NATIONAL PARK SERVICE POLICY STUDY REVIEW

A Review and Bibliography of Resource Management Policy Recommendations for the U.S. National Park Service (1988-1997)

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I. FINDINGS

The National Park Service (NPS) lacks sufficient funding, receives inadequate political support, offers limited public education, and is weak in science-based management. There is one thing, however, that the NPS has in abundance: a storehouse of policy recommendations for natural resource management. This review describes the recommendations of thirteen books, reports, and papers written since 1988. Each of these publications addresses the question: how can the NPS best protect the natural resources of the national parks?[1]

The answers are numerous and diverse. Recommendations cover a wide range of issues -- from limiting automobiles and issuing bonds to strengthening education and promoting ecosystem management (*see* Summary Table, page 4). But within this diversity lie two strongly consistent themes: *science* and *professionalism*.

Science. The majority of the publications strongly advocate an increased role for science in park management. Although "science" is rarely explicitly defined, commentators are generally referring to the factual understanding of the natural resources of the National Park System. For instance, "science" includes the knowledge contained in biological inventories, the research conducted on natural histories of specific species, the interpretation of ecosystem relationships, and the determination of the effects of perturbations on living systems. According to most of the reviewed publications, the problems facing the NPS result largely from a lack of such scientific information. Without this understanding, the NPS cannot make decisions that ensure resource protection.

Repeated appeals for "more science" may give the impression that science *per se* can "save the parks." This is illusory; the national parks manifest shared values implemented through politics -- and values and politics are fundamentally nonscientific phenomena. But while science cannot define values and politics, science should provide fundamental baseline data for management decisions. Preserving park resources often calls for making difficult decisions that are unpopular with specific user groups. These decisions can only be implemented on the basis of credible evidence and demonstrated need. Without science to back up controversial decisions, the performance of the NPS in protecting natural resources will remain far below its potential.[2]

Professionalism. While park managers need science in order to protect natural resources, they also need *to be able to use* scientific information. Unfortunately, the NPS appears to have substantial weaknesses in this area; over half of the publications reviewed

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[1] This review was initially conceived as a review of policy studies on the biological resources of the National Parks. But it was clear that restricting coverage to studies that focused solely on the biodiversity on the national parks would be far too limiting. Consequently, this review looks at a broad range of studies related to the general organizational health of the NPS. This review does not address efforts to protect cultural, archeological, or historical resources of the parks (except where they also cover biological resources). Extensive work has been conducted in those areas, and a separate review examining these efforts would be worthwhile both for examples of political or managerial strategies to protect resources, and for symbiotic relationships for protecting both cultural and natural resources.

[2] For example, "ecosystem management" has become a widely accepted -- although still ill-defined -- standard for the National Parks and surrounding federal lands. While ecosystem management is subject to various definitions, nearly all agree that it can only work if it is based on "sound science."

state that the NPS faces a serious problem in *declining professionalism* within the Service corps.

Not all documents use the term "professionalism." Some refer to the problems of managerial capacity or leadership qualities. A few reports, such as the *Vail Agenda*, specify weaknesses in recruitment and training standards. But all refer to the essential ability of NPS employees to accomplish the mission of the Service. And while different publications focus on different aspects of professionalism (e.g., financial expertise and public safety), the ability of NPS personnel to generate, support, and use science is a dominant theme.

Neither of these issues is new. Insufficiency in both science and professionalism have been enduring problems facing the NPS since long before 1988 (the earliest of the publications under review). To address these problems, commentators have recommended policy reforms in support of better science and strengthened professionalism -- many of which have been nominally adopted by the NPS. But still these long- recognized problems persist.

What would it take for the NPS to address these problems? One response should be immediately ruled out: there is no need to commission additional studies of resource management. In light of numerous, repetitive analyses of the NPS, it is clear that *implementation* of better science and higher professionalism is the fundamental prerequisite for change.

We began this project to understand what "the experts" thought were the best ways to enhance the performance of the NPS. Considering the diversity of authorship, the thirteen publications were remarkably consistent. This is not be surprising: knowledge (science) and capacity (professionalism) are fundamental to the success of any organization.

