Purpose and Scope of the Sourcebook

This sourcebook is a companion to the *Director's Order on Park Planning* (DO-2) and its attached program standards. The purpose of this sourcebook is to provide specific methods, tools, and pointers about how to produce the plans and meet the standards directed by DO-2.

The focus of this sourcebook is on general management planning, along with some information on park strategic planning and annual performance planning. Additional information on implementation planning will be released as it is produced by the various program managers. Coordinating and integrating all the various types of park planning, as stated in DO-2, is essential.

DO-2 requires that each general management plan (GMP) for a park clearly state (1) its legislatively established mission, and (2) specific management prescriptions for each park area, including desired resource conditions and visitor experiences, along with appropriate kinds and levels of management, use, and development for each prescription. This sourcebook recommends 11 steps to follow in developing a GMP. The recommended steps provide detailed information about methods and tools, pointers, and examples to help guide planning teams through a new process. (A key to the 11 steps is included on the back cover of the sourcebook.) Details about each step are found in the corresponding tabbed sections of the sourcebook.

None of the approaches outlined here is mandatory. Planning teams may tailor their approach to meet their specific needs so long as the resulting plan meets the policy and program standards outlined in DO-2 and its attachment. However, following these steps will result in a more consistent approach to presenting the information required in GMPs.

Because the focus of park planning under DO-2 has been changed, only a few GMPs following the new model have been produced. As additional plans are produced, examples will be added to the sourcebook. Also, the methods, tools, and pointers will be continuously expanded as the NPS planners gain additional experience and expertise with the new model. The most current version of the sourcebook will be posted on the Internet at ***http://www.nps.gov/planning.***

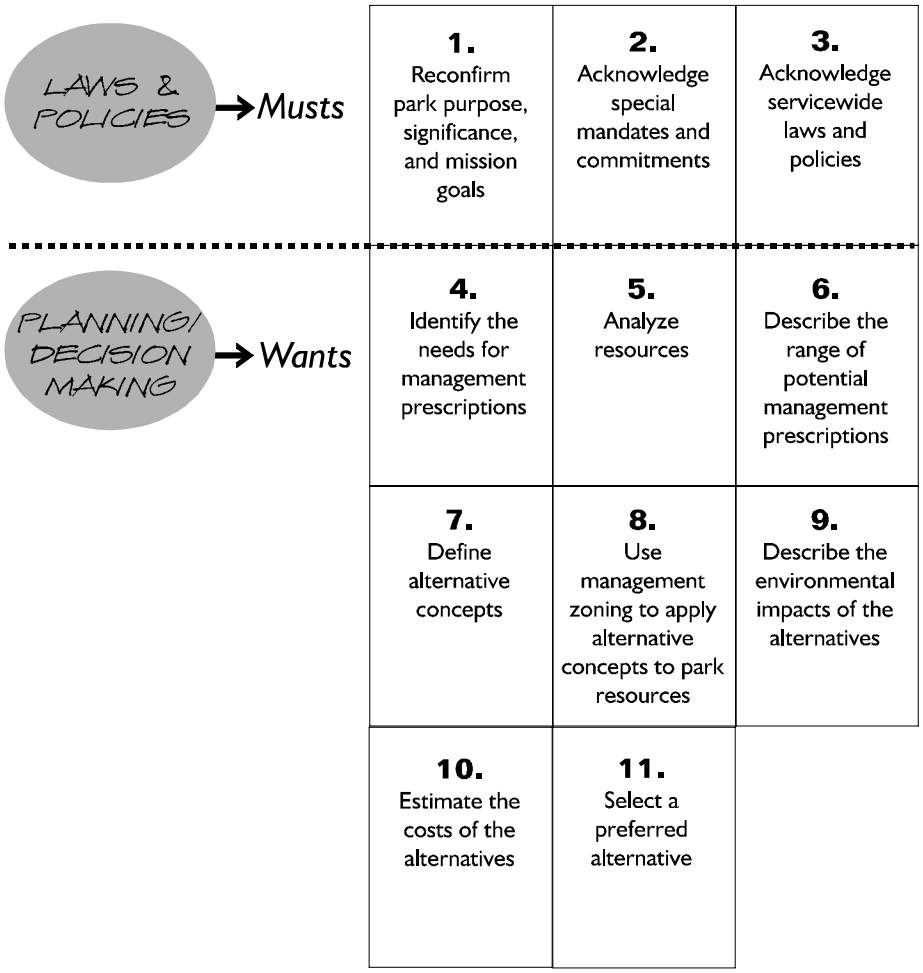
Contents

Introduction: The Purpose of and Need for a General Management Plan

CONTEXT

The management of the national park system is directed by law, policy, and plans, in that order. Law and policy deal with musts — things that must happen in the park because they have been mandated by Congress or the NPS leadership. Park managers and staffs do not make decisions about law and policy, they simply implement it.

Key Steps in the NPS General Management Planning Process



Planning is a decision-making process, and general management planning is the broadest level of decision making for parks. This level of planning deals with wants — all the things that different people want to happen in a park. Laws and policies are the sideboards for determining which wants can be legitimately considered. Some legitimate wants are mutually compatible and achievable; others are not. Planning provides the process for choosing among the wants.

As an NPS policy, an environmental impact statement (EIS) is required for all GMPs. This sourcebook follows the general guidelines prepared by the Council on Environmental Quality (CEQ) for organizing an EIS. Specific guidance for the National Park Service in the preparation of an EIS is given in DO-12 (formerly NPS-12). The preparation of these two director's orders has been coordinated so that the guidance they offer is consistent.

Purpose of a GMP

There are two broad purposes for a GMP:

- Clearly describe specific resource conditions and visitor experiences to be achieved in park management units, and identify the kinds of management, use, and development that will be appropriate in achieving and maintaining those conditions.
- Ensure that this basic foundation for decision making has been developed in consultation with interested stakeholders and adopted by the NPS leadership after an adequate analysis of the benefits, environmental impacts, and economic costs of alternative courses of action.

Need for a GMP

A GMP needs to do two things:

(1) **Clarify and articulate what must be achieved in the park —** These requirements are based on the park's purpose, significance, special mandates, administrative commitments, and the body of laws and policies directing the management of the national park system.

(2) **Make decisions about the most appropriate mix of wants that have been identified for a park —** The wants may be identified by the park staff, technical experts, current and potential visitors, other agencies, traditional users, regional residents, and the general public. While the park's mission, mission goals, and other mandates set the parameters for planning, various approaches to resource protection, use, and development may be possible. These different approaches are the potential management prescriptions for the park, and in some cases they may represent competing demands for the same resource base. Determining the best mix of wants is the point of the general management planning process, and decisions are based on scientific and academic resource analysis, a rigorous evaluation of the natural, cultural, and social impacts of alternative courses of action, and consideration of long-term economic costs.

The initial statement of purpose and need for a GMP is given in the nomination form for assessing and prioritizing potential GMP projects competing for ser-

vicewide general management planning program funds. These nomination forms ask for descriptions of the major resource management, visitor use, and operational issues the park is facing and how a GMP might help resolve these issues.

Once a potential GMP project receives a servicewide priority, the specific need for the plan is documented in a project agreement, which identifies the major decisions to be made by the plan, defines what will and will not be included in the scope of the project, and identifies project participants, consultants, tasks, schedule, and costs.

The need for the plan will be further refined during public scoping. The National Environmental Policy Act (NEPA) requires "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." As part of the scoping process, the National Park Service is required to invite the participation of affected federal, state, and local agencies; any affected Indian tribe; and other interested persons. (This scoping is described under step 4.) Once this step has been completed, the team should know what decisions the plan needs to make and the major park resources and human values potentially at stake in the planning. If this information varies from the assumptions documented in the project agreement, the agreement should be revised.

