

**National Park Service  
U.S. Department of the Interior**

**Social Science Program**



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**External Evaluation of the National Park Service  
Social Science Program**

**Review Team Report**

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**August 2007**



# An External Evaluation of the National Park Service Social Science Program

August 22- 29, 2007

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## **Purpose**

This report presents findings of a panel of external reviewers regarding current and possible future operations of the National Park Service (NPS) Social Science Program. Although small in size in comparison to many other NPS programs, the number of social science personnel in the NPS is slowly increasing. These include sociologists, psychologists, economists, human dimensions specialists, and geographers. Some are a part of the NPS Social Science Program, and some are not. Many of those that are currently a part of the SSP are at various locations and are not well integrated into a program. This is not to suggest that all social science personnel in the NPS should be part of a single program, but rather that there should be a point of contact in the NPS who knows what is being done, by whom, and what the future needs are in this area.

## **Charge to the External Review Team**

An external review team was convened by the Social Science Program for the period of August 22 -29, 2007. The review team included Mr. Frank J. Deckert, a former National Park Service superintendent; Dr. Robert B. Ditton, a professor in the Department of Wildlife and Fisheries Sciences at Texas A&M University; Dr. William H. Hammitt, a professor in the Department of Parks, Recreation, and Tourism Management at Clemson University; and Dr. Daniel J. Stynes, a professor in the Department of Community, Agriculture, Recreation, and Natural Resource Studies at Michigan State University.

In addition to meeting with the Visiting Chief Social Scientist, who is based in Washington, D.C. and at Texas A&M University in College Station, the review team met with Social Science Program staff at various other locations, including the Visitor Services Project in the Idaho Park Studies Unit at the University of Idaho in Moscow, Idaho, the Public Use Statistics Office in Denver, a Senior Research Associate working with the Visiting Chief Social Scientist but duty-stationed in Denver, and various personnel connected with the Natural Resources Program Center in Fort Collins, Colorado.

The external review team was charged with reviewing important issues associated with the various activities of the NPS Social Science Program. In particular, the team was charged with “suggesting future strategies that will mitigate or remedy important problems confronting the Social Science Program and take full advantage of opportunities likely to emerge by the NPS centennial year of 2016.”

## **Principles Guiding the Review**

- While the roots of the National Park Service can be traced back almost 100 years, the beginnings of the NPS Social Science Program are much more recent (1996).
- From our experiences with management of various other important public trust natural resources, it is inconceivable to think that the national parks can be managed to fully meet their goals and objectives without a strong social science component.
- Sometimes, natural resources are managed indirectly by managing visitors and their impacts. Here, visitors and their experiences are managed to ensure use is consistent with park goals. Without careful attention to the “people part” of park management, visitors may bring inappropriate experience preferences with them to parks and may exert significant resource impacts. In other cases, visitor behavior may be quite appropriate, but change to natural conditions can still occur and must be managed.
- We agree with the stated purpose of the NPS Social Science Program as described in its brochure: “The Social Science Program develops information to enhance the enjoyment of diverse publics while preserving resources for future generations.”
- Increasingly, landowners and communities near parks have expectations for national parks that may or may not be realistic. The NPS needs to use a range of outreach techniques to engage these stakeholders to resolve potential conflict situations.
- Among other techniques, questionnaires, personal interviews, focus groups and observation are the social science analog to biological field studies and monitoring. These are the means by which park managers get feedback from visitors and various other stakeholders. These studies can and should be done on a nationwide, regional, and park-level basis. Currently, social science studies in the NPS range from systematic monitoring of visitor numbers and satisfaction with park experiences (i.e., Public Use Statistics and the Visitor Survey Card) to more in-depth visitor studies carried out on a regular basis (Visitor Services Project) or intermittently as needed.
- From a comprehensive park management standpoint, visitor and other stakeholder studies should be just as important as biological, ecological, and air and water quality studies currently conducted by the NPS in support of management. Even more important than having scientific capability in a variety of disciplines is the need for an integration of usable knowledge across disciplines to support management. For this to happen, there needs to be much greater comparability in budgets for social science research, monitoring, and outreach.

## **Acronyms Used in the Report**

AD – Associate Director

BLM – Bureau of Land Management

CESU – Cooperative Ecosystem Studies Unit

I&M – Natural Resource Inventory and Monitoring  
MGM2 – Money Generation Model, version 2  
NNRP – National Needs Research Program  
NPS – National Park Service  
NRPC – Natural Resource Program Center  
NRSS – Natural Resource Stewardship and Science  
OMB – Office of Management and Budget  
ppv – persons-per-vehicle  
PSU – Park Studies Unit  
PUSO – Public Use Statistics Office  
SSD – Social Science Division  
SSP – Social Science Program  
VCSS – Visiting Chief Social Scientist  
VSC – Visitor Survey Card  
VSP – Visitor Services Project  
WASO – Washington Office

The review was organized initially around nine issues identified in a self-study of the NPS Social Science Program (SSP). This self-study was completed by the Visiting Chief Social Scientist with input from personnel in the various program components. The review team added a tenth issue dealing with additional changes in operational and programmatic responsibilities in the SSP. The team's findings and recommendations for each of the ten issues are in the remainder of this report.