II. OVERVIEW OF POLICY STUDY RECOMMENDATIONS

The Table on page 5 provides an overview of the principal recommendations made in thirteen publications critiquing the NPS (*see* Section III). As can be seen in the bibliography (Section IV), the thirteen publications selected for review were chosen from over forty other publications on the NPS. Of the thirteen, two were chosen because they were recent (Buccino, *et al.* and Sellars), two because of their scale (the *Vail Agenda* and *Science and the National Parks*), five because they originated within the NPS, and the others because of the authors' diverse experiences and reformist ideas.

The summary attempts to condense and isolate conclusions reached in each of the different publications. It is difficult to extract the essence of a report such as the *Vail Agenda* -- which is chock-full of recommendations -- but a careful effort was made to do so.

Table
Recommendations for Improving the NPS

(Chart numbers correspond with publication key below (and as reviewed in the following section).

	1	2	3	4	5	6	7	8	9	10	11	12	13	T
Science/Resource protection														
Increase the role of science in park management	*	*			*	*	*	*		*	*	*		9
Increase public education on preservation				*		*	*		*	*		*		6
Increase scientific capacity of employees											*			1
Park management														
Promote the use of ecosystem management/interagency coordination					*			*	*	*		*		5
Strengthen partnerships with other institutions	*					*		*		*				4
Promote collaborative planning with local communities	*													1
Maintain public access without impairing preservation										*				1
Retain or transfer park units to emphasize preservation				*										1
Establish "quiet zones"									*					1
Limit number of visitors/autos									*					1
Personnel														
Increase agency responsiveness and efficiency through improving employee professionalism				*	*	*		*		*	*	*		7
Link job description/career advancement to preservation				*					*					2
Financial management														
Give NPS control of user fees and more fund raising discretion	*		*	*										3
Lobby for increased funding and protection	*			*										2
Rely on market mechanisms	*		*											2
Do not rely on market mechanisms				*										1
Reevaluate the role of concessionaires									*					1
Allow NPS to issue bonds	*													1
Involve public in setting funding priorities	*													1
Politics														
Increase NPS independence from DOI and Congress			*	*			.		*					3
Strengthen legislative/executive mandate for preservation	*			*										2
Strengthen legislation for science								*			*			2
Increase NPS Director's authority in setting policy													*	1
Keep political bureaucrats out of specific park management													*	1

Publication key (listed chronologically from most recent)

1. Buccino *et al.* 1997. *Reclaiming Our Heritage.* NRDC, NTHP.
2. Sellars. 1997. *Preserving Nature in the National Parks: A History.*
3. CEHC. 1995. Tarnished jewels: The case for reforming the Park Service. *Different Drummer.*
4. Lowry. 1994. *The Capacity for Wonder.* Brookings Institution.
5. NPS. 1994. *Restructuring Plan for the National Park Service.*
6. NPS. 1994. *Vision: National Park Service Strategic Plan.*
7. NPS. 1993. *Planning for the Future.*
8. NPS. 1993. *Science and the National Parks II: Adapting to change.*
9. Frome. 1992. *Regreening the National Parks.*
10. NPS. 1992. *National Parks for the 21st Century: The Vail Agenda.*
11. National Research Council. 1992. *Science and the National Parks.*
12. CRRMP. 1989. *National Parks: From Vignettes to a Global View.* NPCA/NPS.
13. Hartzog. 1988. *Battling for the National Parks.*

III. REVIEW OF SELECTED POLICY STUDIES[3]

1. **Buccino, Sharon, Charles Clusen, Ed Norton, Johanna Wald. 1997. Reclaiming Our Heritage: What We Need to Do to Preserve America's National Parks. Washington: National Resources Defense Council, National Trust for Historic Preservation. July.**