GMP Project Agreements

A project agreement will be developed for each GMP. Through these agreements the regional director and park manager, the program manager for park planning, and the principal planning office(s) will define and agree upon

the major decisions to be made by the plan

the information required to make the decisions

the products and services to be produced

the roles and responsibilities for production, consultation, and review

a project schedule, including major milestones

a cost estimate that specifies salary costs by contributing office and other costs for travel, contracts, and printing

A project agreement for a GMP will be recommended by the superintendent and the principal planning office(s), cleared for planning policy compliance by the program manager for park planning and special studies, and approved by the regional director.

To comply with NPS planning policy, GMP project agreements must demonstrate the following:

- The decisions made will satisfy the purpose of and need for a GMP and will achieve the advantages cited when a project's servicewide priority was requested.
- Adequate data will be available to make the required decisions (GMP funds will not normally be used to collect basic inventory information).

- The agreed to products and services will meet the program standards for GMPs and EISs.
- NPS and departmental leaders will be consulted at a level appropriate to the issues and required decisions and at appropriate times to ensure the most efficient and effective consultation.
- The estimated cost will not exceed (by more than 20% or $40,000, whichever is less) the cost cited when the project's servicewide priority was established.

Each project will be tracked according to its project agreement. Any changes to the project's scope, schedule, or cost must be documented in a revised project agreement, which must be resubmitted to the program manager for park planning and special studies to ensure that the project still complies with park planning policy.

Superintendents and regional directors will be responsible for ensuring that plans fulfill their project agreements.

TYPICAL OUTLINE / TABLE OF CONTENTS FOR A GMP/EIS

Cover Sheet

Summary

PURPOSE OF AND NEED FOR ACTION

Purpose of the GMP
- To specify resource conditions and visitor experiences to be achieved
- To provide the basic foundation for decision making

Need for the GMP
- Planning Direction or Guidance
  - Park mission and mission goals
  - Special mandates and administrative commitments
  - Servicewide mandates and policies
- Planning Opportunities and Issues
  - Decision points
  - Major resources and human values at stake in the planning process

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

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- Concept
- Management Prescriptions by Zone
- Needed or Allowable Changes

Alternative B
- Concept
- Management Prescriptions by Zone
- Needed or Allowable Changes

Alternative C
- Concept
- Management Prescriptions by Zone
- Needed or Allowable Changes

Alternative D: No Action
- Baseline Conditions

Summary of Alternatives, Environmental Impacts, and Estimated Costs

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Impact Topic 2
Etc.

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  - Methodology for Analyzing Impacts
  - Analysis of Impacts
  - Cumulative Impacts
  - Conclusions
- Effects on Impact Topic 2
  - Methodology for Analyzing Impacts
  - Analysis of Impacts
  - Cumulative Impacts
  - Conclusions
- Remaining Impact Topics (same organization as above)
- Relationship Between Short-Term Uses and Long-Term Productivity
- Irreversible/Irretrievable Commitments of Resources
- Adverse Impacts That Cannot be Avoided

Alternative B and Other Alternatives (same organization as for alternative A)

CONSULTATION AND COORDINATION WITH OTHERS

The Planning Process for this Project
History of Public Involvement
List of Recipients
Response to Comments

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Appendixes
- A: Legislation
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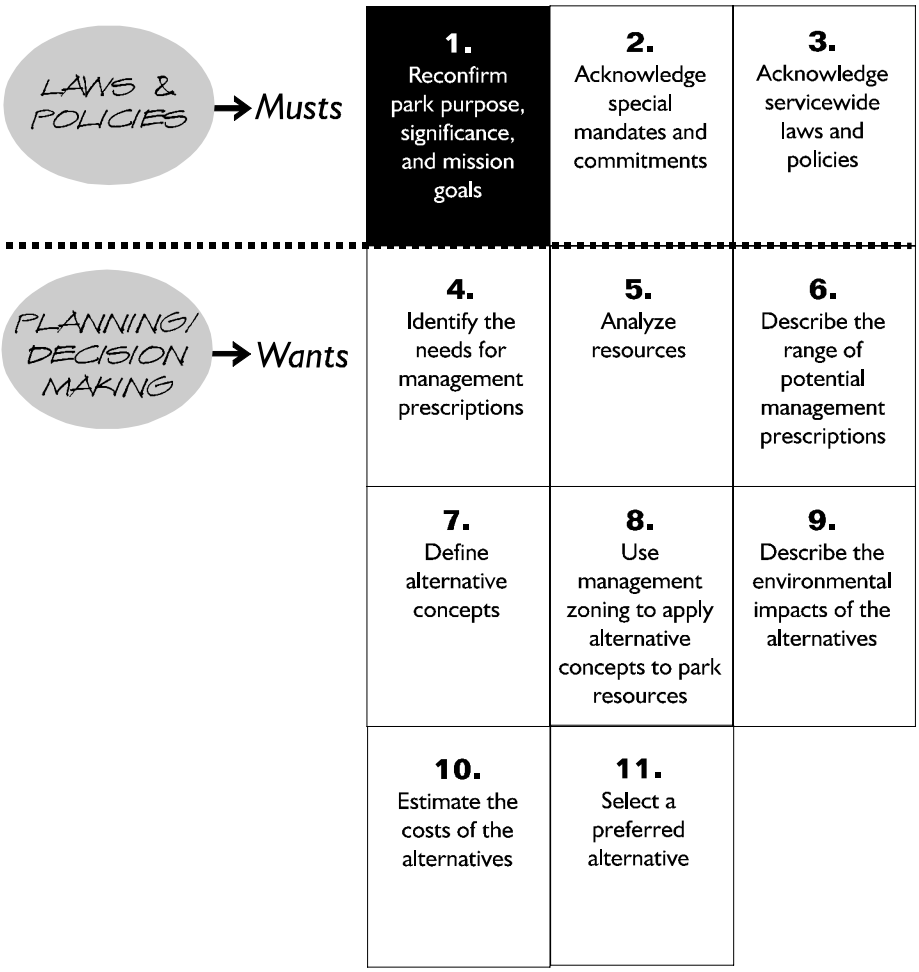
STEP 1

Key Steps in the NPS General Management Planning Process



WHAT'S NEW?

Demands for more government accountability and restrained federal spending make it critical to identify and give the highest priorities to realizing each park's core mission and to protecting the values that contribute to its national significance. Park staffs are being asked to relate programs and activities to the park's purpose, significance, and mission goals. This redirection is helping ensure that the most important things get done before attention is focused on activities that may not be directly related to the park's core mission or significance.

Purpose, significance, and management objectives used to be developed as part of a park's statement for management and/or GMP. Now these elements (with mission goals replacing management objectives) are documented as part of a park's GMP and strategic plan.

The former management objectives typically ranged from general restatements of legal mandates and policy ("preserve the resources") to specific guidance about particular park programs and facilities ("relocate and expand the maintenance yard"). Some of these statements were at the level of law and policy, while others were at the level of site-specific actions.

Under DO-2 the park purpose, significance, and mission goals are givens that frame decisions about managing resources and providing for visitor use. Thus, they should be general in nature and not preempt the kinds of decisions that are best made through general management planning and strategic planning.

RECONFIRMING THE PARK'S PURPOSE

Suggested Methods and Tools

- *Convene a small, facilitated group to reconfirm or rewrite the park's purpose and significance statements and mission goals.*

  All parks should have purpose and significance statements and mission goals that were developed as part of their strategic planning. If these elements meet the standards in DO-2, they will only need to be reconfirmed. If they do not fully meet all or some of the standards, the planning team will want to review and strengthen them. Once a small group has reconfirmed or rewritten these elements, they should be reviewed by the full staff, other agencies with special interests because of law or expertise, and the general public. It is important that everyone with a stake in the outcome of the planning process — planners, park staff, and the public — understand these statements because they are the foundation for all subsequent decisions.

