field areas contract research.



### **Social Science Projects, 1990-95**

A preliminary inventory of social science projects was conducted. Over 150 social science projects were completed during 1990-95, and over 35 are in progress. Most research projects (57%) were general visitor studies; economic studies account for 7% of the total. Current funding from all sources is estimated at \$1 million per year.

NPS managers have used the results to improve interpretive programs, develop and implement carrying capacity management plans, reduce the impact of campsite use, develop resource management plans and improve customer service. Specific examples are presented.

### **NPS Issues That Require Social Science**

Based on interviews, workshops, an informal survey and other reviews, a list of important research issues emerges. Several critical research questions reflect a significant research agenda for NPS social science. Many of these issues are also the concern of NPS natural science, anthropology and ethnography programs. For each question, specific research needs are presented.

## **III. Recommendations**

Following are key recommendations for improving social science in the national parks:

1. The NPS should develop and maintain a state-of-the-art and cost-effective social science program.
2. The objective of the NPS social science program should be *“to conduct and promote state-of-the-art social science related to the mission of the National Park Service, and deliver usable knowledge to NPS managers and the public.”*

3. NPS social science research should be recognized within the agency as science, and fully integrated into an overall NPS science program.
4. NPS social science and scientists should make significant contributions to their respective disciplines, and encourage public use of research results.
5. The NPS social science program should implement key recommendations of the National Research Council's report on science in the NPS to the extent possible.
6. The current organization of NPS social science should be restructured to reflect recent changes in the agency.
7. A small Washington Social Science Program should be established. Its role and function should be to support social science activities in the field. It should be directed by a Visiting Chief Social Scientist.
8. Cooperative Park Studies Units should play an essential role in providing NPS social science. With the participation of NPS managers, universities and scientists, CPSU social science programs should be restructured and organized into a coordinated network.
9. A broader range of social scientists should be encouraged to conduct social science in the parks, through a competitive contracts program and other initiatives.
10. NPS social science should be coordinated with the research activities of the National Biological Service, other federal agencies and NPS partners.
11. The NPS should increase funding for social science activities.

These recommendations are implemented through the following plan.



## IV. A Plan for Furthering NPS Social Science

### **Social Science Program Office**

A small Social Science Program Office will be established in Washington, D.C. A Visiting Chief Social Scientist will provide leadership. A 0.5 time Research Administrator and 0.5 time Contracting Specialist will provide technical support; both positions are reassignments rather than new FTE. A student intern program will be established. A Science Advisory Committee will be formed.

The WASO office will initiate several activities. An electronic clearinghouse will be established to make social science information available to managers and the public. Social science needs assessments will be provided as requested, to aid park managers in prioritizing research. A Young Scientists Competition will be established to encourage innovative research. Research support for park planning and design will be increased. An interagency social science coordinating group will be formed to increase partnerships and cooperation. An internal working group will be formed to increase partnerships and cooperation across NPS directorates. A competitive contracts program will be established to conduct research on NPS national needs. Initially, the research will focus on economic impact analysis, carrying capacity research, social aspects of ecosystem management and a triennial survey of the American public.

### **A CPSU Network**

Cooperative Park Studies Units are a key mechanism for delivering NPS social science. To continue being innovative and effective, CPSUs with social science programs will be restructured. Over several years, a network of “virtual” CPSUs will be created.

Each CPSU will have several elements. A host university will be the contact for the NPS. Partner institutions will expand the CPSUs potential services. A role and mission statement will identify key areas of social science research and service. A four-year plan will

provide general performance goals. A managers committee will help guide the CPSUs' social science research agenda and assist in program evaluations.

CPSUs will report to field area directors or their representatives in system support offices or park clusters. The WASO Social Science Office will provide coordination and technical assistance. A pilot effort to restructure an existing CPSU social science program will be undertaken.

The NPS has significant resources and responsibilities in urban areas. An urban-focused CPSU will be established to conduct social science research on urban recreation issues. Partners will include Historically Black Colleges and Universities, predominantly Hispanic universities and other urban institutions.

### **Other Programs**

The Denver Service Center will be a partner in many of the initiatives in this plan. The Socioeconomic Studies Division will be refocused on visitor statistics. The Visitor Services Project will continue work at present levels. NBS science centers, system support offices and individual parks will be partners in several of the initiatives in this plan.

### **Funding Social Science: A Critical Investment**

This plan proposes a modest funding increase for NPS social science. The result will be usable knowledge for managers, improved science, increased accountability and efficiency, and heightened productivity of scientists. FY96 costs are \$300,000; FY97-99 costs are \$445,000 annually. A budget is provided.

### **Implementing the Plan**

Implementing the plan will require significant effort, especially in FY96-97. Communication with park superintendents and the NPS National Leadership Council will be important. A schedule is provided, showing objectives for each year FY96-99.





**For More Information**

For more information on NPS social science, and to receive additional copies of this summary or the complete report, please contact:

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