## **Issue 1: What is the best organizational home for the NPS Social Science Program?**

### **Existing Conditions**

The SSP is organized as a partnership between the federal government and cooperating universities. This is a symbiotic relationship. A major advantage to this arrangement is that NPS employees provide program continuity while non-federal employees provide periodic infusions of fresh perspectives crucial to maintaining program vitality. However, some weaknesses in the program are evident. These include delays in transferring operating funds to university partners, limited SSP presence in Washington, D.C., lack of continuity due to the limited tenure of the Visiting Chief Social Scientist (VCSS) and limited direct supervision due to the federal/non-federal employee mix.

Currently, the SSP components reside in various physical locations and organizational homes. The SSP operates out of offices in Texas, Idaho, Colorado and Washington, D.C. and performs field work around the country. It is organized to include a mixture of NPS and partner employees working together in a somewhat confusing configuration of supervision and management. This situation is further complicated by social scientists working in parks and other NPS locations, e.g., the NRPC and the Denver Service Center, with little or no coordination with the SSP.

The SSP is not part of the same organizational structure as the other research and technical assistance programs included in the Natural Resource Stewardship and Science Directorate. Although part of the same NPS directorate, the SSP is not included in the Natural Resource Program Center. This arrangement provides the VCSS direct access to the Associate Director, however the AD cannot devote as much time to SSP issues as this arrangement would indicate because of his considerable WASO responsibilities. Since it is structurally separated from frequent interaction with the other programs and divisions in the directorate, opportunities for interdisciplinary work between the natural and social sciences are restricted.

### **Alternatives**

In the following section, two alternative actions for the future organization of the SSP are presented. Because reorganizing, filling new positions and developing new programs and funding sources takes time, progress toward the “More Usable Knowledge Alternative” may be done in increments that will necessitate intermediate organizational structures.

**No Action Alternative.** Under this alternative, existing conditions will continue. Basic data collection will be done through the Public Use Statistics Office (PUSO), and the VSP and VSC programs with little analysis accomplished. Submission of visitor surveys for approval by the Office of Management and Budget (OMB) will be processed, but only with a considerable time commitment by the VCSS. Little interaction will occur between the SSP and the programs of the NRPC, or even between the programs within the SSP. The SSP will underutilize the opportunities afforded by the Cooperative Ecosystem Studies Unit (CESU) network. Delays in transferring operating funds to universities, lack of full-time SSP presence in Washington, D.C., lack of continuity due to the limited tenure of the VCSS and limited direct supervision due to the federal/non-federal employee mix will continue. Institutional knowledge of PUSO employees will be lost without a plan to document that knowledge prior to the retirement of those employees.

**More Usable Knowledge Alternative.** A Social Science Program that provides the quality and quantity of usable knowledge necessary to inform park management at all levels would result from the implementation of this alternative. It would continue existing programs, provide the NPS with an expanded range of social science capabilities, and enhance interaction and cooperation both within the SSP and with other disciplines in the NRPC. Major components of this alternative would include the following steps

- The SSP would be reorganized into a division of the NRPC in Fort Collins and/or Denver. A fully staffed division would include the current PUSO positions and the Senior Research Associate responsible for OMB submissions. New federal NPS positions at Fort Collins and/or Denver would include a Division Chief, an administrative assistant, an economist to support PUSO, a Social Monitoring Program Science Manager, and a Social Monitoring Program Database Manager.
- A non-federal Visiting Social Scientist would work out of the office of the division chief and would be available to advise that position and others, up to and including the Associate Director, Natural Resource Stewardship and Science. Keeping this position

non-federal will ensure that the infusion of new ideas into the SSP continues, and placing the position in this part of the organization should facilitate desired university expertise in the position. Depending on needs and funding, more than one individual may occupy the VSS position simultaneously.