- *Look in the park's establishing legislation for the specific reasons that a particular park was established.*

  Often, these reasons are vague and open to interpretation, and the purpose statement needs to do more than simply restate the law. A purpose statement needs to document the National Park Service's assumptions about what the law really means so that those assumptions can be understood by others. Information about the specific reasons for establishing a particular park can often be found in the park's legislative history or its historical record.

- *Avoid including special mandates that may be stated in the enabling legislation but that are not part of the reason the park was established.*

  Provisions for special uses such as grazing or mineral development are examples. Such provisions are discussed under special mandates below.

- *Consider new scientific discoveries and scholarship.*

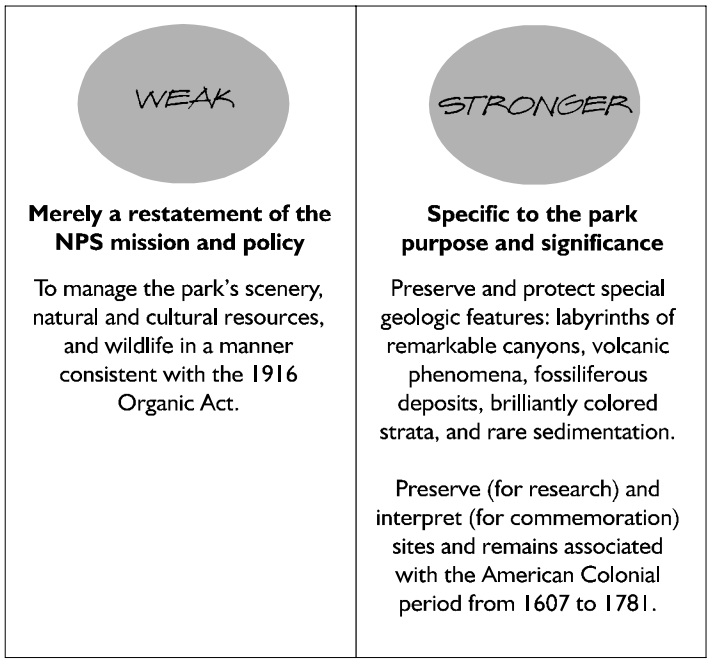
  Although the intent of a park's legislated purpose should remain constant over the long term, the intent as well as the wording may change as a result of major new scientific discoveries or scholarship. However, before "updating" the park purpose statement, the planning team should be sure that the change is of such importance that it would be appropriate to consider a possible amendment to the park's establishing legislation.

- *Generally, do not develop more than three to five purpose statements.*

  If, after thoroughly considering the legislative record, the team cannot agree on the park's purpose, it may be that the planning team needs to develop the GMP alternatives around alternative opinions about the purpose of the park. This would become the major planning issue to be resolved through the general management planning process.

Pointers for Writing Purpose Statements

Purpose statements are included in the GMP/EIS under the heading "Purpose of and Need for Action," as part of the discussion of park mission and mission goals. (See the typical table of contents on pages 5–6 of the "Introduction.") DO-2 states that a park's mission can be described as its purpose and significance.



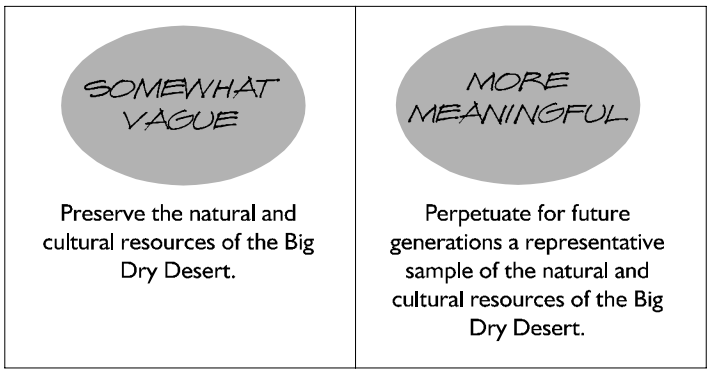
- *Avoid writing purpose statements that are too general or that don't apply to a specific park.*

  The example on the left above is too general to be an effective purpose statement. All this statement really says is that we are going to obey the law, and it could apply to any park. The stronger statements on the right are specific to a particular park.

- *Avoid quoting any vague language in the legislation or legislative history as part of the purpose statements because the vague language will remain open to differing interpretations.*

  Whenever possible, try to further define or qualify vague words such as outstanding, natural, preserve, and enhance.

The example on the right qualifies the language used in the legislation to more clearly state the purpose of the park.



RECONFIRMING THE PARK'S SIGNIFICANCE

Recommended Methods and Tools

- *Focus the significance statements on why the park was established: Why are park resources and values significant enough to warrant national park designation?*

  In reconfirming the significance, consult the park's legislative history, technical experts, and research reports, including nominations for national historic and national natural landmarks, world heritage sites, and biosphere reserves. Usually the park staff are the experts, but there may be outside experts with additional important information. The information base must be broad enough to support statements of relative significance within a regional, national, and global context. Don't forget to consider park values from multiple cultural perspectives. For example, Native Americans may have different views about the significance of a park, and their views should also be considered.

- *Test a significance statement for relevance to park purpose by asking, "If this value did not exist, would we still have XYZ National Park?" If the answer is yes, then the value may be important, but it does not contribute to the park's significance.*

  For example, assume that Black Rocks National Monument was set aside to preserve distinctive volcanic features. Nearby, and within park boundaries, are trail ruts associated with Irish emigration to Mexico.

  If the value of the distinctive volcanic features was destroyed or severely impaired, would there still be a Black Rocks NM? No. Therefore, the volcanic features contribute to the park's significance. The statement that "the monument contains the largest expanse of black lava flows in the Intermountain West, providing an outstanding representation of the effects of volcanism on the regional landscape" describes one significant element of the park.

  If the value of the trail ruts was destroyed or severely impaired, would we still have Black Rocks NM? Yes. Therefore, the trail remnants do not contribute to the park's significance, and the fact that "the monument contains

an exceptional example of trail ruts associated with the Irish emigration to Mexico" is not a good statement of significance. This is the case even though the trail may carry its own significance and even though the park staff may have some management and protection responsibility for the trail.

- *Develop between three and five significance statements for most parks.*

  Not even a park as large and diverse as Yellowstone should have more than 10 significance statements.

- *If desirable, identify resources that are important but do not directly contribute to the park's significance.*

  Listing these resources separately will provide a checklist for ensuring that all important resources are fully considered during planning and are protected to the full extent required by law and policy. Keeping this list separate will ensure that resources directly related to the park purpose get the highest priority. Some parks have called these "special emphasis" statements.

If, after thoroughly considering the current documentation and the opinions of technical experts, the team cannot agree on what is significant about the park, it may be that the park's purpose is too vague or controversial to provide the guidance needed for describing its significance. If that is the case, the planning team may need to develop the GMP alternatives around alternative opinions about the purpose of the park. This would become the major planning issue to be resolved through the general management planning process.

Pointers for Writing Significance Statements

Significance statements are included in the GMP/EIS under "Purpose of and Need for Action," as part of the discussion of park mission and mission goals. (See the typical table of contents on pages 5–6 of the "Introduction.") DO-2 states that a park's mission can be described as its purpose and significance.

- *When writing significance statements, avoid listing important resources and values. Instead, describe what attributes make the park resources and values important enough to warrant national park designation.*

  If the participants want to list resources rather than describe them, it may be useful to first develop a list of important or exceptional resources, then describe what it is about those resources that contributes to the park's significance as a unit of the national park system.

