# NATIONAL PARK SERVICE PLANNING by David G. Wright for 28th Annual Conference Western Social Science Association Reno, Nevada April 24, 1986

## MISSION AND HISTORIC PERSPECTIVE

In order to best describe "where we are" at present, it is desirable to first recount our origins, the assigned mission of the agency, and the evolution of National Park System planning.

The National Park concept first manifested itself in the creation of Yellowstone National Park by the Act of March 1, 1872. Other parks were then similarly created by Congress on a case-by-case basis, until it became clear that an agency should be established to manage them as a cohesive system representing the best of our heritage. Much time and effort went into the crafting of an "organic act" for a National Park Service (NPS). When, at last, such an Act became law on August 25, 1916, the "governing sentence" clearly defined our mission; and it stands today as the foundation of all our planning efforts:

"The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (U.S.C., title 16, sec. 1.)

The underlined portion of the governing sentence says it all--we are to conserve the resources of the parks, and to provide for public enjoyment of them. These two mandates of Congress are partially in conflict; and to this day a primary objective of both NPS planners and managers is determining the appropriate balance between them. How much preservation...how much development?

Congress further guides our planning through the individual enabling acts for National Park System units; and by a number of other laws. The "umbrella" under which we plan is then completed by Executive Branch mandates (for example, the Executive Orders on wetland/floodplain preservation) and the policies of the Interior Department and NPS.

The Service's first set of policy objectives was drafted in 1918, and issued as a letter from Interior Secretary Lane to Park Service Director Mather. The Lane letter, dated May 13, 1918, was a landmark for those early years, and became our basic creed. "For the information of the public, an outline of the administrative policy to which the new Service will adhere may now be announced," the letter stated. It added that, "This policy is based on three broad management principles: First, that the national parks must be maintained in absolutely unimpaired form for the use of future generations as well as those of our time; second, that they are set aside for the use, observation, health, and pleasure of the people; and third, that the national interest must dictate all decisions affecting public or private enterprise in the parks."

These three principles were followed by twenty-three specific points. Our current Management Policies Notebook is now a halfinch thick; and the specific policies do change and evolve. But the basic underlying principles are the same.

Within this context, then, the history or course of planning within the Service can be described as evolving from simple development plans to a planning system that encompasses all aspects of our mission and the resources we administer.

In the early days, NPS planning reflected the "Frontier America" in which we existed. Roads, utilities, and accommodations were primitive. The Service wanted--and needed--to develop infrastructure to allow visitation. We also needed the visitation in order to build a public constituency supporting the National Park System. So we basically planned for development, although there was proper consideration of resource impacts.

By the 1930's we were using the term "Master Plan," a label that endured up until the mid-70's. Master Plans were what the name implies--an overall plan for how the land within the park was to be used. They included sub-plans for development areas. The only other common plan document was a "construction plan," which was prepared for each development project (road, building, campground, etc.) carried out under the umbrella of the Master Plan.

Many generations of planning manuals were released. One phase is particularly noteworthy--the planning for Mission 66, a great decade-long effort to complete the development of park units by 1966. The Mission 66 "plans" were essentially complete line drawings of the proposed development, with other plan components included as text notations on the margins of the drawings.

But change was occurring. In 1966, we instituted a multidisciplinary team approach to planning; and the purpose of the master plan shifted from development as a primary function to park administration and visitor use as well. In 1969, Secretary Hickel initiated consideration of transportation alternatives for park access, and resource-based planning was given greater emphasis. In 1970 we commenced a more uniform practice of reviewing master plans at public meetings. And, of course, the National Environmental Policy Act (NEPA) was signed that year, subjecting our plans to the rigors of environmental analysis under NEPA.

In 1975 the Service adopted the term, General Management Plan, to more clearly reflect the functional evolution from development to broader resource-based planning and management. The world had gotten smaller, and our planning approach was changing.

#### PRESENT STRUCTURE OF NPS PLANNING

The General Management Plan is now the basic comprehensive park plan prepared by the NPS. Congress has instructed us as follows, in the National Parks and Recreation Act of November 10, 1978:

"General management plans for the preservation and use of each unit of the National Park System, including areas within the national capital area, shall be prepared and revised in a timely manner by the Director of the National Park Service. On January 1 of each year, the Secretary shall submit to the Congress a list indicating the current status of completion or revision of General Management Plans for each unit of the National Park System. General Management Plans for each unit shall include, but not be limited to:

(1) measures for the preservation of the area's resources;

(2) indications of types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation and anticipated costs; (3) identification of and implementation commitments for visitor carrying capacities for all areas of the unit; and

(4) indications of potential modifications to the external boundaries of the unit, and the reasons therefor.".