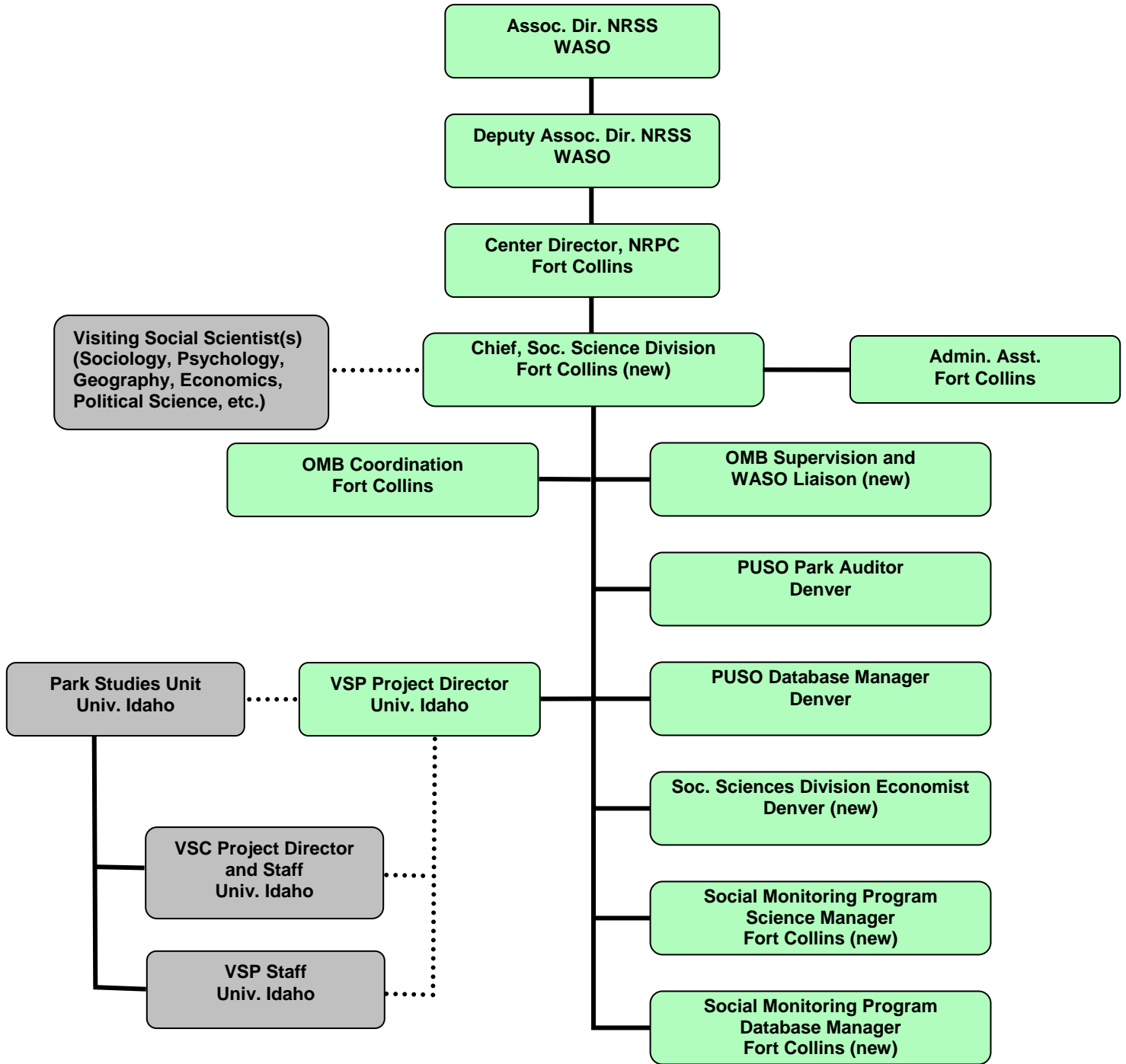
- A new WASO NPS position would be created to facilitate OMB submissions and act as liaison between the Social Science Division in Colorado and WASO.
- The current structure of the VSP/VSC would be retained at the University of Idaho, but located organizationally within the NRPC Social Science Division. Federal employees in the VSP would report directly to the division chief.
- Whenever possible, new employees would train under current employees of the PUSO in order to preserve their wealth of institutional knowledge.

A list of proposed new federal positions, including the required education level and brief statement of duties follows:

- Chief, Social Science Division
  - Ph.D. in a social science-related field.
  - Provide strategic guidance to the program and supervise and manage the federal employees in the division.
- OMB Supervision/SSD Liaison with WASO
  - Ph.D. with survey research skills.
  - Provide technical review of NPS-sponsored information collections and act as SSD liaison with WASO.
- Economist
  - M.S. in resource economics plus experience.
  - Assist PUSO staff with economic impact issues and public use reporting; provide back-up on website development and management.
- Social Monitoring Program Science Manager
  - Ph.D. in statistics or quantitative social science.
  - Assist Division Chief and VSS with social science program and manage Social Monitoring Program.
- Social Monitoring Program Database Manager
  - M.S. in computer science and database management experience.
  - Create and manage databases for the NPS Social Monitoring Program.

The proposed structure of the SSP is summarized in the organization chart shown in Figure 1.

Figure 1. Proposed Social Science Division Organization Chart.



External Review Team – proposed Social Science Program organization  
 NPS ■ non-NPS ■



**Issue 2. When funded, how should the NPS Social Monitoring Program be developed, i.e., from scratch, by modifying the VSP, or some other strategy?**

The Social Monitoring Program is intended to be the social science counterpart to the NPS Inventory and Monitoring networks for natural resources. The broader issue here is the development of a monitoring system for tracking some set of social/economic indicators covering visitor characteristics, as well as other socio-economic dimensions of importance to NPS management, planning and policy. While measures of visitor characteristics, behaviors and attitudes likely require visitor surveys, many other variables can be gathered from secondary sources or can be measured using observation or other data collection techniques. Recreation visits and overnight stays can be tracked for most parks using existing PUSO data. A number of other indicator variables may be gleaned from Census and other secondary sources (see “Potential Elements/Data Sources for the Social Monitoring Program” at the end of this section on page 10).

The Natural Resource Inventory and Monitoring (I&M) Program provides useful models and standards for a program of social monitoring, since such a program will need to follow similar steps to develop the indicators and corresponding measurement protocols and database structures. There are some differences in the nature of social data, but integration of the social indicators with natural resource indicators is essential to address visitor-resource interrelationships. There is a danger that the Social Monitoring Program will lack the resources to develop a monitoring program of similar quality to the I&M networks. The SSP currently lacks personnel with statistical, database management, and higher level data analysis skills. The NPS should take steps to put social science on a comparable footing with other sciences.