This report distinguishes four *program* recommendations from nine *funding* recommendations. The program recommendations focus on the executive branch: (1) The President should sign an executive order affirming a "protection first" mandate for the national parks. This order would obligate *all* federal agencies to not cause harm to park resources. (2) An executive order should mandate integration of scientific research into resource management programs. (3) The President should "promote collaborative planning between park managers and gateway communities that serve and depend on the health of the parks." This would include moving visitor services to gateway communities and enhancing public transportation systems. (4) The NPS should develop a "comprehensive computerized public information system" that would enhance the experience of visitors as well as promote protection of park resources. The nine funding recommendations include: (1) involving the public in setting funding priorities; (2) increasing federal appropriations; (3) providing funding for alternative transportation in national parks; (4) creating a "National Park improvement fund" through the sale of National Park federal agency bonds; (5) establishing a National Park Authority to guarantee NP bonds; (6) allowing the NPS to issue bonds with local governments; (7) raising entrance fees and keeping funds in the NPS; (8) ensuring that concessionaires aid in protecting park resources; (9) taking the Land and Water Conservation Fund "offbudget" to ensure funds are used for land acquisition. The second half of the report provides case studies of 23 NPS units.

2. **Sellars, Richard West. 1997. *Preserving Nature in the National Parks: A History*. New Haven: Yale University Press.**

Sellars recounting the history of *tourism development* as the major impetus in the creation of the National Parks System. This extensive legacy of tourism, Sellars argues, has ensured a secondary role for science and research in park management throughout Park history. Whenever there has been a push for scientific management of natural resources (one occurred with George Wright in the 1930s, others have appeared sporadically since the early 1960s), the NPS has instead remained focused on how to attract more people to the parks. Calls for more scientific management, in other words, have run up against the NPS' deeply ingrained cultural affinity for tourism. "When--and only when--the National Park Service thoroughly attunes its own land management and organizational attitudes to ecological principles" -- and not to tourism

[3] The publications are listed chronologically, starting with the most recent ones in 1997.

objectives -- "can it lay serious claim to leadership in the preservation of the natural environment."

3. **Cascade Holistic Economic Consultants. 1995. Tarnished jewels: The case for reforming the Park Service. *Different Drummer*, 2: 1, Winter.**

This issue of *Different Drummer* devotes itself to an in-depth review of the NPS. Four main sections of the magazine include (1) an "introduction" to the NPS, (2) a history of the NPS, (3) an analysis of NPS finances and incentive structures, and (4) threats to the Parks' ecosystems. The authors (principally Randal O'Toole) argue that nearly all of the park system's problems -- decreased morale, absence of scientific management, overcrowding, eroding ecosystems, etc. -- are symptoms of the legislative control over the parks. The recommendations are to "sever the ties between Congress and the parks," to allow the NPS to set and retain self-sustaining user fees, and to create incentive structures that promote resource protection rather than "park barrel" politics. Such incentive structures would include (1) basing user fees on fair market values, (2) funding each park out of its *own* user fees, (3) allowing parks to keep a percentage of net income (as opposed to gross income), (4) establishing a board of directors for each park, to be elected by individuals who purchase a "friends of the park" pass, (5) designating a percentage of user fees to natural, archeological, and historical "preservation trust funds," (6) and establishing principles of self-sufficiency.

4. **Lowry, William R. 1994. *The Capacity for Wonder*. Washington, DC: Brookings Institution.**

Lowry compares the U.S. National Park Service and the Canadian Park Service. He argues that *consensus on agency goals* and *political support* are the strongest determinants of each agency's success (or failure) in implementing preservationist policies. He finds that the CPS has enjoyed more consensus and support for preservation. Lowry recommendations are: (1) do not rely on market mechanisms to enhance preservationist policies (as others have recommended in the past); (2) consider making the NPS independent from DOI (placing it instead in a "Department of the Environment"), thereby increasing political autonomy; (3) "[p]ass meaningful legislation making preservation the dominant and explicit goal of the park services"; (4) put the NPS in charge of preservation by transferring all wilderness areas to the NPS, and transfer all NPS recreation areas to other land management agencies; (5) the NPS should eliminate activities (e.g., commercial development) that "make preservation seem random or sporadic"; (6) the NPS should educate and involve the public in its preservation efforts; (7) the NPS should *actively* communicate the preservation message with policy-makers, focusing on funding and autonomy; (8) lobby to increase funding, including direct use of and increases in entrance fees and concessionaire royalties; (9) hire individuals with a commitment to preservation, give them adequate training, and link

advancement in the bureaucracy to commitment to preservationist goals; (10) involve employees in decision-making and increase local autonomy.