- *Describe significance in a national and regional context. Using language such as "the largest collection," "the most diverse representation," "the most authentic," "the oldest," and "the best remaining example" where appropriate will help define the significance of park resources compared to other resources in the region or the country.*

  The following example appropriately describes significance:

  > The park contains one of the very few accessible examples of intertidal communities and chaparral communities representative of the southern California coastal environment.

- *Focus the scope of significance statements; do not try to make them overly broad.*

  Significance statements are intended to help parks set priorities, but they should not be so broad that they could justify all ongoing park programs. Many park programs are required by laws or NPS policy, but this does not necessarily mean they are significant to the park's purpose. For example, a park whose significance is primarily archeological may need management programs to protect habitat for endangered species, even though endangered species are not represented in the park's significance statements. While one could argue that all park resources are equally important, this approach will not help park managers make decisions about what is most important when allocating limited money and staff time.

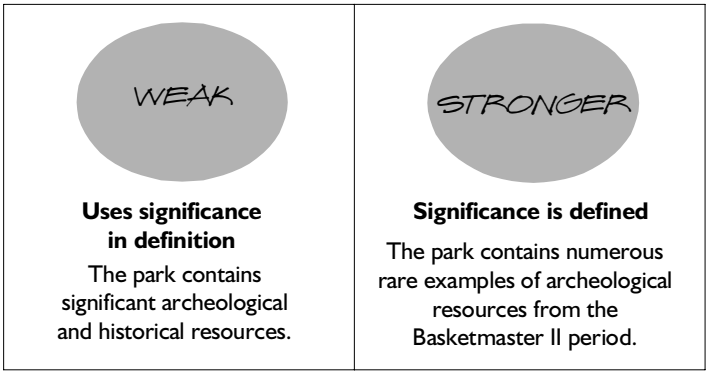
- *Avoid statements about the park that do not relate directly to the park's purpose of preserving a portion of America's heritage.*

  While it may be true that the park "provides a wide array of recreational activities" or that it "contributes significantly to the local economy," such facts do not represent the part of American heritage preserved at this park. Therefore, they are not good significance statements.

- *Avoid sentence fragments — use complete sentences to convey complete thoughts.*

- *Avoid using the adjective "significant" when defining significance. Rather, describe why the area is significant.*

- *Avoid the term unique unless you are truly describing the only one of a kind in existence.*



RECONFIRMING THE PARK'S MISSION GOALS

Recommended Methods and Tools

- *Tier the park mission goals off the servicewide mission goals stated in the National Park Service Strategic Plan.*

  The park's mission goals are a bridge between the servicewide goals and the particular goals of an individual park.

- *Use the park-specific information in the park's purpose and significance statements to write park-specific mission goals.*

  These goals should be specific enough to clearly state what is required by law and policy, but general enough to avoid precluding any legitimate alternatives from being analyzed through the resource planning process.

Pointers for Writing Mission Goals

Mission goals are included in the GMP/EIS under the "Purpose of and Need for Action" as part of the discussion of park mission and mission goals. (See the typical table of contents on pages 5–6 of the "Introduction.")

- *State mission goals as desired future conditions — what the park or visitor experience should be like.*
- *Be as specific as possible to the particular park.*
- *Write mission goals as full sentences in the present tense.*

  For example: "The public understands and appreciates the exchanges, conflicts, and accommodations that shaped the social, cultural, and economic systems and institutions of the lower Rio Grande valley."

NOTES

EXAMPLES

PURPOSE AND SIGNIFICANCE STATEMENTS
COLONIAL NATIONAL HISTORICAL PARK

PARKWIDE

Purpose: Preservation (research) and interpretation (commemoration) of sites and remains associated with the American Colonial period from 1607 to 1781.

Significance: Park contains two sites that represent the beginning and end of British colonization in what is now the United States.

JAMESTOWN

Purpose: Commemorate the first permanent English settlement.

Interpret values and institutions that came out of Jamestown.

Significance: First permanent English settlement.

Association with social, political, and economic development of Colonial Virginia and the nation.

YORKTOWN

Purpose: Commemorate and interpret the climactic campaign of the American Revolution and its meaning in history.

Preserve remains and structures related to the Yorktown campaign.

Significance: Climactic campaign of the Revolutionary War -- the symbolic end of British colonization.

Topographic, economic, and commercial features that contributed to Yorktown's strategic importance in 1781.

COLONIAL PARKWAY

Purpose: Physically and aesthetically link Jamestown, Yorktown, and Colonial Williamsburg in a way that maintains the character of the Colonial period.

Significance: A scenic corridor that unifies Jamestown, Yorktown, Colonial Williamsburg, and other historically relevant sites.

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PETRIFIED FOREST NATIONAL PARK

Purpose and Significance

PURPOSE

- To preserve and protect the Petrified Forest, its outstanding paleontological sites and specimens, its associated ecoystems, cultural and historical resources, and scenic and wilderness values for present and future generations.
- To provide opportunities to experience, understand, and enjoy the Petrified Forest and surrounding area in a manner that is compatible with the preservation of the park's resources and wilderness character.
- To facilitate orderly, regulated and continuing research by qualified scientists and students to support park management and promote scientific knowledge.
- To promote understanding and stewardship of resources and park values by providing educational opportunities for students, scientific groups, and the public.

SIGNIFICANCE

- Petrified Forest National Park is globally significant for its exposures of the Chinle Formation's fossils which preserve evidence of a Triassic Period ecosystem of more than 200 million years ago.
- The national park's detailed paleontological and stratigraphic records provide outstanding opportunities to study changes in organisms and their environments in order to better understand today's environment.
- The park's wide diversity of cultural resources represent an 8-10,000 year continuum of human occupation and adaptation, cultural interaction, and technological change; for more than 90 years they have afforded opportunities for scientists, students, and the public to learn more about man's role in the high desert environment.

PARK PURPOSES AND SIGNIFICANCE

Park purpose statements are based on park legislation and legislative history, other special designations, and NPS policies. The statements reaffirm the reasons for which Isle Royale was set aside as part of the national park system. Purpose statements provide the foundation for park management and use.

A draft set of purpose statements was reviewed by the park staff and the public. The following statements reflect the modifications made in response to comments.

- Preserve and protect the park's wilderness character for use and enjoyment by present and future generations
- Preserve and protect the park's cultural and natural resources and ecological processes
- Provide opportunities for recreational uses and experiences that are compatible with the preservation of the park's wilderness character and park resources
- Provide park-related educational and interpretive opportunities for the public
- Provide opportunities for scientific study of ecosystem components and processes, including human influences and use, and share the findings with the public