Rather than focus too quickly on the General Management Plan, however, it would be useful to back up and look at NPS planning in a broader way. The purpose of each NPS area is usually defined in its enabling law, presidential proclamation, or executive order; and documented at the park in a 6-to-10 page "Statement for Management." Planning is to achieve the purposes of the park by providing specific guidance for preservation, use, and development.

Planning begins with the identification of issues, problems, and objectives to be addressed in the plan. This process is begun by the park superintendent who, with assistance from regional and Denver Service Center personnel, prepares a Statement for Management. The Statement for Management is updated and reviewed every two years to assure that it reflects a current view of the park in its regional context. All National Park System units have a Statement for Management.

(As an aside, our Denver Service Center is essentially a technical center housing a variety of people in specialized disciplines that we could not efficiently or economically replicate in each of our ten regional offices. The Center includes park planning teams, design specialists, contracting/ construction administration and printing/archival services. The plan/design/construction groups are essentially in-house consultants, whose time is contracted for and reimbursed by NPS regional directors and park superintendents.)

The Statement for Management gives a concise description of the park's purpose and the way it is currently being managed, operated, and utilized; an analysis of influences on management and use; a status report on plans and studies underway and completed; major issues and problems; and management objectives to achieve the park's purpose. The Statement for Management does not contain decisions or prescribe solutions. It does provide park management with an assessment of conditions from which it can determine the nature and extent of needed studies, plans, and designs.

The Statement for Management leads directly to an analysis of the plans and tasks that must be done to resolve issues and achieve objectives. Park, regional, and Denver Service Center personnel bring an interdisciplinary expertise into this task analysis during the preparation of an Outline of Planning Requirements and its related funding documents. The Outline of Planning Requirements is a priority listing of the studies and surveys needed to provide the information base for planning and compliance, and the plans and designs needed for the park. The funding documents request programming and funding for the tasks during the next five years and provide the details and justifications for task accomplishment.

Each park superintendent is responsible for keeping the Outline of Planning Requirements current on a yearly basis. If no planning or study tasks are needed, the Outline of Planning Requirements carries a statement justifying that determination. All previously-prepared funding documents for planning and studies not approved in the park's current Outline of Planning Requirements are null and void and are removed from program files.

Once a planning task is programmed and funded, a "task directive" is prepared. This is a written agreement between the regional director, the park superintendent, and the persons assigned to accomplish a task. It sets forth the focus and scope of work, methodology and products to be produced, opportunities for public participation, responsibilities and talents required, and a schedule of completion dates and costs. The task directive is prepared and kept up-to-date by the office assigned to accomplish the task.

#### General Management Plans and Other Implementing Plans

The major planning document for all parks is the combination general management plan/environmental document. It sets forth the basic philosophy for a park and provides the strategies for resolving issues and achieving identified management objectives, usually within a 10-year time frame. The strategies presented in the General Management Plan are those required for resource management and visitor use. Based on those strategies, any necessary development for efficient park operation, protection, and use is identified. The assessment of environmental impacts and other required compliance documentation are included in the document.

General management planning is conducted by an interdisciplinary team, normally consisting of specialists from the park, region, and Denver Service Center. The first stage of planning is a clear, thorough articulation of the issues to be addressed by the plan. This leads to the identification and acquisition of specific information necessary to permit the development of meaningful and reasonable alternatives for dealing with the issues. In addition, the park's existing data base is assembled and reviewed, as is the Statement for Management to make sure

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that it is current. If necessary, management objectives are restated, or new ones formulated, to properly address park needs. Interviews may be held with park and other agency personnel, and members of the public contacted to identify issues of concern to them. Once the information needs, objectives, and issues have been agreed upon, the development of reasonable and meaningful alternative strategies to resolve the issues and reach the objective begins.

Every General Management Plan must address three classes of alternatives for the issues being considered:

- no action

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- actions necessary to minimally meet the mission of the park; and
- other reasonable alternatives

Every draft General Management Plan/environmental document must, at a minimum, contain the following information:

- park purpose, objectives, legal constraints, and a brief description of the park
- the issues addressed by the plan
- the proposal (proposed action)
- alternatives addressing the issues
- environmental impacts of the proposal and alternatives
- necessary appendices

A section is required on existing conditions, with particular emphasis on those relating to the issues, if not adequately addressed in other sections.