Given the diversity of parks and the wide range of potentially useful social and economic indicators, considerable up-front work will be required to identify the most useful indicators and to assess the costs of measuring these indicators on a regular basis. How many and which indicators to include will depend on the objectives, scope and intended uses of such a system, as well as on the anticipated resources to develop and maintain it. The identification and evaluation of alternatives for a monitoring system will need to involve many people, both from within and external to the Social Science Program. Manager input is essential to assure usability.

**Alternatives for a Social Monitoring Program**

Many existing elements of the NPS Social Science Program provide data and/or protocols that could contribute to a social inventory and monitoring program. Other data can be assembled from secondary sources or could be gathered in social science research projects. Which SSP efforts might be included, how they might need to be modified, and what new programs or procedures might be required are questions that must be answered in designing a monitoring strategy.

The design of a system of social indicators comparable to the natural resource I&M programs will take several years and considerable resources. A benefit of such an effort is that it

provides a structure for organizing the elements of the SSP, a framework for understanding interrelationships between these elements, and some direction for future work. These benefits may be as important as any database or monitoring system that may result.

**Extend Current Social Science Program Elements.** In the short term, one might begin by considering alternative ways of extending the existing social science programs in the NPS to better address national needs and tackle some of the objectives of a monitoring system. Some of these efforts could begin simultaneously with development of the broader monitoring strategy. Public use data and visitor surveys will undoubtedly be critical elements of any park visitor monitoring system.

The PUSO regularly collects recreation visit and overnight stay numbers for most parks going back several decades. With PUSO staff close to retirement, there is a critical need for at least one additional position to provide continuity in the public use program. Such a person might also help with park audits, identifying indicator measures from the public use data and other tasks.

The VSP and VSC programs are indicative of some of the alternatives for measuring visitor characteristics for a monitoring program. The VSP project has conducted visitor surveys in 151 parks since 1988. Visitor surveys provide detailed information on visitor characteristics, behaviors and attitudes, but are based on samples of visitors during a single week's period at selected parks. There is considerable variation in question formats and coverage over time and across parks that pose some problems in trying to combine the VSP datasets. The manner of selecting parks also does not guarantee that the parks sampled in any given year are representative of the system. The VSC card covers a larger number of parks, conducting surveys in these parks every year, but information is limited to a handful of evaluation questions.

- **Adapt VSP procedures.** Adapting VSP procedures to the objectives of the Social Monitoring Program would require identification of a standardized set of questions measuring the variables of interest and modification of procedures for selecting the parks that are surveyed each year. It should be fairly straightforward to split the VSP questions into a standard set that is part of the monitoring system and another set that is customized to meet the needs of individual parks. This allows the VSP program to continue to address the needs of individual parks, while also contributing to a monitoring effort. Monitoring variables will depend on objectives of the system, but at a minimum should include basic visitor characteristics (age, race, zip code) and trip characteristics (party size, length of stay, primary activity, trip purpose).

Identifying a set of indicator parks for the VSP studies is a more difficult problem. It is impossible to represent the variations in visitor characteristics with any 12-15 parks. There is also the question of whether to sample the same parks each year or rotate the parks included in order to reach more parks over a period of years. A logical approach is to group parks into types and sample at least one or two parks in each group. However, the groupings likely depend on the characteristics of interest. Sampling the same parks each year would violate the VSP intent of conducting surveys in many

different parks over time. Problems with the variations across parks are reduced if the number of parks sampled each year is increased and trends over time are identified using moving averages across multiple years. In any event, the problem will require careful study and a clear sense of the objectives and uses of the monitoring system.

- **Modify VSC.** The VSC card covers a larger number of parks, conducting surveys in these parks every year, but information is limited to a handful of evaluation questions. Unlike the VSP procedures, the VSC relies on personnel in the parks to carry out data collection. This approach keeps costs down, but gives rise to variations in implementation of survey protocols and subsequent lower response rates and reliability.

The modified customer satisfaction card used by the Bureau of Land Management (BLM) includes some of the demographic and trip characteristics of interest to a monitoring program and suggests another possible approach to monitoring. A procedure that combines the more concise format and greater park coverage of the VSC with the more rigorous sampling and measurement procedures of the VSP studies should be considered.

**Other approaches to a monitoring program.** Other approaches or combinations of approached to developing a Systemwide Social Monitoring Program could be considered.