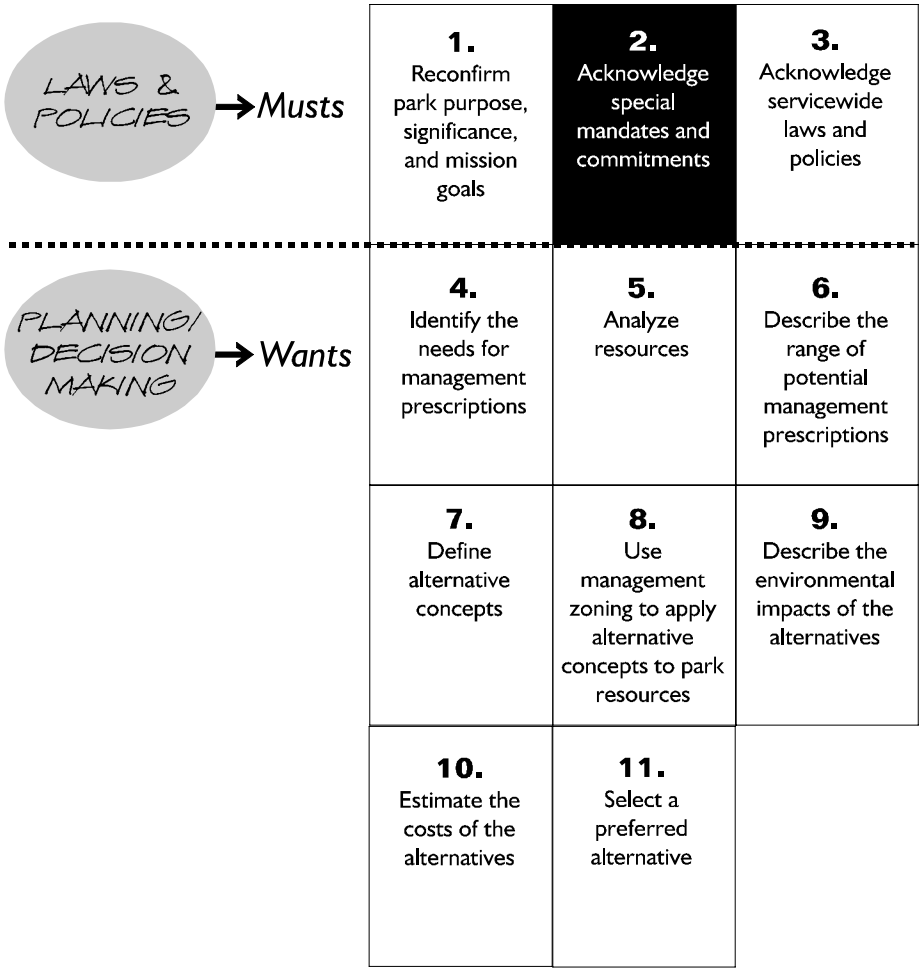
Park significance statements capture the essence of the park's importance to our country's natural and cultural heritage. Significance statements do not inventory park resources; rather, they describe the park's distinctiveness and help to place the park within its regional, national, and international contexts. Understanding park significance helps managers make decisions that preserve the resources and values necessary to accomplish the park's purposes.

The following significance statements were developed for Isle Royale National Park and were refined based on park staff and public comments.

- This maritime park, an international biosphere reserve, encompasses a remote and primitive wilderness archipelago isolated by the size and power of Lake Superior.
- Isle Royale is world renowned for its long-term wolf/moose predator-prey study. The park offers outstanding possibilities for research in a remote, relatively simplified ecosystem where overt human influences are limited.
- Park waters contain the most productive native fishery and genetically diverse lake trout populations in Lake Superior.

STEP 2

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

Special mandates and administrative commitments are a separate category of "musts," and the sources of these givens must be documented. Special mandates and commitments are park specific, not servicewide. Servicewide laws and policies are a third category of "musts" (see step 3). Considering special mandates and commitments separately from park purpose and servicewide laws and policies will make it easier to test assumptions about what can and cannot be considered during the planning process.

Suggested Methods and Tools

- *Identify special mandates (legal requirements) and administrative commitments, document them, and share them with the public as early in the planning process as possible.*

  All participants must understand these mandates and constraints since they will affect the range of feasible alternatives.

- *Look for special mandates in the park's establishing legislation.*

  The legislation may specify things such as "cattle grazing will continue for 20 years" or "there will be no additional land acquisition inside the park boundaries."

- *Look for special mandates in the legislation designating all or portions of a park as a unit of another national system, such as the national wilderness system or the national wild and scenic rivers system.*

- *Do not look for special mandates in general environmental and historic preservation laws, such as the National Historic Preservation Act, which are applicable to the entire national park system (these are part of the servicewide laws and policies discussed in step 3).*

- *Look for administrative commitments in park and other office files and through discussions with long-term park employees and superintendents.*

  Generally, commitments are agreements that have been reached through formal, documented processes. Examples would be a commitment to abide by the policies of an interagency management commission, or to manage fishing in cooperation with the state Department of Fish and Game. Occasionally, commitments will be less formal, "political" commitments or understandings, such as a commitment not to ban motorboats or other traditional uses.

  Recognize that people may have made assumptions about something being a commitment, when in fact the commitment is not real or is negotiable. A full and honest discussion of what must be done and what can't be done often leads to a broader range of options than originally anticipated.

Pointers

Special mandates and commitments are included in the GMP/EIS under the "Purpose of and Need for Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

- *Include the source of the mandate or commitment in the statement.*

EXAMPLES

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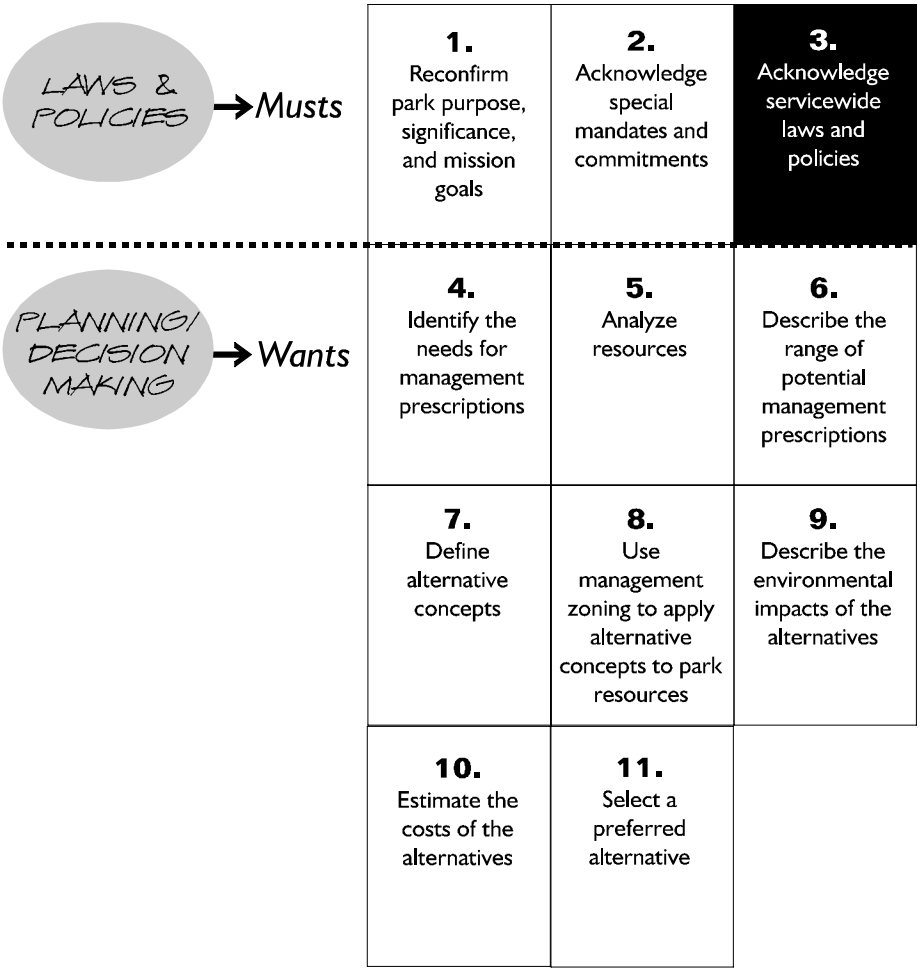
STEP 3

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

Much of basic good park management is specified in laws and policies and therefore is not subject to alternative approaches. In the past, planning teams outlined high-visibility legal and policy requirements in the section called "Actions Common to All Alternatives." However, because that section became such a catch-all, readers didn't always know what was "common" because it was directed by law/policy and what was common because somebody decided not to consider alternatives. To provide a more logical, trackable rationale for decisions, park staffs and planning teams are now being asked to distinguish between what must be done and what different people may want to be done in the park.