The draft document is circulated to the public and other agencies for review and comment. After the review period, the regional director considers the environmental impacts, reassesses nonenvironmental factors, evaluates public and agency comments, and modifies the proposal as necessary. After National Environmental Policy Act and other compliance requirements have been met, the General Management Plan is approved, printed, and distributed.

About 280 of the 337 National Park System units now have approved General Management Plans or Master Plans, and we have an ongoing program for completing and updating such plans. A major emphasis over the past couple years has been the completion of General Management Plans for the fourteen National Park System units in Alaska. Provisions of the Alaska National Interest Lands Conservation Act greatly expanded the number and acreage of park units in Alaska, and called for management plans to be prepared on a timely basis.

The General Management Plan responds to the basic "governing sentence" of the 1916 organic act, and to the General Management Plan direction in the 1978 National Parks and Recreation Act. A General Management Plan may be fairly general or very specific, depending upon the nature of the park, the planning issues, available information, and time and funding. In all cases, National Park System units have a variety of more specific implementing plans prepared for subjects that may not be adequately covered in the General Management Plan or that are prepared subsequent to it. Examples are:

- Development Concept Plans, for more detailed development planning in a specific area of a park
- Wilderness Plans, where specifically required or where such plans are consistent with general guidance for wilderness studies contained in the Wilderness Act of 1964
- Land Protection Plans, prepared for parks that contain land not owned or directly administered by the National Park Service, identifying methods by which these lands will be protected (less-than-fee and fee)
- Minerals Management Plans
- Concession Management Plans
- Interpretive Prospectuses
- special planning efforts or studies that may be required to resolve major issues

The Development Concept Plan responds to the organic act mandate to provide for visitor use of the park. It amplifies development decisions made in the General Management Plan for a given developed area of the park; and is an intermediate step between the General Management Plan and comprehensive design drawings. Where practical, Development Concept Plan-level planning is incorporated within the General Management Plan, particularly for revised General Management Plans in parks with an existing infrastructure of buildings, roads, and utilities. All park units also have Resource Management Plans, covering stewardship of both the natural and cultural resources of the park.

### Resource Management Plans

Our resource management planning deserves special attention, as it is the mechanism by which we structure our approach to the other great mandate of the organic act, to conserve park resources "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Resource Management Plans complement Development Concept Plans in the balancing of the dichotomous development/preservation direction in the organic act.

The Resource Management Plan documents a park's resources and, based on the Service's Management Policies, legislative mandates, Executive Orders, management zoning and related planning documents, describes a comprehensive resource management, monitoring and research program for a park's natural and cultural resources. A Resource Management Plan contains a description of the current resource program, provides a clear evaluation of that program, identifies inadequacies in activities and knowledge, and provides for the resolution of the inadequacies. Resource Management Plan development requires that the park manager evaluate the resources under his/her management; identify specific deficiencies in or problems with the inventory, study, treatment, or interpretation of those resources; analyze alternatives; and formulate specific recommendations to correct important problems.

A Resource Management Plan essentially constitutes a contract by the superintendent to deal with important natural and cultural resource problems. It is a document which provides a basis on which actual accomplishments can be measured against resource management commitments. Resource Management Plans are used as one of the fundamental elements in preparing park budgets and in deciding how to allocate funding and staffing resources to parks. Each plan provides the following management decision-support information:

- -- Resource management problems and issues are ranked in importance and the significance of each clearly stated.
- -- A proposed program for dealing with the most important and time-urgent resource management problems is developed.
- -- The plan carefully identifies research needs; these research needs are keyed directly to individual high-

priority resource management problems.

-- A proposed schedule of accomplishments is developed which demonstrates a commitment to real and measurable progress in dealing with high priority resource management problems.

The plan is designed for the use of the superintendent and his staff, and by Regional and Washington management personnel. In addition, because the plan provides a comprehensive and critical analysis of a site's resources, it also may be of interest to concerned institutions/groups and the general public.

