



United States Department of the Interior

NATIONAL PARK SERVICE
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IN REPLY REFER TO:

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Memorandum

To: Regional Directors
Attention: Resources Management Plan Coordinators

From: Chief, Division of Natural Resources Management

Subject: Review of Relationships between Park Threats and Resources Management Plans

The attached report is being sent to you for your information. Mr. Richard Coon, Departmental Trainee from the Fish and Wildlife Service, recently completed a review of a sampling of Resources Management Plans and their relationships to park threats and the 1981 Significant Resource Problems. I think you will find his report of interest.

R. Wauer

Attachment

THE RELATIONSHIP BETWEEN PARK THREATS AND RESOURCE MANAGEMENT
PLAN PROJECTS

by Richard A. Coon, Ph.D.

EMDP Program - Departmental Trainee

This report examines recently completed (1981) Resources Management Plans (RMPs) prepared by a sampling of 17 National Parks. RMPs are a systemwide tool to describe, evaluate, and provide resolutions to cultural and natural resources problems. They are used by the Park, the Regional Office, and Washington Office personnel for identifying, offering solutions, and subsequently funding and completing, Resource Management projects. This report is the result of a 3-week review of RMPs within the Natural Resources Division.

Specific objectives of this study are (1) to compare high priority park threats identified as significant Natural Resource Priorities (SRPs) with Project Statements identified in the RMPs, and (2) to determine if the high priority threats are being adequately addressed in the Resources Management Plans (RMPs).

Project statements make up the heart of the RMP by describing the problems, alternative actions, and preferred solutions, and then ranking the projects in order of importance. Five Year Natural Resources Programming sheets are used to summarize the information and list the type of actions necessary to bring about the solution to each problem. The three action types are: (a) Resource Management, (b) Monitoring, and (c) Research. Since the RMP is updated annually it forces a fresh look at old problems, a first look at newly developing problems, and gives an update on progress

in solving currently funded projects.

Methods

I first reviewed documents related to "State of the Parks-1980" report, the Service guidelines concerning preparation of the RMPs, and other materials I felt would be important for background information.

I reviewed 17 of the most recent RMPs (completed in 1981) (Table 1). Sample parks were chosen randomly, while making sure that as many regions as possible were represented. However, only 5 of the 10 regions are represented. Assuming the number of parks at 335, this is a 5 percent sample. I then examined the relationship between reported threats, the Significant Resources Problem (SRP) exercise undertaken by the Service in preparation for the FY 82 budget, and the RMP Project Statement. This relationship is illustrated in Table 2.

Results

It is quickly obvious that the plans reflect a high degree of insight and knowledge about the individual parks. One thing that stands out overall, is the concern for the welfare and continued usefulness of the parks on behalf of those that prepared the reports. The common format for preparing the reports aids in reading and comparing information.

The number of natural resource projects listed per Park varied from a low of 0 (Adams and Castle Clinton), to a high of 23 at Rock Creek. The average number of projects per park was 8.5. The variability in the number of projects per plan does not appear to relate to the number or intensity of problems in the parks, but more on the interpretation of the problems and their reduction from broad threat categories into smaller workable projects. Some plans go into greater detail in listing projects than others. Assateague, for example, identified 8 natural resource problems, but listed them on the programming sheet as 21 separate projects in priority order with budgets. In general, however, the larger national parks and recreation areas, especially the urban areas, appear to have more and varied types of problems.

External vs. Internal Threats. Whereas park threats were found to be over 50 percent external, as stated in "State of the Parks-1980" report, I found the projects addressed by the RMPs to be 78 percent internal (113 of 143). There is, I feel, a reason for this and an implication. The greatest sources of danger to the park ecosystems are largely external. On the other hand, the project statements in the RMPs reflect the identification, description, and quantification of internal impacts. Many activities external to the parks cannot be controlled by park actions and authority. This implies that the greatest impact in preventing or mitigating a threat can be through internal management, monitoring, and research. As an example, although acid rain was listed as an important threat at 6 of the 17 parks sampled, 5 of the 6 parks either eliminated acid rain from

project status or reduced it to a much lower priority. Air and water quality research and monitoring within the park appeared to take their place. Superintendents and Resource Managers in all probability felt that the way to address some external threats was to devise internal projects that would gather documentary information for future use.

Park Threats and RMP Projects. Of 72 threats mentioned by the 17 parks in the 1979 State of the Parks data base, only 42 (58 percent) threats were listed or covered in some related way in the 17 RMPs. However, of 34 SRPs identified in 1981, 29 (85 percent) of these were listed in the RMPs. Titles of individual SRPs not listed are given in Table 2.

Ignoring of the original threats may relate to a natural change in priorities, not listing those that could not be controlled through internal park studies, or simply that threat categories were reduced to smaller, workable projects that relate only distantly to the originally described threat. It is much more significant that 85 percent of the SRPs were addressed in the RMPs.

Natural Resource Programming Sheets. In about half of the Five Year Programming Sheets, there was great variability in classifying projects as (a) Resources Management Action, (b) Monitoring Action, or (c) Research Action. Some left out the column entirely, such as Assateague. Others devised their own categories, such as Bandelier (1-Research and/or Monitoring, 2-Management and Research). Allegheny Portage and Johnstown Flood prepared two Programming sheets, entitled "Management

Needs," and "Resource Study Needs," and mixed cultural and natural resources projects together. This variability may lead to confusion as the RMPs are used. More instructional material may be needed to aid in standardizing the classification of projects as to Management, Monitoring, or Research.