Suggested Methods and Tools

- *Summarize the body of legal and administrative mandates that apply to managing all units of the national park system.*

Pointers

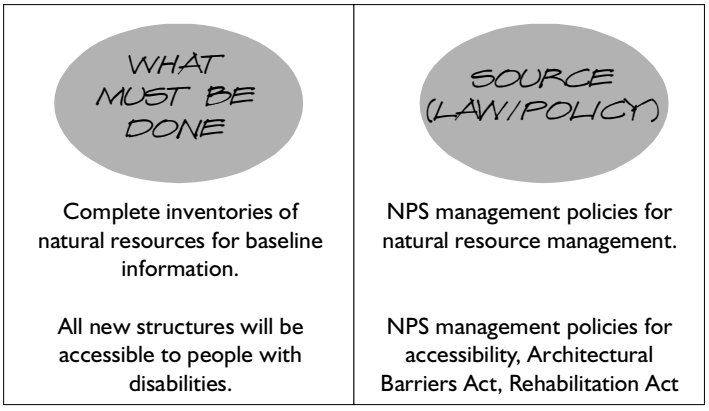
The discussion of servicewide laws and policies is included in the GMP/EIS under the heading "Purpose of and Need for Action." (See the typical table of contents on pages 5-6 of the "Introduction.")

- *Keep the summary very brief, since no decisions are needed.*

  Some topics may warrant more attention because of the level of interest by park staff or the public. It may be useful to summarize these topics in the "Purpose and Need" section of the plan under a heading of "Servicewide Laws and Policies," then refer to an appendix for additional details.

- *To ensure that all the actions described in this section are derived from law or policy, complete a worksheet with two columns, as shown below.*

  This would provide a good check of musts vs. wants. If no law or policy can be cited, then what was assumed to be a "must" may be a "want" and should be considered as part of the planning alternatives.



EXAMPLES

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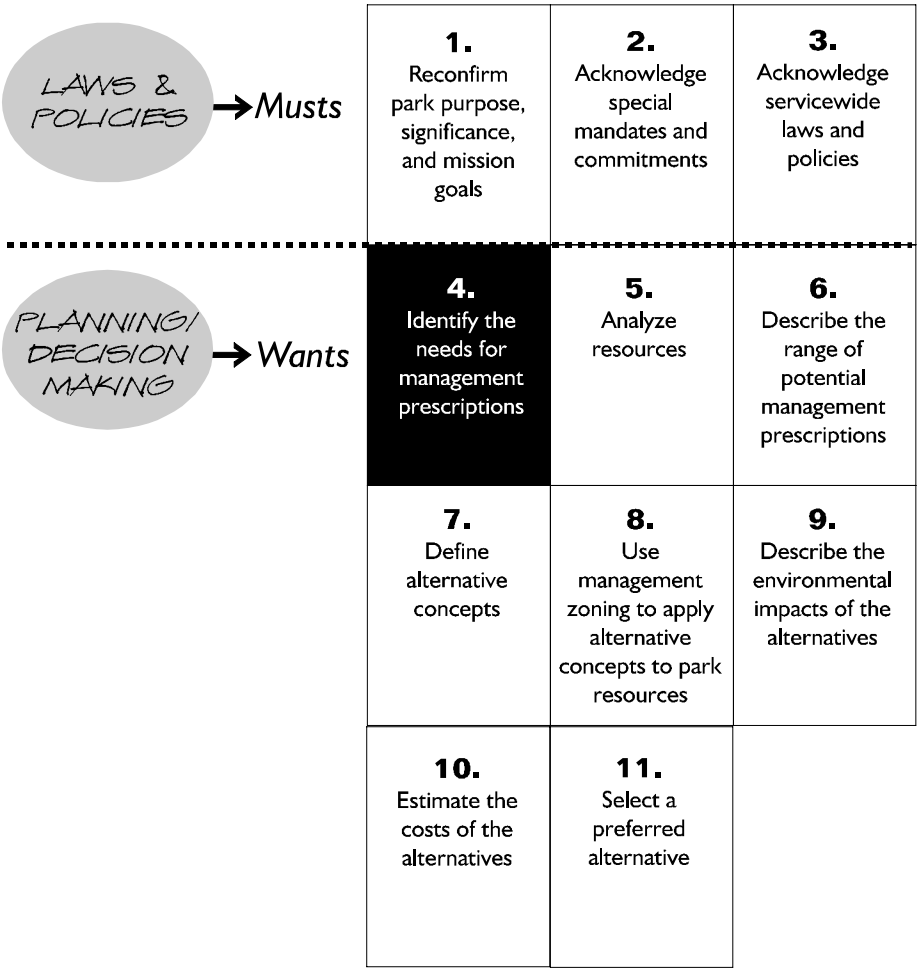
STEP 4

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

The regulations of the Council on Environmental Quality for implementing NEPA require that all EISs include a discussion of the "Purpose of and Need for Action." The action at the general management planning stage is deciding what kinds of resource conditions and visitor experiences should ultimately be achieved and maintained in various areas of a park. These conditions and experiences are called the park's management prescriptions. By analyzing and choosing among alternative management prescriptions, planning teams resolve the potential broad tradeoffs among competing resource values and park experiences.

Management prescriptions provide a basis for decision making that will help the park staff solve the long-term and short-term problems that they are aware of today as well as unforeseen problems that will arise in the future. This kind of action is different from the site-specific action needed at the implementation

planning stage, which solves a specific problem, such as "eliminate feral goats from the ecosystem" or "relocate the maintenance facility."

The new NPS guidance for implementing NEPA defines need as conditions that must be changed, problems that must be remedied, decisions that must be made, and/or policies and mandates that must be implemented. The definition "decisions that must be made" works best for general management planning. If a park does not need the kind of broad decisions included in management prescriptions, it does not need a general management plan, although it may need another kind of plan (a strategic plan or an implementation plan) to address specific activities.

Suggested Methods and Tools

- *Identify the full range of people's interests and concerns early in the planning process through "scoping" sessions with the park staff, governmental agencies with a special interest through law or expertise, Indian tribes, and the general public.*

  NEPA requires early scoping with all agencies having jurisdiction by law or expertise and with state and local governments, Indian tribes, and the public. Examples of agencies with jurisdiction by law include the Advisory Council on Historic Preservation and the state historic preservation officer if there are cultural resource issues; the U.S. Fish and Wildlife Service if there are threatened/endangered species issues; or the U.S. Army Corps of Engineers if there are floodplain or wetland issues.

  Input may be obtained through meetings, newsletters with response forms, visitor surveys, focus groups, telephone contacts, or interviews. This work usually results in a relatively long list of mixed issues identified by technical experts within and outside the National Park Service, the general public, and other interested agencies.

- *Sort this comprehensive list of issues into the following categories:*

  (1) actions that can't be taken because they are inconsistent with law or policy or they are beyond the scope of the plan

  (2) actions that must be taken because they are already mandated by law or policy

  (3) interests or concerns that have been raised and that are appropriately addressed by a GMP

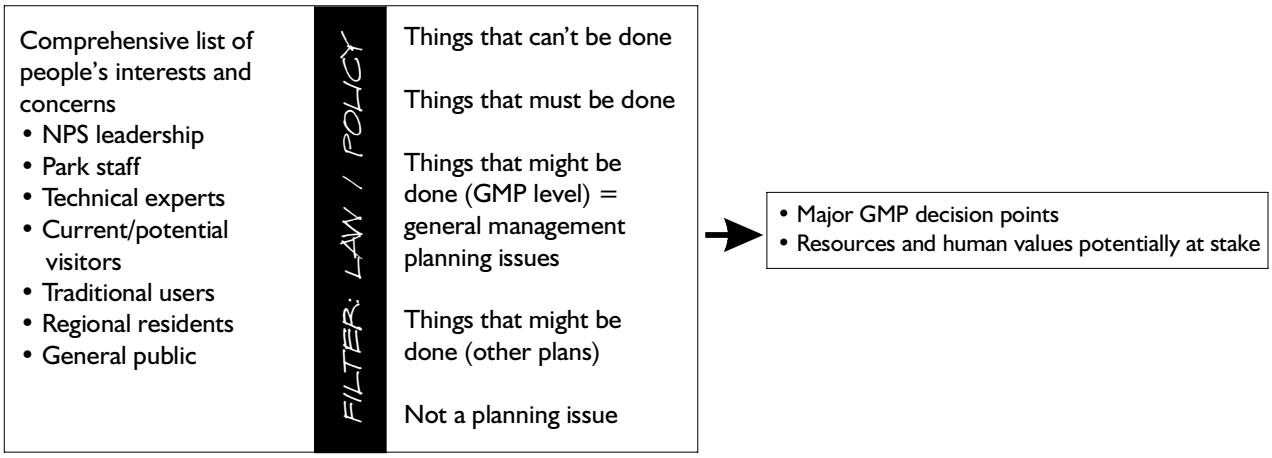
  (4) actions that are more appropriately addressed by an implementation plan