The Park Superintendent has the final responsibility for the preparation of the park's Resource Management Plan. The park's resource management specialist (in title or in practice) is usually the plan coordinator and project manager. The Superintendent requests assistance as needed from the regional office and elsewhere to assure an interdisciplinary effort in the preparation and/or revision of the plan. Resource Management Plans are revised/updated every year, so that budget requests reflect the park's greatest resource management needs. The highest-priority problems/needs are designated as "Significant Resource Problems" in the NPS budget process.

#### Environmental Compliance

As was stated earlier, our proposed General Management Plans are combined with the appropriate environmental compliance document-either an environmental assessment or full environmental impact statement. In a 1981-1982 examination of both our planning and National Environmental Policy Act processes, we found they had very parallel goals and methods--the sorting and evaluation of alternative ways to manage our resources and visitor use. So we developed a joint format that meets both legislative requirements, and have been relatively pleased with it. We still have the option of preparing a separate National Environmental Policy Act document. We also sometimes drop some format elements (rejected alternatives, for example) when printing a final General Management Plan that had only an environmental assessment, and thus required only one public printing for National Environmental Policy Act purposes.

Our Resource Management Plans are also prepared in a combined format that includes National Environmental Policy Act requirements. Development Concept and other plans still have a separate National Environmental Policy Act document. Public participation was discussed earlier, for General Management Plans. All but the most minor plans have a public review stage. And the National Environmental Policy Act has given us an additional early-coordination step called "scoping." Scoping means contacting interested parties early in the process, to sort out issues, alternatives, and environmental impact categories to be evaluated.

### PLANNING STUDIES FOR NON-NATIONAL PARK SYSTEM AREAS

The National Park Service also conducts studies as authorized by Congress or requested by the Department of the Interior of areas being considered for possible addition to the National Park System, the Wild and Scenic Rivers System, and the National Trails System. These studies are carried out to determine an area's significance; to determine the kind, extent, and effectiveness of existing protection of the area; to evaluate the effect of existing and projected land use trends on significant resources in the area; and to determine feasible alternatives for management, protection, and use of the area. These studies are submitted to Congress for use in determining if some form of federal action is warranted to protect the areas and how and by whom they should be managed in the future.

The legislative and administrative mandates are different for each of the three kinds of studies, as are the content and requirements of the documents. Once a study is authorized, it is funded, a study team selected, and a "task directive" prepared to guide the study.

After the scope of the project is established, necessary data is gathered and the significance and integrity of the area's natural, cultural, scenic, and recreational resources are determined. Significance is determined in reference to criteria in NPS Management Policies, the National Park System Plan, and other relevant documentation and guidelines. Based on the significance of the area's resources, alternative strategies for managing, protecting, and using the area and its resources are developed and assessed.

Reports of these studies are circulated for in-house review and comment. Compliance and public review processes then parallel those used in our general management planning. Following Departmental clearance, the report is transmitted to the Office of Management and Budget, which forwards it to Congress. Official decisions concerning the areas are usually made during congressional hearings and deliberations on the studies. Congress may request additional information from the National Park Service and other federal and state agencies to support these decisions.

#### ISSUES

Our present planning system has developed from both our own real needs and from mandates arising outside NPS. As is the case with all other agencies and planning bodies, our system is always evolving. You may be interested in some of the issues we are currently facing, as they may well affect our planning in coming years.

#### Multiplicity of Plans

I earlier enumerated some examples of the many types of plans that we prepare. Our major plans are, of course, the General Management Plan and the two more detailed plans directly relating to our organic act mandate, the Development Concept Plan and the Resource Management Plan. But other planning needs arise, and we must simply meet them. We therefore usually have separate plans for managing activities such as concessions, minerals, park interpretation, major resource issues, etc.--the list goes on. At a recent planning meeting, the Superintendent of Joshua Tree National Monument advised that he currently has eighteen different plans in effect. A number this high raises the question of conflicting goals or approaches among plans; and whether managers may be less inclined to closely follow a complex, voluminous set of plans.

Our current approach to this issue is plan consolidation wherever reasonably possible. As new General Management Plans are prepared, they are to incorporate the content of previous land protection, mineral management and some other plans. But we will continue separate General Management Plans, Resource Management Plans, interpretive prospectuses, and certain other plans. The involvement of senior park management personnel in planning is a primary key to attaining a set of cohesive plans that complement and build on each other.