- **Monitoring activities rather than parks.** A monitoring program could be organized around activities/visitor services or market segments rather than parks. For example, backcountry users could be surveyed each year at a collection of parks by sampling from backcountry permits using questions tailored more directly to backcountry users and policies. Similar studies could be designed for visitors camping in the park, staying in park lodges, using park concessions, or attending an interpretive program. This approach could follow the model of the current I&M programs by setting up several distinct networks, each addressing a different activity. It also may simplify sampling of visitors and be better suited to evaluations of particular visitor services or activities.
- **Panel approach.** In this approach, a panel of park visitors would be established that would be surveyed each year, possibly via on-line surveys. This type of monitoring is widely used in travel and tourism research.
- **Household survey approach.** The NPS's Comprehensive Survey of the American Public could be used as a monitoring instrument, repeating the survey every year or at two to five year intervals.
- **Using a VSP database.** A database assembled from past VSP studies could be used to answer a number of questions and provide the foundation for at least part of a visitor monitoring system. The archive of VSP studies goes back many years and covers a wide array of parks. There are, however, significant obstacles to assembling a consistent database due to variations in questions and wording over time. Previous

attempts to organize such a dataset have failed. Fortunately, the questions that should be most useful in a monitoring program have been reasonably stable over time. It is not necessary to include all variables or all studies in the database. It suffices to identify a set of variables worth monitoring that have been measured reasonably consistently in studies that will cover a wide range of parks. Important variables that may be missing or inadequately measured in past studies can be added to the standard questions in future studies. In three to five years, the sample should be adequate to provide a baseline for any new indicators.

These are only a few of many possible approaches to social monitoring in the National Park System. Choosing among these and other alternatives requires clearer objectives for a visitor monitoring program, the development of useful indicators and an assessment of measurement protocols and associated costs.

The experience of the VSP staff in conducting visitor surveys should be sought in developing strategies for any visitor survey approaches to the monitoring program.

**Potential elements/data sources for the Social Monitoring Program.** The following are sources of data that could be used in the NPS Social Monitoring Program:

- Public use statistics – monthly recreation visit and overnight stay figures for all parks reporting visitation.
- Selected variables from visitor surveys (VSP, VSC, others).
- Non-visitor information and public awareness and attitudes (NPS Comprehensive Survey of the American Public).
- Social and economic indicators (socioeconomic Atlas project), including population and economic characteristics for gateway communities.
- Local economic impacts – Money Generation Model, version 2.
- Recreation and travel market trends – external sources, including industry sources.
- Inventory of park facilities and visitor services offered.
- NPS budgets, employees and payroll.
- Concessions and concession receipts.
- Lodging capacities in gateway communities (acquired from a commercial source like Smith Travel Research).

**Issue 3: Should the Social Science Program be federalized so that all or more of its staff are employees of the NPS? (This issue is combined with Issue 4.)**

**Issue 4: How can the Social Science Program best deal with its human resource challenges so that work stresses are reduced, back-up capabilities increased, and workload issues mitigated?**

The external review team makes the following summary observations regarding Issues 3 and 4:

- There is a need for an additional staff member at the VCSS level to assume OMB review and approval duties.

- Efforts to advance the efficiency of the SSP through automated data management and information technology is a priority.
- The proposed Social Monitoring Program requires personnel similar to those employed in the I&M program of the NRPC.

Among many duties, the VCSS technically reviews 55 to 65 research proposals each year for OMB approval, the VSP works on 30 to 45 visitor surveys per year, the VSC staff conducts satisfaction surveys at over 300 parks each year, and the two employees of PUSO must deal with all NPS units reporting public use. This is a tremendous workload, and, despite seeking efficiencies, other tasks cannot even be considered.

The solution to the human resource challenges documented in the SSP self-study report and observed by the external review team is twofold: (1) an increase in resource personnel and (2) automation efficiency. Efforts are currently underway to address both of these issues. The SSP base budget increased 28% in FY 2007 and is on target to receive a substantial increase in FY 2008. These increases, plus other potential budget increases during the NPS Centennial Initiative, should increase the badly needed human resource capacity of the SSP. Concerning the automated efficiency of the SSP, the program was wise to contract with a data management/statistics person to seek better ways to automate the VSP and VSC data processing procedures. The SSP is encouraged to seek even better and more efficient means of scanning and analyzing visitor data. This is particularly true in light of additional data handling needs associated with the proposed Social Monitoring Program.

The addition of human resources to the SSP, their competencies, and duty assignments are critical concerns as new monies are added to the base budget. A summary of proposed new positions was presented in the discussion of Issue 1 and in Figure 1. An important need identified by the external review team is more efficient use of the VCSS talents and leadership concerning direction of the SSP. This need relates to less time/effort commanded by the OMB approval process. While it is recognized that the OMB process is a necessity for the SSP to function and for social science to be done in the National Park System, it is also recognized that it is an inefficient use of a senior scientist's talents. A senior scientist serving as the VCSS cannot direct a national social science program while devoting excessive time to detailed technical reviews of 60-plus proposals a year. Additional personnel are needed to accomplish the OMB demands, and to allow the VCSS to accomplish the directorship duties of the SSP in the future.

The future personnel and duties associated with the proposed Social Monitoring Program will need to be planned carefully so as not to add additional workload and stress to an already overworked SSP staff. As discussed in Issue 1, it is recommended that federal personnel be added to occupy positions similar to those in the I&M program of the NRPC. This would include a science manager and a database manager.

Workforce redundancy (i.e., the ability of existing personnel to back-up the duties of associated team personnel) was not identified as a current human resource problem for some

SSP components, but is an issue in others. Existing VSP and VSC staff, though thin in numbers, felt sufficient at backing up the duties of associates. On the other hand, back-ups were not identified for either of the two PUSO positions or for the Senior Research Associate who manages the OMB submission process.