5. **National Park Service. 1994. *Restructuring Plan for the National Park Service.* Washington: U.S. Department of the Interior.**

This is the NPS response to President Clinton's National Performance Review ("reinventing government") and the *Vail Agenda*. The report describes thinning in the Washington offices and more autonomy for park units as part of "[r]eengineering throughout NPS to increase our effectiveness at all levels." According to the report, a benefit of the restructuring will include "increased emphasis on natural and cultural resource management and science" and "moving to ecosystem and cultural geographical context management."

6. **National Park Service. 1994. *Vision: National Park Service Strategic Plan.* Washington: U.S. Department of the Interior.**

This NPS report describes seven "most important things we can do" to preserve the park resources: (1) establish a scientific/scholarly basis for resource management decisions; (2) strengthen protection of park resources; (3) achieve sustainability in all park operations and development; (4) help people forge emotional, intellectual, and recreational ties with their natural and cultural heritage; (5) lead in a national initiative to strengthen the recognition and perpetuation of heritage resources and their public benefits; (6) become a more responsive, efficient, and accountable organization, and: (7) pursue maximum public benefit through contracts, cooperative agreements, contributions, and other alternative approaches to support park operations. Although these objectives are vague, the report goes beyond recounting the problems of the NPS by providing "future scenario" standards against which the NPS can measure progress. That is, for each of the above seven objectives, the report describes the "desired conditions" once the problems have been "fixed." It is an attempt to answer the question: *What do we ideally want the NPS to look like?*

7. **National Park Service. 1993. *Planning for the Future: A Strategic Plan for Improving the Natural Resource Program of the National Park Service.* Washington: U.S. Department of the Interior.**

The NPS Natural Resource Program focuses on "knowledge, restoration, maintenance, and protection of the natural resources of the National Park System." The Program is divided between "resource management" and "research" at three levels (Washington, regional, and individual parks). The principle goals of the program are to: (1) "Improve natural resource management and research" throughout all levels of park management; (2) "Provide a scientific foundation for managing natural resources"; (3) "Maximize the utility of natural resource data in planning and managing parks," and; (4) "Promote a better understanding of and support for the

National Park Service natural resource management and research program." While these general goals may appear obvious, the report lists several specific -- and useful -- actions under each heading.

8. **National Park Service. 1993. *Science and the National Parks II: Adapting to change.* Washington: U.S. Dept. of the Interior.**

A 1992 report from the National Research Council (NRC; see below) inspired the NPS to create an Advisory Board's Science Program Committee. This committee produced this report, which "endorses" the recommendations of the NRC report. The report advocates (1) the use of ecosystem management; (2) increased professionalization; (3) "partnerships and linkages" with other institutions, and; (4) a legislative mandate for science in the NPS. The report also focuses on the potential benefits of a partnership between the NPS and the National Biological Survey.

9. **Frome, Michael. 1992. *Regreening the National Parks.* Tucson: University of Arizona Press.**

Frome's book is half history, half commentary on the NPS, looking at the role of rangers, the problems of concessionaires, and numerous other national park issues. In the final chapter, he offers a "ten-point program" for "regreening" the NPS: (1) actively encourage NPS employees "to contribute consciously and conscientiously to making parks into genuine demonstration models of ecological harmony"; (2) educate the public on the problems facing preservation in the national parks; (3) "set standards for entry into the big parks" (i.e., do not allow "the baggage of urban living" into the parks); (4) reduce or eliminate automobile access; (5) determine the "human carrying capacity" of the parks and limit the number of visitors; (6) use the national parks as outdoor educational facilities; (7) establish "quiet zones'; (8) reevaluate the "place of each concessionaire"; (9) coordinate land management efforts with other federal agencies; and (10) "[r]econstitute the National Park Service as an independent bureau...."