We have also recently initiated what we call a "phasing" process for General Management Plans. "Phasing" in this context essentially means coordinating and directing the research outputs from resource management planning, so as to be most useful in general management planning. As an example, we are preparing a General Management Plan for Big Cypress National Preserve in Florida. But we found that our General Management Plan effort should not go forward in the absence of adequate data on the delicate hydrology of the area. So the necessary hydrological studies were given high priority among the park's resource management planning initiatives; and the General Management Plan effort was deferred until the necessary hydrological data base was assembled. We are "phasing" the General Management Plan so as to let it progress only after the necessary data is in hand. The two plan processes (General Management Plan and Resource Management Plan) complement each other in this approach.

#### Land Protection

When Congress creates a unit of the National Park System, they establish a boundary within which the Service will acquire and manage certain interests in land. The early parks were withdrawn from public domain lands in the West, and the land within the boundary was simply transferred to NPS. Then, beginning with the establishment of Mammoth Cave, Shenandoah, and Great Smoky Mountains National Parks in 1926, the States purchased and donated significant amounts of previously private land. The Service also acquired a limited number of areas. With the establishment of Cape Cod National Seashore and Minuteman National Historical Park in 1960, NPS initiated a land acquisition program with monies appropriated by the Congress. The passage of the Land and Water Conservation Fund Act in 1964 institutionalized the program on a continuing basis; and we have now acquired something under 3 million acres.

Because less land acquisition money is now being appropriated, we need to assure the protection of park lands in a more costeffective manner. The Service has thus initiated a "Land Protection" planning process in which each superintendent is to inventory remaining non-NPS ownerships, and examine alternatives to fee acquisition, such as scenic or trail easements. We also hope to use a greater proportion of more innovative acquisition methods, such as exchange, donations, regulatory approaches and the leaseback of historic structures.

We deal with an ever-changing picture in land acquisition; and must be alert to a variety of possibilities. Our land protection plans will be reviewed annually, so that our other plans may be implemented most effectively.

## Park Protection

We bureaucrats love buzzwords. I thus want to deal with our term "Park Protection" at this point, to differentiate it from what I have described as "Land Protection". Park protection is another high-level initiative; but one that looks outward at what neighboring land management agencies are doing, that may affect our parks. The primary agencies with whom we are initially focusing this effort are the Bureau of Land Management and the Forest Service, whom I will use to illustrate the issues. Assume that the Bureau of Land Management or the Forest Service is considering mineral leasing, clear-cutting or some other activity adjacent to a park, and that the activity would adversely affect park-related values. Although our interagency working relationships are generally good, we are occasionally surprised with such a problem.

The park protection initiative involves the negotiation of interagency agreements or other means of assuring that NPS gets EARLY notice of the proposal. Any interagency differences can be negotiated much easier at that early stage. We also owe other agencies like Bureau of Land Management and Forest Service, early notice of our planned actions.

Much of our success in the park protection initiative will depend on how well the involved agencies interact in their planning activities -- particularly in the early stages of plan development. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act call for the early involvement of other agencies and the public in any Federal proposal (including plans as well as individual actions) that may significantly affect the quality of the human Continuing failure on the part of all concerned environment. agencies to share and interact on plans/proposals at an early stage, is likely to invite Congressional interest in a legislatively-mandated consistency process, in which NPS would formally concur or not concur that a proposal would have no significant detrimental effect on Park resources (see Senate Bill 2092). The current initiative is an attempt to demonstrate that we can adequately protect park areas through existing authorities and processes. The primary interest relating to this paper is the current increased emphasis on "early coordination" in the planning efforts of both other agencies and NPS.

## Carrying Capacity

You will recall that the Congressional mandate for General Management Plans states that they shall include "identification of and implementation commitments for visitor carrying capacities for all areas of the unit." Carrying capacity is a current topic in the NPS. We had 200 million recreation visits last year. Although National Park System acreage has tripled since the 1930's, visitation has increased tenfold. And we estimate an annual visitation growth rate of about 3% a year. Some areas of the system are being "loved to death"--Yosemite Valley being the area most often cited. Our 1980 "State of the Parks" report rated overuse (and related problems such as vandalism) as the fourth most prevalent threat facing the parks. It is a problem.

Our planning process now addresses the issue on a case-by-case basis, taking into consideration the unique nature of the park resource base and expected visitation pressure. We believe this approach has considerable merit; but it does not constitute a sufficiently systematic approach in the viewpoint of many. Therefore, with NPS support and cooperation, our friends in the National Parks and Conservation Association have been developing a process for analyzing and managing visitor use and its impact. Unlike the carrying capacity processes used for livestock management, recreational carrying capacity cannot be determined as a single number calculated by a simple formula or by plugging data into a computer. Managers need to define both what resources to preserve, and what type of visitor experience an area should provide. The National Parks and Conservation Association format thus considers and integrates both social questions and biophysical considerations.