**Issue 5: Should the Social Science Program expand its international activities, either through informal technical assistance or formal agreements, and where should these efforts be targeted?**

The primary function of the NPS Social Science Program is to produce and provide usable knowledge to park units and decision makers within the NPS. This should remain a principal focus of the program. However, the usable knowledge generated by the SSP may be applicable beyond the parks of the U.S. and should be shared with international parks and protected areas, when feasible.

The international activities of the SSP should not focus only on outreach, i.e., the sharing of knowledge and provision of technical assistance to international parks and protected areas, but should also provide mutual benefits to the SSP. With each international activity the question needs to be asked, "What will this activity do for the SSP and the NPS?" The newly announced (July 2007) "cross-border working group" with Parks Canada is an example of mutually beneficial activity that the SSP should pursue. The working group is charged with improving visibility of social science research in both Parks Canada and the NPS, increasing opportunities for common research activities, providing better access to information, and improving data exchange on park policy and related matters. Specially, the two social science programs have agreed to exchange information and ideas, hold an annual meeting or workshop, develop annual cooperative plans on specific projects, and promote exchange visits between agency social scientists, related staff, and university researchers. This type of international activity needs to be formalized and supported by the SSP so that it becomes a working reality, instead of simply a Memorandum of Understanding.

In pursuing international activities, the following considerations should be taken into account:

- International activities should not be a core objective of the SSP, but nevertheless an important objective to pursue if beneficial to the SSP and the NPS.
- The working group arrangement with the Social Science Branch of Parks Canada should be formalized beyond that of an MOU, and effort should be devoted to insure that the working group becomes a mutually beneficial alliance between the two social science programs.
- The main venue for offering informal technical assistance to international parks and protected areas could be through Internet sites.
- The International Affairs Office of the NPS could be consulted on the potential to offer informal technical assistance to international parks. A link could exist on their Internet site to guide parties to the SSP Internet site.

- Some attention needs to be devoted to marketing the SSP to international park agencies, as well as to the superintendents of current NPS units.

**Issue 6: Should the Social Science Program participate more fully in the NRPC Technical Assistance Call (TAC)? If so, what types of technical assistance should be offered to the field and how should this assistance be funded?**

Currently, SSP participation in the TAC of the Natural Resource Program Center is limited to providing assistance on a cost-recovery basis, mainly for developing social science research plans at various NPS levels (i.e., park, region, and center). The SSP self-study details other instances where SSP staff has provided various levels of technical assistance above and beyond their work responsibilities on a partial cost-recovery basis. Parks and various entities must currently bear the lion's share of the costs of assistance, and most of these efforts have been unrelated to the TAC.

Tight budgets have limited the extent to which social science concepts, methods, and approaches have been adopted and diffused at the park level to produce usable knowledge. For example, in the last three years there has been only one request for technical assistance through the TAC process. While this could indicate a lack of interest in and need for technical assistance in the national parks, the review team believes this is the case because of an inability on the part of potential requesting units to pay for needed social science assistance on a cost-recovery basis.

Regarding a formal program of technical assistance for the SSP, the external review team reached the following conclusions:

- Technical assistance can and should be expanded to provide a variety of social science-related expertise and technical assistance at the park and regional level. This would be consistent with how the NPS NRPC in Fort Collins currently provides technical assistance for natural resources management. As with technical assistance regarding natural resources, social science efforts need to be fully supported with dedicated funds and personnel.
- The TAC provides an opportunity for the SSP to develop an outreach function and be of service at the park level. Nevertheless, a programmatic effort is needed to determine a complete rationale for this effort and the various types of assistance that can and should be offered. A strategic planning effort would be essential for determining the extent and priority of technical assistance needs.
- The SSP outreach function would transcend current outreach efforts in support of the VSP and VSC and would assist with a variety of products and services.
- Throughout the national parks, additional valuable technical assistance can and should be provided through the CESUs, for example, advising on carrying capacity issues.

- Other examples of technical assistance could include the development of training modules for park staff on how to conduct focus groups, needs assessments, or to use observation techniques to provide additional usable knowledge in support of management. These products and services should be made available on the Web using distance education techniques to supplement other methods of information transfer.
- Additional outreach products and services could include: (1) making peer-reviewed literature available to park personnel on various topics of managerial interest, along with technical back-up; (2) delivery of services by a designated SSP “Geek Squad” that would go to the park to deliver programs and services; (3) assisting in understanding the “service areas” of parks and the various market groups using parks, and (4) mining the U.S. Census databases for understandings regarding national parks and populations living near them.

### **Issue 7: How should the NPS Social Science Program plan and advance its National Needs Research Program?**

The National Needs Research Program (NNRP) should examine priority issues confronting the NPS that transcend park and regional boundaries. As we approach the centennial of the NPS, a robust NNRP is imperative to ensure that parks remain relevant to the people of the U.S into the second century of the NPS.

A successful NNRP will require the following:

- Dedicated funding and a regular award cycle.
- An appropriate dedicated amount of personnel time to manage the program.
- A process of identifying national needs.
- Timely prioritization, implementation and completion of projects.
- Full integration into the CESU network and other elements of the SSP.

The NPS needs a process for identifying national needs and a system for funding investigators to carry out the research. This process should be identified and initiated by the VCSS (or Division Chief under the proposed re-structuring). The goal is to obtain wide input on NPS national research needs from each current SSP component (VSP, VSC, PUSO) and from WASO, regional offices, park personnel, social scientists involved in NPS research, other NPS science units.