Summary

As far as can be determined with this rather small sample, current Resources Management Plans (RMPs) are not excluding Significant Resource Priorities (SRPs) identified 2 to 3 years ago for the State of the Parks Report. However, projects in each new RMP should be checked against regional SRP priorities as a quick check to see that no important original threats are being overlooked.

The average number of project statements per Resource Management Plan was 8.5. Seventy-eight percent of the projects can be considered as internal, addressing internal problems or problems common inside and outside the parks. External projects listed relate largely to air and water quality, and land use near the park boundary.

Projects that seem especially important, other than air and water quality, are those for Resource Information Base Inventory, Pest Management, and Fire Management Programs. It appears to be recognized that an efficient way to attack some problems may be on a regional basis. This would be especially true for problems that show up in a high proportion of the

parks in the region. The National Capital Region carried this out when it regionally ranked SRPs. Four SRPs were then common to all or nearly all parks (Protection of American Elm, Data Base Inventory, Impact of Dredging, and Pest Management Problems). Likewise in the Northwest, air quality was considered to be an SRP of regional importance. Similar monitoring projects in several parks would serve to quantify air or water quality in a standard, and comparable way, for example.

Because of the importance of RMP Project Statements, and the necessary discussion of alternative solutions, I feel emphasis here is all important. A few parks could have spent less time describing the facility and the problem areas, and placed greater emphasis on presenting solutions. This may come with time. The benefit of the RMP is that it forces the park superintendent and/or staff to think through and discuss problems and solutions, and to justify their importance, at least annually.

In general, RMPs are useful vehicles to identify, assess, and describe solutions to the threats that endanger the natural and cultural resources that now exist in individual parks throughout the National Park System.

Table 1. Resource Management Plans (RMP) Reviewed and the
Number of Natural Resource Projects in Each.

<u>Region and Park</u>	<u>No. of Natural Resource Projects in RMP</u>
<u>North Atlantic</u>	
Adams	0
Saint Gaudens	4
Saratoga	6
<u>National Capital</u>	
Rock Creek	23
<u>Mid-Atlantic</u>	
Allegheny Portage & Johnstown Flood	4
Assateague	8
Antietam	4
Booker T. Washington	3
C&O Canal	11
Castle Clinton	0
<u>Midwest</u>	
Agate Fossil Beds	2
Cuyahoga Valley	21
Indiana Dunes	10
Voyageurs	5
<u>Southwest</u>	
Bandelier	17
Buffalo River	22
Chaco Canyon	5
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Total Projects -----	145
Mean No. Projects Per Park -----	8.5

Table 2. Relationship between specific park threats and whether they were addressed in the subsequent Resource Management Plan

Region & Park	No. of Individual Parks Threats Addressed 1/	No. of Regional Threats Addressed 2/	Title of Regional Threats Not Addressed
<u>North Atlantic</u>			
Adams	No threats listed	No threats listed	
Saint Gaudens	1 of 3	"	
Saratoga	0 of 2	"	
<u>National Capital</u>			
Rock Creek	5 of 5	8 of 8	
<u>Mid-Atlantic</u>			
Allegheny Portage & Johnstown Flood	1 of 7	No threats listed	
Assateague	8 of 8	4 of 5	Monitor change in Resource Data Base
Antietam	2 of 8	No threats listed	
Booker T. Washington	0 of 3	"	
C&O Canal	1 of 1	2 of 3 2/	Replace comfort station to meet public health standard
Castle Clinton	RMP lists no Natural Resource Projects		
<u>Midwest</u>			
Agate Fossil Beds	No threats listed	No threats listed	
Cuyahoga Valley	6 of 6	1 of 2	Study Restoration of Wilson Quarry
Indiana Dunes	2 of 4	5 of 5	
Voyageurs	4 of 7	4 of 4	
<u>Southwest</u>			
Bandelier	4 of 6	1 of 2	Common to all of region. Re- read transects/Exclosures to determine vegetative changes Land Use Planning
Buffalo River	5 of 8	2 of 3	
Chaco Canyon	3 of 4	2 of 2	
	42 of 72	29 of 34	
	(58%)	(85%)	

1/ Threat summaries listed or discussed that accompanied return of questionnaire

2/ From SRP's-1981. Threats are prioritized regionally.

RESOURCES MANAGEMENT PROGRAM: The Identification
and Evaluation of Park Threats as Described in Resources Management
Plan Documents

Objective: To determine if the Resources Management Plans adequately identify, describe, and offer solutions to the threats that endanger the natural and cultural resources that now exist in individual parks.

Existing Situation: In May 1980 the National Park Service identified and assessed threats to the parks in a publication "State of the Parks - 1980: A Report to the Congress." This was followed in December 1980 with "State of the Parks: A Report to the Congress on a Servicewide Strategy for Prevention and Mitigation of Natural and Cultural Resources Management Problems." In Phase I of the strategy, high priority Significant Resources Problems were identified in each of the 10 regions. In Phase II, a request was made for comprehensive Resources Management Plans (RMP) to address issues and problems within individual parks. The RMPs are to include an identification of problems (threats), alternative actions, and recommended action to prevent or mitigate impacts of the problem. By September 1981, 46 percent of the parks had prepared Resources Management Plans.

Relevance to the Threats: The supporting activity being carried out here as part of the Resources Management Plan Program, will evaluate a sample of RMPs from several parks in several regions to monitor the content regarding resource issues or problems. To be useful in preventing or mitigating park threats, the RMPs must adequately identify and describe the threats as called for in the "Resources Management Program Analysis and Planning Guidelines."

Procedures: A sample of RMPs from several regions will be reviewed. Resource management issues or problems listed will be compared with significant resource problems or threats identified in previous documents. A summary statement for each RMP will be prepared as well as an overall summary discussing RMPs and the RMP Program in general.