The Association is to publish a set of reports this spring, presenting the findings of their effort. We in the National Park Service will, of course, be reviewing it very closely. They believe that it will fit well into our present General Management Plan process--or the recreation planning process of any other agency. For more information, please contact Ms. Laura Loomis or others familiar with the Carrying Capacity Project, National Parks and Conservation Association, 1701 18th Street, N.W., Washington, D.C. 20009.

#### PEOPLE FOR THE JOB

Most of you are from academia; and as a group you will have a dominant role in counselling today's youth for a role in tomorrow's park planning. Let me share both some background and a few thoughts on the disciplines we may need. Remember that I am confining this discussion to our planning function, and not the ranger ranks, historians, interpreters or others.

In the very early days of the Service, our founding fathers were predominantly concerned with infrastructure development in the newly-established parks. But the new roads and buildings had to be compatible with their surroundings; and landscape architecture became the primary discipline they sought in hiring planning and (They also referred extensively to "landscape design staff. engineers.") Landscape architects are still rather dominant in our general management planning teams, and they are a vital component. But the mix is changing. For instance, the Big Cypress advance hydrological study I mentioned, was conducted by staff with a background in hydrology. The parks and the "natural and historic objects and the wild life contained therein" are indeed threatened by overuse. Our general management planning must inevitably become even more resource-based if the parks are to survive "... in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." We will probably employ a greater mix of disciplines such as botany, biology, zoology, ecology, geology, and physical geography.

While superintendents utilize Denver Service Center planning teams for general management planning assistance, our resource management plans are prepared within the park, by park staff. In recent years, the ranger forces have found themselves increasingly drawn into law enforcement and other visitor-related activity. They have thus been spread thinner and had less time to devote to resource-related work. Recognizing this, the Service has over the last four years begun a program to establish park staff positions titled as resource management specialists. These specialists generally prepare the resource management plans I mentioned earlier; and update them annually. Those involved in cultural resource planning have been, and will continue to be, from related disciplines such as history, archeology and historic architecture. Let me expand a bit more, however, on natural resource planning.

When the need for an enhanced natural resource management/planning capability became apparent, we started a 22-month in-house training program to develop the needed expertise. We graduated 32 persons from an initial class; and currently have 23 people in training. But the training program will be discontinued after this class, due to budget limitations. We will thus be interested in applicants who already have sufficiently broad training, plus some practical experience. Our natural resource management personnel will need a foundation in the physical and/or biological sciences. With such a base, then, our training program has included further courses in the following: wildlife management; mining and minerals; water resources; coastal processes; vegetation management; fisheries and aquatic systems; cave management; natural resources law; planning; budgeting; contracting; conflict resolution; negotiation; integrated pest management; public relations; professional ethics; recreation sociology; fire management; counselling and mentoring; situational leadership; computer use; and remote sensing/digital cartography/satellite photography, and other geographic information systems. Academic training has been interspersed with practical experience.

I provide this information so that you may know what we are currently emphasizing; you may want to consider it in curriculum development. But I do not want to mislead you into believing that we will be recruiting many entry-level employees. Budget constraints will require that we make better use of present employees, rather than recruiting many new hires. Our present natural resource management trainees all came from "within the ranks."

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In summary, I must say that I look to the future with feelings of both hope and concern. One can trace evolutionary stages in the history of planning for the National Park System, from relatively simple development planning to a more "ecosystembased" approach. As the world grows smaller, the parks will be increasingly threatened and influenced by development around them; and some future Park Service official may address you on the management of "ecological islands." Our planning must and will adapt.

The park protection and carrying capacity initiatives are but the tip of the iceberg--a glimpse into the future. Both the National Park Service and the American people will need an iron will if we are to retain intact the best elements of our natural and cultural heritage. I see that will developing and manifesting itself now. It must translate into forward-looking plans that face the real issues and provide real answers.

In many ways, tomorrow is already here.

Thank you for your kind invitation to this forum. We look forward to a continued relationship with the Association. I would urge you particularly to keep abreast of the carrying capacity matter, as it relates to all agency planning.