The process could involve a general call for ideas or a more formal process using focus groups, a nominal group process and other techniques (perhaps a special workshop at George Wright Society meetings or other NPS or social science meetings). The Division Chief could also solicit mini-proposals from prospective investigators (including NPS social science units) suggesting research and justifying its national importance and potential uses of results by the



NPS. Following this means of idea generation, the Division Chief could then convene a smaller group to evaluate the ideas or proposals and decide which ideas/mini-proposals might be funded and where a full proposal might be requested. Full proposals would need to be evaluated against the nature of the problem to be addressed, the technical merits of the methodology used, and the qualifications of the investigators. This program should continue to stress usable knowledge. Regardless of the specifics, the NPS needs a research-award process that should be transparent and open to all qualified individuals, including investigators in CESUs.

Priority areas that cannot be funded directly should be circulated to encourage academics, students, Canon Scholars and others to study these problems. Alternatively, priorities identified could be advanced to leverage additional research funds or find matching fund sponsors. Many of the national needs identified will likely be shared by other federal and state recreation providers and tourism and commodity groups. From the outset, efforts could be made to involve these other groups in identifying research priorities and helping to find additional support.

With the structural changes proposed, namely, a new NPS Social Science Division, the Division Chief would initiate the process, with input from one or more Visiting Social Scientists. All would be involved in identifying priorities and funding decisions. The VSS (or other division staff as assigned) would be responsible for managing the NNRP and overseeing the research. As the Social Science Division grows its own staff of social scientists, the review team would expect some of them to help identify and manage extramural research in their particular thematic areas.

In terms of funding, it would be desirable to support one or two major efforts (like the Comprehensive Survey of the American Public) each year at \$100-\$150,000 each, plus another four to six smaller projects in the \$30,000 range. Thus, we would suggest an NNRP budget of at least \$250,000 per year, with an increase to \$500,000 per year in the near future.

**Issue 8: How can the Social Science Program improve internal communication between its parts and with other social science efforts in the NPS? (This issue is combined with Issue 9.)**

**Issue 9: What are potential areas of cooperation between the Social Science Program components?**

The components of the SSP have historically developed somewhat independently. The VSP program at the University of Idaho has existed since 1982. The Public Use Statistics Office was merged into the SSP only recently (2001). National needs and CESU projects generally vary from year to year, involving different principal investigators. So it is not surprising that the various offices and programs tend to see themselves as relatively independent and for the most part operate that way. Linkages between program elements and relationships across units are quite limited. To date, this has not posed major problems for each unit in carrying out their missions, but the SSP may be missing opportunities to enhance individual projects and build the overall program. Small staffs and operating budgets limit the ability of each program to pursue major new initiatives, and the heavy OMB workload of the VCSS provides little time

for team-building. The VSP project staff works well together, but does not have significant relationships with other SSP elements. Also, the SSP does not interact as well as it could with divisions within the NRPC, some of which include social science components (i.e., human dimensions programs in wildlife and natural sound). Finally, there is a perception by staff in various SSP components that park managers consider the data collection process within parks as more of a burden than a management benefit or tool. All of these indicate a need to improve internal and external communications.

**Improve internal and external communications.** The VCSS holds bi-weekly conference calls with the VSP and PUSO offices. According to many SSP staff, these calls are not seen as particularly useful. In addition, more social science research is being conducted at the national, regional, park and university-cooperator levels, outside the purview of the VCSS of the SSP.

Ideas for improving both internal and external communication include:

- An annual retreat of SSP and other NPS personnel involved in social science.
- A periodic newsletter with contributions from all SSP personnel.
- Consolidating some staff and programs geographically.
- Additional linking of program information on the SSP website.

**Potential areas of cooperation.** The Money Generation Model (MGM2) is the NPS's economic impact estimation program. Located at Michigan State University, it draws from both the PUSO visitor statistics and VSP survey data sets. Other social science research studies could likely also benefit from relationships with these programs.

- The proposed Social Monitoring Program and workshops to identify national needs offer opportunities to involve staff from each office in more collaborative ways.
- An NPS social science research session could be organized at a major research conference at least once each year to provide opportunities for each SSP program, as well other social scientists, to present papers and interact with each other and with managers and planners.

More specific areas of potential cooperation between the VSP and PUSO can be identified.

- **Updating ppv factors.** The VSP and PUSO programs could collaborate more closely in refining procedures to regularly review and update person-per-vehicle (ppv) factors. These are an important element in estimating recreation visits from vehicle counts. The ppv's are measured in VSP surveys, but only for a single week a small number of parks each year. A ppv variable could be added to the VSC to increase the number of parks and seasons covered. The ppv's could also be estimated using observational approaches. Improved procedures could likely be developed by drawing on the

knowledge and experience of the two programs. VSP studies could include additional questions at some parks to help PUSO refine counting procedures/factors.

