

# WASO SOCIAL SCIENCE PROGRAM

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#52

## FUNDING FOR PARK SOCIAL SCIENCE PROJECTS

**Summertime, and tourism is high**  
**360 million visitors predicted for parks by 2000**

*Park plan means tourism, jobs, pride*

### **The crowded outdoors**

National parks wrestle with record crowds  
as traffic, noise spoil wilderness

#### Shades of Green

Eight of 10 Americans  
Are Environmentalists,  
At Least So They Say

#### **Trampled heritage**

Public land managers have a name  
for the overcrowding of paradise.  
They call it 'Greenlock.'

**Mexico plans Big Bend park  
for environment, not tourism**



# United States Department of the Interior



NATIONAL PARK SERVICE

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WASHINGTON, D.C. 20013-7127

IN REPLY REFER TO:

September 20, 1991

## Memorandum

To: Park Superintendents

From: Assistant to the Director for Science and Technology

Subject: **FUNDING FOR PARK-BASED SOCIAL SCIENCE PROJECTS**

The first part of this memorandum provides a status report concerning ongoing efforts to identify and document social science needs of parks within the Southeast Region. Following this discussion are a few comments that I hope each Superintendent and each Regional Director will read. We have spent the better part of three years working to build a strong technical foundation and a solid base of internal support for our social science program. The Director has identified increased social science funding as a top priority issue in his FY-93 budget request. We are ready to move the social science initiative forward at the field level. Clearly this can happen only if we are able to secure substantial add-on social science funding for parks from the Congress. I believe that in order to achieve this new funding support it will be necessary that we first develop a ranked list of high-priority, park-based socio-economic issues, and that we then build a credible Systemwide program around these needs. What I am proposing here is that we develop the social science equivalent to the Natural Resource Preservation Program (NRPP) or the Cultural Resource Management Program (CRMP). My comments at the end of this memo deal with this matter.

I. SOUTHEAST REGION SOCIAL SCIENCE INITIATIVE. The Southeast Region, as part of its park-level resource management planning process, has identified to date some 55 visitor-related, park-specific social science issues that require either study or remedial action. Four-year funding associated with these 55 projects has been estimated to be \$3.2 million.

I reported to you on this SER initiative in Superintendents Memorandum #38. It was noted at that time that the SERO had issued Guidelines requiring that 15 categories of Social Resource Issues be considered simultaneously with Natural and Cultural Resource Issues when parks prepare or update their Resource Management Plans. These 15 categories of Social Resource Issues include socio-economic issues related to visitor problems, visitor conflicts, visitor impacts, visitor use, visitor health and safety, visitor economics, visitor recreation, etc. Under the SER approach, 1 - 2 page Project Statements are developed by the park for each socio-economic issue that is included in a park's Resource Management Plan. These Project Statements identify a problem or need, describe a proposed course of action, assign an overall park priority to the issue, and identify multi-year funding requirements.

Examples of the kinds of activities that need to be carried out in responding to the social science needs of Southeast Region parks include the following: to conduct a visitor survey; to systematically monitor visitor use of a recreation asset; to implement a program for educating the public about acceptable visitor behavior; to correlate accident statistics with public use and visitor demographics data; to develop

a combined educational, interpretive and enforcement strategy designed to mitigate adverse visitor impacts on a critical resource; and to develop a recreation plan for making the park more user-friendly to minority visitors. Other required actions would be: to identify the interests, expectations and needs of first-time versus repeat visitors; to assess perceptions of overcrowding and overuse and determine visitor social carrying capacity thresholds; to prepare recreational use maps and develop demographic and activity profiles for those individuals who use particular recreational assets; to assess ways of handling conflicts between visitors who compete for the same recreation facilities or opportunities; to study the unique needs and problems of special populations, such as senior visitors; or to assess visitor reaction to management practices that affect visitor access to and use of park resources and recreational opportunities.

The Attachment presents ten representative social science Project Statements prepared by SER parks. These Project Statements all were included in FY-91 Resource Management Plans of the parks. They illustrate not only the kinds of social science work being requested by SER Superintendents, but also the kind of documentation that needs to be included in order to explain or justify requests for budget increases:

#1. Big Cypress. Collect socio-economic data as required to properly plan and manage new recreational opportunities, determine the kinds and levels of needed visitor services, and decide what constraints on visitor uses are appropriate.

#2. Great Smoky Mountains. Determine the factors that contribute most to a quality visitor experience.