  Not all of the interests and concerns about things that might be done in a park are GMP level issues; those that deal with specific programs (such as the backcountry permit system) or facilities (such as a particular campground) should be deferred to the next level of decision making. However, there may be GMP-level issues implied in people's more specific interests and concerns. For example, if someone is concerned about a need for more campsites in a particular campground, that may indicate a GMP-level issue about the overall types and levels of overnight use in the park. Step

back from the more specific issues and look for the broader questions that may need to be resolved as a basis for more detailed decision making at a later time.

Some comments may not fit any of the four categories, in which case it may be useful to have another category for things that are simply not planning issues (such as "Get out of the United Nations").

Identifying early on what will and will not be addressed in the planning effort is important because it focuses attention on the appropriate issues, avoids raising expectations about issues that are outside the scope of planning, and helps the planning team and the public distinguish between those things that are subject to decision making and those things that must be done because of law or policy.



The list of things to be addressed in the GMP will provide the data needed to identify two important planning factors:

(1) the major decision points, which are the questions that will be answered by the plan

(2) the major resources and human values potentially at stake in the planning and decision-making process, which are the park resources, the visitor experiences, and the surrounding ecological, cultural, and socioeconomic conditions that might change as a result of the decisions that are made

These factors are discussed below.

MAJOR DECISION POINTS

Suggested Methods and Tools

- *Think of decision points as questions the plan needs to answer.*

  The generic question for all GMPs is "Should we achieve one set of resource conditions and experiences, or some other?" Each planning project will pose more specific versions of this question based on the particular circumstances and issues at each park.

- *To identify the specific decision points for a particular GMP, study the list of GMP-level issues generated during scoping and look for places where people's visions for the future are substantially different.*

  The tension created by these differences will be the questions the plan needs to answer: "Should the park or areas of the park be like this, or like that?" "Should the mission goals be accomplished one way, or another?" These either/or kinds of questions (which could also be expressed as questions of degree along a continuum) may be answered differently by different stakeholders. The planning alternatives should reflect the range of people's viewpoints in answering these questions.

  When studying the list of planning issues, avoid simply grouping the issues as "resource issues" or "use issues" because they will probably always be interrelated on some level. The questions should revolve around different combinations of resource conditions and experiences.

- *Keep in mind that decision points may have to be tiered.*

  A broad decision about what should be accomplished for the park as a whole may need to be made before decisions about specific locations, particular resources, or certain visitor uses.

This step may be accomplished by a small work group, then verified by the full planning team and reviewed by all the stakeholders.

Pointers for Writing Decision Points

Decision points are included in the GMP/EIS under the heading "Purpose of and Need for Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

- *Summarize the process used to identify the decision points, with backup information as to how the individual issues were evaluated (things that can't be done, things that must be done, or things requiring a decision as a result of the GMP or a subsequent implementation plan), either in the text or an appendix.*

- *State the major GMP decision points as questions.*

  For example:

  "Can we provide visitor access to a large number and diversity of sensitive archeological resources without causing unacceptable adverse impacts, or should access be restricted to a few sites and visitor understanding enhanced some other way?"

  "To what degree should the needs for a commuter route through the park be allowed to affect resource conditions and interpretive and recreational opportunities?"

  "Can resources be protected through public/private partnerships, or is public ownership and management required?"

- *Try to limit the number of major decision points. (People may have difficulty keeping track of more than three or four fundamental questions.)*

- *Test the adequacy of the decision points by asking, "If these questions are answered, will the plan be successful?"*

MAJOR RESOURCES AND VALUES POTENTIALLY AT STAKE IN THE PLANNING

Suggested Methods and Tools

- *Once the major decision points have been defined, identify the major park resources and human values that could be affected.*

  This step involves determining what major park resources and experiences could be changed as a result of the decision-making process. Agreeing about what is at stake will help focus analysis on what is really important in the planning process.

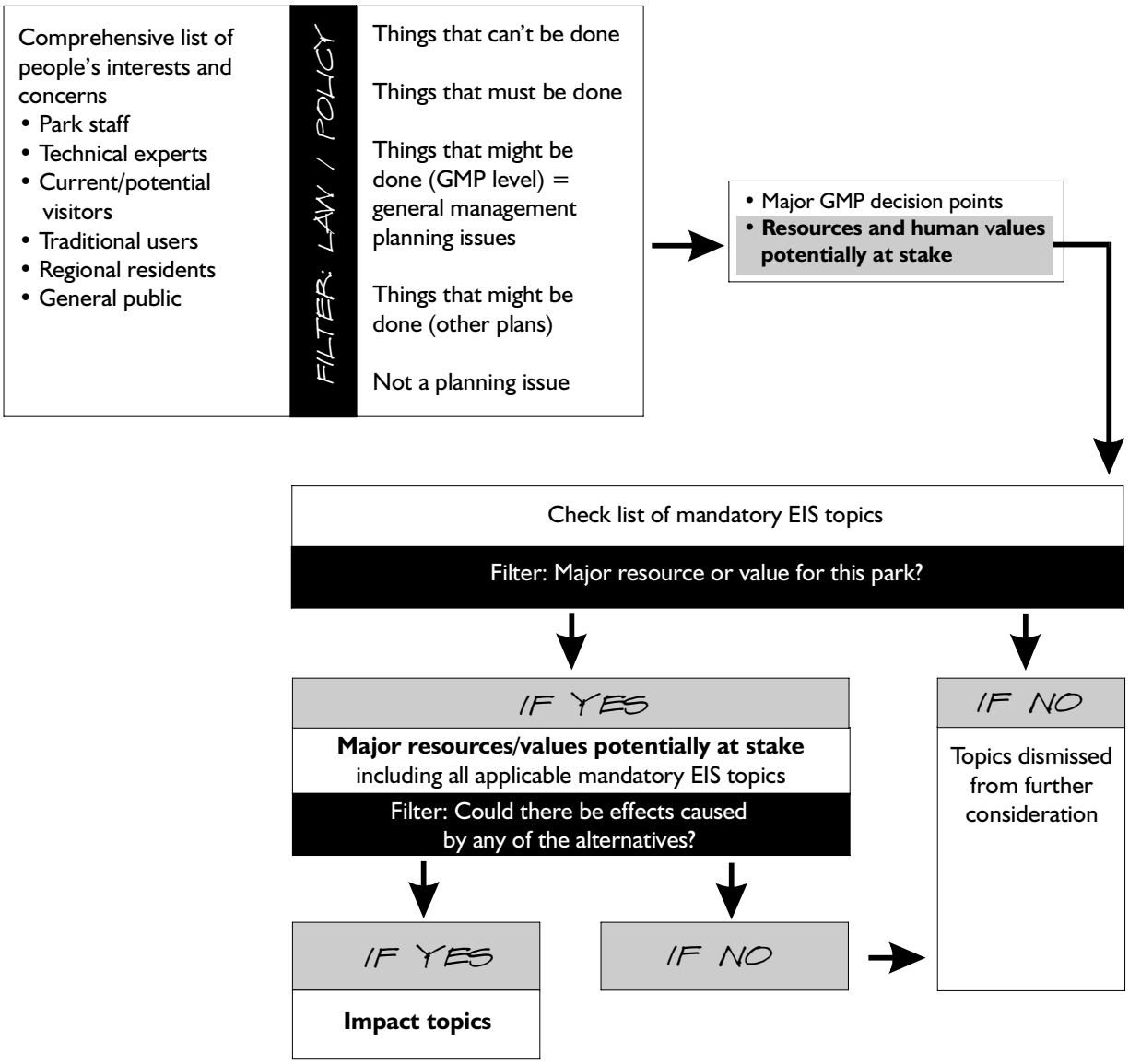
  While this step will mostly consider resource or experiential values, "operational efficiency" or "local quality of life" may be important factors that are potentially at stake in the planning process. If so, they should be included in the list and analyzed.