10. **National Park Service. 1992. *National Parks for the 21st Century: The Vail Agenda.* Washington: U.S. Department of the Interior. National Park Service Document Number D-726.**

The *Vail Agenda* can be seen in two parts. The first part is a single chapter drafted by a Steering Committee composed of eminent academics, federal officials, conservationists, and business representatives. The Steering Committee endorses six "strategic objectives" in the areas of: (1) promoting resource stewardship and protection as the primary responsibility of the NPS; (2) maintaining access and enjoyment while protecting parks resources; (3) ensuring that each park provides education and interpretation of the park's resources; (4) evincing proactive leadership at local, national, and international levels; (5) establishing science and research as basic tools in decisionmaking,

and; (6) developing "a highly proffessional organization and work force." The Steering Committee lists several specific recommendations under each category, with emphasis on resource stewardship and protection.

The second part of the *Vail Agenda* consists of four "Working Group" reports on (1) organizational renewal, (2) park use and enjoyment, (3) environmental leadership, and (4) resource stewardship. Presented as the final four chapters of the *Vail Agenda*, these reports provide the foundation for the Steering Committee's six strategic objectives. Each report contains numerous specific recommendations. For example, under "Organizational Renewal" recommendations include establishing a standardized process for recruiting and hiring, enhancing training throughout the Service corps, and giving a greater priority to financial mananagement. Under "resource stewardship," various recommendations relate to enhancing regulatory authority, defending the parks from external threats, increasing professionalism in resource management, inventorying the resource base, creating a scientific authority, expanding outreach programs, and establishing new park areas.

11. **National Research Council. 1992. *Science and the National Parks.* Washington: National Academy Press.**

This report summarizes the extensive history of previous reports on science and conservation in the national parks. These previous reports have all called for increasing the role of science in park management. A mix of bitterness and irony seeps out of the NRC report, as it can only reiterate the point that science would benefit park management -- a point that has been under-emphasized and frequently neglected by policy-makers for as long as these reports have been written. The report emphasizes the need for a centralized science program (as opposed to the current decentralization to the regional level) that is administratively separate from the management program. This presages the National Biological Survey (see *Science and the National Parks II*, below). The report calls for a legislatively mandated science program, separate funding for the science program, and more rigorous scientific capacity within the NPS. The report's rallying cry is "science for parks and parks for science."

12. **Commission on Research and Resource Management Policy in the National Park System. 1989. *National Parks: From Vignettes to a Global View.* Washington: National Parks and Conservation Association.**

NPS Director William Penn Mott and NPCA President Paul Pritchard commissioned "17 of the nation's best minds" to deliberate independently over the roles of resource management and research in the national parks. The Commission's Chair (John C. Gordon) states that while the Commission "attempted to stay above specific issues in specific parks," it has provided "a framework in which significant controversies can be resolved." The report proposes recommendations in four principal areas. First, the NPS should

"install and refine" ecosystem management in both natural and cultural resource protection via "Ecosystem Management Advisory Panels" and an "Ecosystem Management Network." Second, Congress should provide the NPS with a "formal mission" for research and science in the parks. Third, the NPS should increase professionalization through guidance, career ladders, training assignments, and more focused recruiting based on educational levels. Fourth, the NPS should direct its educational efforts toward the "development of a conservation ethic among all segments of society" through various public information programs. In sum, this report offers a useful and concise definition of four problems facing the NPS.

13. **Hartzog, George B. 1988. *Battling for the National Parks*. Mt. Kisco, N.Y.: Moyer Bell.**

Hartzog recounts his life in the NPS. Focusing on the changes in the NPS during the Carter/Reagan years, the last chapter discusses several problems with the NPS and responds to some of the service's critics. He recommends that: (1) the NPS director be given more discretion under general policies laid out by the DOI Secretary, and: (2) political bureaucrats should get out of *specific park* management. "Let's get the politics out of the parks and regional offices and back into the director's job where it belongs."

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