#3. Great Smoky Mountains. Identify areas of documented and potential conflicts between visitor groups, and evaluate techniques for dealing with these situations.

#4 Gulf Islands. Conduct research to identify the current demographic, sociological, and economic trends affecting the northern Gulf Coast, and project future trends to support strategic planning in the Seashore.

#5. Blue Ridge. Assess the economic impacts of park visitation on tourist sensitive economies. Evaluate the impacts of reservation systems and other actions that might be taken to reduce overcrowding.

#6. Blue Ridge. Assess the unique needs of special visitor populations such as senior visitors, foreign visitors, and minority group visitors.

#7. Castillo De San Marcos. Assess the effectiveness of education programs, enforcement actions, exclusion policies, etc., in controlling visitor behavior that causes damage to park resources or that diminishes the visitor experience.

#8. Chattahoochee River. Assess visitor perceptions about commercial development on adjacent lands, about public expectations toward recreational opportunities, and about management actions to manage visitor conflicts.

#9. Fort Sumter. Conduct visitor carrying capacity studies to provide data for long term planning for interpretation and resource protection.

#10. Natchez Trace. Collect information on visitor use patterns, visitor behavior, visitor needs, etc., to support decision processes involving management of high use areas of the park.

**II. SECURING ADDITIONAL SOCIAL SCIENCE FUNDING FOR PARKS.** In FY-83, the Congress provided the NPS with some \$7.5 million of add-on monies to fund a new natural resource initiative called the "Natural Resource Preservation Program," or NRPP. The NRPP program is still in place and has contributed more than \$60 million to parks over the intervening years. We were successful in getting NRPP funding for one and only one reason . . . namely because we first had developed a ranked list of \$120 million dollars worth of high priority natural resource needs existing within the National Park Service. We called each item on this list of natural resource needs a "Significant Resource Problem", or "SRP". Each high priority SRP was taken directly from a Resource Management Plan, and each SRP was accompanied with a Project Statement that described the problem, its significance, its urgency, and the proposed course of remedial action

The time now has come to do in the social science arena precisely what we did so successfully in the natural resources program in FY-83. We need to identify, document, and cost out the social science needs of each park in the System. We need to demonstrate that this social science work is important by showing how it will contribute to the mission of the NPS, particularly as relates to helping to provide improved services and an enhanced park experience to visitors. We need to assign priorities to each of our social science issues, first at the park level, and then at the Regional and WASO levels. And finally we need to develop a credible program for systematically responding to these prioritized social science issues, and build a responsible budget request around this program initiative.

The Southeast Region has, in fact, already begun this process. The Guidelines that the SERO issued to the parks earlier this year let socio-economic issues fit conveniently side-by-side with natural and cultural resource issues in either existing or new Resource Management Plans. The Project Sheet format that SER parks are using to document their social science problems is concise and easy to follow. In short, the work pioneered by Regional Sociologist Dr. Frank Noe in the SERO has given us a simple, workable model that each Superintendent can use to identify his or her social science needs. If we had this kind of information from parks throughout the Service, WASO and the Regional Office Social Scientists together could develop a ranked list of NPS social science needs, and we then could formulate a budget request for monies that would go exclusively to parks to carry out social science projects identified in their Resource Management Plans.

The budget cycle for the FY 94 budget will begin in another few months. At that time, I will develop a social science budget request that includes funding specifically to support social science needs identified and documented in park Resource Management Plans, and for which Project Statements have been prepared and forwarded to me.

This new initiative will be called the Social Science Management Program, or "SSMP"; it will be the Social Science counterpart to the Natural Resources Preservation Program (NRPP) and the Cultural Resources Management Program (CRMP). Over time, I think we can secure budget support for SSMP projects that is every bit as great as exists for either natural or cultural resource issues.

While there is no guarantee of any success here, I think that the quality of the social science Project Statements prepared by Southeast Region parks demonstrates clearly that a good, solid, Social Science Management Program (SSMP) budget package can be developed for the Service. It certainly is worth a try, and I encourage any Superintendent who has unfunded social science needs to work with your Regional Social Scientist and with your Regional Office to develop appropriate Project Statement materials. I would like to receive draft copies of those Project Statements as soon as they are available because in that way I can begin to identify the specific kinds of park-based socio-economic issues that Superintendents think are most important, and I also can get a sense of the collective magnitude of effort and dollars required to respond to those needs.