- **Designing VSP sampling plans.** Park use statistics from the PUSO could be used in designing sampling strategies for VSP studies. These studies must often allocate samples across multiple entrances or locations in proportion to expected use. The PUSO could generate custom public use reports for VSP that would help in designing survey samples.
- **Uses of a VSP database.** An important new initiative in the VSP program is to combine data from the 122,000 visitor surveys across 183 studies. Such a database would permit exploration of a variety of questions. For example:
  - How do ppv's vary by season, park type and over time? Seasonal variations could be used to more frequently update and adjust the ppv factors.
  - What seasonal differences exist in visitor characteristics and use patterns, and how do these seasonal differences vary across park types, regions and locational settings? (This information could be used to extrapolate characteristics measured in VSP studies to an annual basis. For example, the MGM2 model must currently use ad hoc procedures to adjust VSP estimates of party size, visitor segment mix, length of stay and spending to a year-round basis in order to estimate local economic impacts. VSP surveys could provide primary data on seasonal differences in use and spending patterns that could improve MGM2 estimates.)
  - Are there identifiable differences in visitor characteristics and behaviors across park types, locational settings and regions? (Surveys at individual parks generally do not obtain sufficient numbers of cases to analyze subgroups such as backcountry visitors, minority populations, or international visitors. However, by pooling cases across studies one may obtain enough cases to examine these groups.)

A variety of other analyses addressing national and regional research questions could be carried out using a combined visitor survey dataset.

### **Issue 10: Should there be changes in Social Science Program Operational or Programmatic Responsibilities?**

As a result of site visits to the University of Idaho, Denver, and Fort Collins, the external review team added this tenth issue to the nine identified in the SSP self-study.

#### **Public Use Statistics Office (Denver)**

According to the PUSO staff, there are no written standard operating procedures on how park audits should be conducted. Nor is there documentation of the workings of the PUSO website. This could limit the quality and timeliness of the data reported by the PUSO in the future. Further, the availability of counting instructions for each park does not mean that public use

data will be collected “on the ground” in a consistent manner. Either by contracting or a specific job performance assignment, both standard operating procedures and documentation manuals need to be produced for the PUSO. It is important to capture the institutional knowledge of the long-term operations of this unit.

Greater oversight of field data collection is required to ensure that visitation data are as accurate and as timely as possible. The proposed PUSO economist could assist with this oversight.

### **Visiting Chief Social Scientist (WASO)**

The VCSS position as currently configured is not likely to be a highly sought-after position due to the mixture of operational responsibilities included in the job description. The review panel was in agreement that one of the most important aspects of the VCSS position was the infusion of new ideas from the academic environment into the SSP. We kept this in mind as we restructured the SSP in an effort to differentiate the “visiting” idea from direct operational responsibilities.

The OMB review and approval process is not as efficient as it could be. A concern is the expanding number of proposals not directly associated with the SSP that the VCSS is required to handle for other NPS units on a no-cost basis. The hiring of an additional employee (WASO liaison) to review the growing number of these proposals should serve to reduce the time necessary for gaining OMB approval.

### **Visitor Services Project/Visitor Survey Card (University of Idaho)**

The VSP staff has completed visitor surveys in 151 parks to date. Furthermore, they conduct the annual VSC customer satisfaction survey for over 300 parks in the National Park System. This latter survey helps the NPS meet its reporting responsibilities under the Government Performance and Results Act. While producing the best available usable knowledge at the park level, there are numerous questions about the sampling procedures used in both surveys and the reliability and validity of the data being collected. High-priority efforts should be made to overcome some of the aforementioned sampling problems.

The external review team makes the following recommendations:

- A “secret shopper” approach should be used to make sure that prescribed VSP and VSC survey procedures are followed at parks in a consistent manner.
- Currently, parks must pay the costs of completing a VSP survey, which limits the availability of usable knowledge about park visitors. Subsidies must be made available to parks for them to conduct VSP surveys and that pay much greater attention to the sampling issues involved in each study. These matters must be attended to adequately if the resultant data are to be used as a part of the Social Monitoring Program.

- Whether or not VSP data can be input into a integrated database system that will allow for further analysis and understanding remains to be seen. An integrated approach should be a high-priority item, rather than collecting more data and fitting the data to the system.
- The VSC needs to be expanded to include some monitoring indicator variables, similar to the BLM visitor survey card.
- Sampling and survey collection procedures for the expanded VSC need to be investigated to determine if response rates might be improved to the 80% range of the BLM customer satisfaction card.
- The model of employing university personnel to supervise VSP surveys in the field appears a good working model and might be expanded.

### **Natural Resource Program Center (Fort Collins)**

There are social science professionals in the NRPC office in Fort Collins who are not part of the SSP, and efforts should be made to coordinate with them to the greatest extent possible. Also, by being a part of the NRPC, SSP staff would be able to better integrate their efforts with biology and the other disciplines in support of management decision making. This would help overcome the boundaries between and among various projects, programs and disciplines.

There is also a need for a central point of strategic coordination for the SSP. A social science Division Chief would have such a responsibility at a time when social science is recognized as being more important to the NPS.

There is currently not enough space to house all of the divisions of the NRPC in Fort Collins. However, there is a need for the proposed new Social Science Division to be housed there and derive cross-fertilization and synergism benefits.

There is not a clear understanding of the role or distinction between the fields of resource-based social science and human dimensions within the NPS. This needs to be clarified, or the two fields face the danger of becoming separate programs within the NPS.