Richard H. Briceland

Attachment

## ATTACHMENT

### REPRESENTATIVE PROJECT STATEMENTS

1. Big Cypress
2. Great Smoky Mountains
3. Great Smoky Mountains
4. Gulf Islands
5. Blue Ridge
6. Blue Ridge
7. Castillo De San Marcos
8. Chattahoochee River
9. Fort Sumter
10. Natchez Trace

# #1. BIG CYPRESS

## PROJECT STATEMENT SHEET

TITLE: VISITOR SURVEY: BIG CYPRESS NATIONAL PRESERVE

### PROBLEM STATEMENT:

As BICY continues to expand, and given the special activities authorized by PL 93-440 (off-road vehicle use, hunting, fishing, trapping, and agriculture), it is important to management that existing use patterns and needs be determined by conducting a visitor use survey. PL 100-301 ammended the basic legislation in 1988 to require the NPS to provide Congress with a summary of the public's use of the preserve within two years. As south Florida develops at a rapid rate relative to other areas of the nation, the preserve must be able to evaluate the effects of increased recreation pressure and visitor expectations for opportunities. The preserve will require baseline visitor data and other socio-economic information to properly plan and manage new recreational opportunities, determine the kinds and levels of visitor services, and to decide what constraints on visitor uses are appropriate.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

Conduct a visitor use study designed to determine existing recreational use patterns, visitor attitudes toward the preserve, visitor expectations, and local and regional influences on preserve visitors.

#### 2) Alternative Actions and Impacts:

With visitation at BICY increasing by 20 percent per annum, it is imperative that management understand visitor use patterns, needs, and expectations if appropriate recreational and interpretative services are to be provided. Surveys remain the most effective method of deriving the necessary data to accomplish this. Due to the remote location of BICY, other state and local agencies do not currently collect the necessary data in this period of rapid growth in south Florida.

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
*****	*****	*****	*****	*****	*****	*****	*****
BICYN069	VISITOR SURVEY: BIG CYPR ESS NATIONAL PRESERVE	27	20.0	40.0	10.0	5.0	75.0

# #2 GRSM

## PROJECT STATEMENT SHEET

TITLE: DETERMINE COMPONENTS OF  
QUALITY VISITOR EXPER.

### PROBLEM STATEMENT:

There are no effective means currently available to determine the factors which contribute most to a quality visitor experience, whether they be resource, facility, and/or service related factors. This is an attempt to understand which factors most contribute to a quality visitor experience.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

The first component will be a literature search of techniques designed to identify these kinds of factors. The second phase is field testing of these techniques. The third phase is implementation to thoroughly assess the factors isolated.

#### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
*****	*****	*****	*****	*****	*****	*****	*****
GRSMNO41	DETERMINE COMPONENTS OF QUALITY VISITOR EXPER.	90	5.0	10.0	10.0	0.0	25.0

PROJECT STATEMENT SHEET

TITLE: DEVELOP POLICY TO RESOLVE VISITOR CONFLICTS

PROBLEM STATEMENT:

No systematic assessment of potential conflicts between various visitor activities has been conducted. Possible conflicts include horse versus hiker, tuber versus fisherman, and bicyclist versus auto driver touring Cades Cove.

DESCRIPTION OF ACTION:

1) Recommended Action:

Review literature in social recreation research in general and that conducted in the park in particular to identify areas of potential and documented conflicts. Conduct study of those conflicts not well defined. Develop management policy as necessary to resolve identified conflicts.

2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
GRSMN042	DEVELOP POLICY TO RESOLVE VISITOR CONFLICTS	84	10.0	10.0	10.0	10.0	40.0

# #4 GULF ISLANDS

TITLE: EVALUATE SOCIOECONOMIC & VISITATION TRENDS AT GUI5

## PROBLEM STATEMENT:

Gulf Islands is a young and relatively little known National Seashore located in the midst of a rapidly growing and changing urban corridor. The southern migration of industry, completion of the Tennessee-Tombigbee waterway, the imminent siting of a naval task force, and the rapid expansion of offshore petroleum development are changing the character and demographics of the northern Gulf Coast dramatically. Northwest Florida is currently the fastest growing area in the state and the park's Mississippi District lies at the convergence of rapidly encroaching urbanization from New Orleans and Mobile.

## DESCRIPTION OF ACTION:

### 1) Recommended Action:

Conduct research to identify the current demographic, sociological, and economic trends affecting the northern Gulf Coast and project future trends for the purpose of strategic planning in the Seashore. Characterize the patterns of visitation by employing visitation data collected in a NOAA sponsored survey in 1987, and develop visitor profiles that summarize the background, expectations, and impacts of visitors. Combine the trend analysis, projections, and visitor profiles to project future demands and impacts on park resources.

### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
*****	*****	*****	*****	*****	*****	*****	*****
GUI5NO45	EVALUATE SOCIOECONOMIC & VISITATION TRENDS AT GUI5	31	20.0	10.0	0.0	0.0	30.0

# #5 BLUE RIDGE

## PROJECT STATEMENT SHEET

TITLE: ASSESS ECONOMIC IMPACTS/MARKETING BLRI VISITATION

### PROBLEM STATEMENT:

In a somewhat broader context, we believe that we need to become more involved in the economic and the marketing aspects of park visitation. We need to learn much more about how parks and park activities have an impact on tourist sensitive economies. We need to coordinate our programs with state park authorities and with sister Federal agencies who provide recreational services on public land. We need to work closely with park neighbors, with gateway communities, and with travel and transportation interests. We need to become involved in the portal-to-portal aspects of park visits.

For example, clearly we have a role to play in providing accurate and useful information for those who are planning visits to parks, and in facilitating the use of reservation systems, as well as a continuing obligation to assure the highest quality concessioner and in-park services while the visitor actually is in the park.

As crowding becomes a significant problem at heavily visited parks, we will need to work closely with the travel-tourism industry and with other agencies to encourage visitation at lesser-used parks and to shift peak visitor loads into the April-May and September-October shoulder seasons. Each of these areas of interest requires that we learn more about park visitors, and potential future park visitors, and learn more about how visitor interests and needs are changing with time, and that we use this information to develop and market cooperative strategies and programs for providing a broad range of Federal, state, and local recreational opportunities to the public.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

Become more involved in the economic and marketing aspects of park visitation.

#### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTA PROJEC
*****	*****	*****	*****	*****	*****	*****	*****
BLR11022	ASSESS ECONOMIC IMPACTS/ MARKETING BLRI VISITATION	8	15.0	5.0	0.0	0.0	20.0

# #6 BLUE RIDGE

## PROJECT STATEMENT SHEET

TITLE: ID SPECIAL VISITOR POPS/ DETERMINE SPECIAL NEEDS

### PROBLEM STATEMENT:

The National Park Service is continuing to look at what we call "special visitor populations." Last year, for example, we completed an initial study of older park visitors, and recently we initiated research on the use of our national parks by African-Americans. Future special population studies will include research on foreign visitors, single parent family visitors, and Hispanic visitors, concentrating on special needs of these groups.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

Identify special visitor populations; determine special needs.

#### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
BLR11026	ID SPECIAL VISITOR POPS/ DETERMINE SPECIAL NEEDS	17	10.0	5.0	0.0	0.0	15.0

# # 7 CASTILLO DE SAN MARCOS

## PROJECT STATEMENT SHEET

TITLE: REDUCE VISITOR IMPACT ON FORT

### PROBLEM STATEMENT:

Visitors can cause significant impact on the coquina walls and historic cannon by sitting, scratching and climbing on them. This causes increased erosion and loss of historic fabric.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

1) Install ropes and/or barricades in particular casemates to prevent access to historic mural artwork and grafetti.

2) Install appropriately designed barricades around mortars to prevent contact with artwork.

3) Increase public awareness through increased interpretation and displays.

4) Schedule regular ranger patrols.

2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
*****	*****	*****	*****	*****	*****	*****	*****
CASAC015	REDUCE VISITOR IMPACT ON FORT	11	3.0	10.0	3.0	3.0	19.0

# #8 CHATTAHOOCHEE

## PROJECT STATEMENT SHEET

TITLE: VISITOR PERCEPTIONS AND REACTIONS TO ON-SITE IMPACT

### PROBLEM STATEMENT:

Previous research has focused on specific backcountry use in parks and wilderness areas, and has not evaluated impacts of visitors in the more developed park areas and lands adjacent to parks. Much of the previous research has dealt with identification and monitoring resource impacts rather than visitor perception and reaction to these impacts. The emphasis from previous research has focused evaluation on biological and other natural effects on the resources by the visitor, without any understanding of the social behavior that the visitor is engaged in during his/her experience. While previous research has indicated that park managers and scientists are quite perceptive of and concerned about visitor-caused impacts, visitors are not perceptive of the same impacts. Much of what has been described about the alleged visitor problems has been attributed mistakenly to overuse. That assumption on the part of many resource managers has led to imposing carrying capacity limits, which are often an ineffective solution to impact problems and actually obscure the real issues associated with visitors' use of park environments.

This study will encompass visitor-related issues for CHCH, CHAT, and BLRI. The objectives of this study (for each park) are as follows:

- 1) To assess whether land use developments adjacent to a park have any negative impact on the perception of park visitors;
- 2) To assess visitor perceptions of increasing recreation use and degradation of natural resources;
- 3) To assess public expectations toward recreational opportunities and resource impact levels; and
- 4) To assess visitor perceptions of better ways to accommodate and handle conflicts among on-site visitors as a result of adverse site impacts.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

**SITE REVIEW** Do initial field reconnaissance to identify existing impacts. Use field observation, interviews, and photo inventories to develop a representative set of existing impacts.

## #8 CHAT, Cont'd

**SAMPLING DESIGN** Determine sampling design and sampling frame from the season of year when the majority of visitation occurs for the park. Use a single stage sample to collect visitor perceptions of illustrated impacts (identified in the site review). Visitors will be randomly sampled, using a cluster design technique. A minimum sample size of 200 visitors per park will be necessary for statistical analysis.

**INSTRUMENT** Based upon the results from the field reconnaissance, a survey questionnaire will be developed, pre-tested, and administered on-site or by mail, depending on the most appropriate way visitor impacts can be illustrated and evaluated.

The survey questionnaire will be designed to collect the following information: visitor awareness, knowledge and perception of resource impacts; visitor profile characteristics; visitor attitudes toward the environment; visitor ratings of impact photographs; and indicators of past experience and use.

**ANALYSIS** Descriptive statistics will be used to describe the sample. In addition, data will be analyzed, using multivariate techniques deemed most appropriate to satisfy stated objectives.

### 2) Alternative Actions and Impacts:

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
CHATN999	VISITOR PERCEPTIONS AND REACTIONS TO ON-SITE IMPCT	0	13.0	5.0	0.0	0.0	18.0

# #9 FORT SUMTER

## PROJECT STATEMENT SHEET

### PROBLEM STATEMENT:

The number of large school groups visiting Fort Moultrie has increased steadily in recent years and has now reached the point where it may pose a threat to the resource. By like token, a new tour boat facility in Charleston, when completed, may radically change visitation patterns at Fort Sumter to the detriment of park resources there.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

Visitor impact studies are needed for both Fort Sumter and Fort Moultrie. At Fort Moultrie a carrying capacity study should be prepared to determine how many people can tour the fort at any given time without damaging the resource. At Fort Sumter a study is needed to assess the possible impact of the new tour boat facility on Fort Sumter. When completed, it will be a useful tool in guiding managers engaged in long-term planning for interpretation and resource protection.

#### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
FOUCO21	CONDUCT VISITOR IMPACT STUDIES	24	5.0	10.0	0.0	0.0	15.0

# #10 NATCHEZ TRACE

## PROJECT STATEMENT SHEET

### PROBLEM STATEMENT:

The park lacks information on why the visitor comes, where they are going, what roadside exhibits are visited most often, how long do they stay, what they expect to see, what their needs are during their stay, and how do these visitor use patterns affect the resources of the park.

### DESCRIPTION OF ACTION:

#### 1) Recommended Action:

Provide funding for a contracted research study to analyze visitor use patterns and their impacts on resources throughout the entire length of the Parkway. Components of the study would include the following:

1. Conduct study of visitor uses and needs.
  2. Conduct visitor travel analysis providing destinations, travel patterns, length of stay, and accurate visitor counts, eliminating duplication.
  3. Roadside exhibit use frequencies.
  4. Determine impacts from visitation on natural and cultural resources, especially in high use areas.
- Provide recommendations.

#### 2) Alternative Actions and Impacts: N/A

PROJECT NUMBER	TITLE	PARK PRIORITY	YEAR 1 BUDGET	YEAR 2 BUDGET	YEAR 3 BUDGET	YEAR 4 BUDGET	TOTAL PROJECT
*****	*****	*****	*****	*****	*****	*****	*****
NATRNO75	VISITOR USE ASSESSMENT IMPACTS ON RESOURCES	45	40.0	0.0	0.0	0.0	40.0