  Deciding what is potentially at stake provides the starting point for identifying the impact topics to be addressed in the EIS. Once the planning alternatives are identified (step 7), the list of resources and values potentially affected can be shortened to those topics that would actually be affected by one or more of the planning alternatives. These then become the impact topics for the EIS.

- *When identifying what is potentially at stake, review the list of standard impact topics (see the text box on page 4-7) that must be considered in an EIS and make sure those important to the park are included.*

  Standard EIS topics that are not important to the park or that will not be affected by the planning alternatives should be identified as topics dismissed from further analysis, either (1) because they are not relevant to this park, or (2) because they would not be affected by the alternatives or the impact would be negligible or minor.

The impact topics will also be the factors used in the benefit/cost analysis conducted to help identify a preferred alternative.


Comprehensive list of people's interests and concerns
• Park staff
• Technical experts
• Current/potential visitors
• Traditional users
• Regional residents
• General public
FILTER: LAW / POLICY
Things that can't be done
Things that must be done
Things that might be done (GMP level) = general management planning issues
Things that might be done (other plans)
Not a planning issue
• Major GMP decision points
• Resources and human values potentially at stake
Check list of mandatory EIS topics
Filter: Major resource or value for this park?
IF YES
Major resources/values potentially at stake including all applicable mandatory EIS topics
Filter: Could there be effects caused by any of the alternatives?
IF NO
Topics dismissed from further consideration
IF YES
Impact topics
IF NO

Mandatory EIS Topics (NPS-12, DO-12)

You must consider all of the following in an EIS:

- *Possible conflicts between the proposed action and land use plans, policies or controls for the area concerned (including local, state or Indian tribe) (40 CFR 1502.16, 1506.2(d)), and the extent to which your park will reconcile the conflict*
- *Energy requirements and conservation potential (40 CFR 1502.16)*
- *Natural or depletable resource requirements and conservation potential (40 CFR 1502.16)*
- *Urban quality, historic and cultural resources, and design of the built environment (40 CFR 1502.16)*
- *Socially or economically disadvantaged populations (see "Environmental Justice," EO 12898, for more information)*
- *Wetlands and floodplains (100-year and 500-year where critical actions as defined in the NPS floodplain management guideline are involved) (40 CFR 1508.27)*
- *Prime and unique agricultural lands (40 CFR 1508.27)*
- *Endangered or threatened plants and animals and their habitats (including those proposed for listing on other state lists) (40 CFR 1508.27)*
- *Important scientific, archeological and other cultural resources including historic properties listed or eligible for the National Register of Historic Places (40 CFR 1508.27)*
- *Ecologically critical areas, wild and scenic rivers or other unique natural resources (40 CFR 1508.27)*
- *Public health and safety (40 CFR 1508.27)*
- *Sacred sites (EO 13007)*
- *Indian Trust resources (ECM 95-2)*

If these are irrelevant in your EIS, include them in the discussion of issues dropped from the analysis.

Pointers for Writing about Resources and Values Potentially at Stake

Resources and values at stake in the planning process are included in the GMP/EIS in the "Purpose of and Need for Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

- *Summarize the process used to identify the resources and values at stake (which are also the basis for the impact topics) and discuss the topics that were dismissed from further consideration once the alternatives were fully defined (because no alternative would have an effect).*

- *Be as specific as possible when identifying the tradeoffs in the planning process.*

  Identifying these tradeoffs will guide the development of the alternatives and the scope of the analysis used to assess their impacts. A topic such as "threatened and endangered species" does not provide as much help as a more specific topic such as "critical habitat for the endangered plover." By focusing on specific major resources and values, you can avoid irrelevant descriptions and help decision makers and the public comprehend the most important things that are at stake in the planning.

- *Don't spend too much time word-smithing descriptions of major resources and values potentially at stake since they may be eliminated from detailed consideration later in the planning process (once the alternatives have been defined).*

Examples of major decision points and major resources and values at stake are shown below.

Major decision points (questions that alternatives would answer differently)	Major resources and human values at stake in the decision-making process
Should visitor use be managed to preserve a diversity of experiences, including opportunities for solitude, or should increasing demand be accommodated throughout the park?	freedom of choice in accessing parklands for various recreational activities
	opportunities for solitude
Should traditional patterns of use and development be retained, or should some uses be relocated to enhance grizzly bear habitat?	undisturbed grizzly bear use of critical habitat
	camping opportunities
	operational efficiency

EXAMPLES

August 20, 1998

SCOPING ANALYSIS
FLAGSTAFF AREAS GENERAL MANAGEMENT PLANS/EIS

Notice of intent to prepare EIS published in *Federal Register* May 19, 1997. NOI indicated availability of newsletter #1, from which comments were accepted until June 30, 1997. First newsletter described purpose and significance statements for all three parks, as well as identifying preliminary issues. Second newsletter, released February 1998, detailed public response to first newsletter, described final purpose and significance statements, and explained the preliminary range of management zones. Table includes input from NOI and both newsletters.

Issue
Resource Protection
Monitoring and protection of resources is difficult
Resources are being lost due to vandalism and theft
Popular resources are trampled by visitors
Basic resource data is lacking
Inadequate library and museum storage facilities limit our ability to preserve and use existing information
Additional research is needed to guide management decisions on backcountry access, fire management, exotic species, natural quiet, water use, future facility locations, and a variety of visitor use activities.
Better information is needed regarding the relationship of park resources to Hopi, Navajo, and other cultures
Increase understanding of existing natural resources
Protect natural areas; encourage indigenous species
Restore seasonal water flow in Walnut Canyon
Educate visitors to prevent unintentional resource damage
Set stiff fines for resource violations; return fines to vandalized parks for repairs
Visitor Use and Access
Existing staffing and budget levels limit visitor services
Relationship between numbers of visitors and impacts on resources is not known.
Need extensive provision for viewing from automobiles
Plan for a shuttle transportation service
Start a reservation system
Don't limit public access
Keep sites accessible to the public
Don't allow full access
Reconstruct a few sites for public and restrict access to others
Seek a balance among various public uses
Facilities
Buildings do not meet current visitor or employee needs
Visitation often exceeds visitor center and parking lot capacities
Handicapped accessibility is minimal for all impairments (mobility, hearing, visual, and mental)
Utility systems are old and inadequate

August 20, 1998

Some facilities are located in prime resource areas and may be causing undue impacts on those resources
Trail use often exceeds design capacity, causing safety and resource protection concerns
Trails are subject to erosion and rockfalls
No new construction of visitor centers
Need small visitor center/kiosk at north entrance of Wupatki
Larger visitor center could be located in less sensitive areas
Facilities are not sustainable and not designed for the landscape
Interpretation
Need to increase awareness of resource protection efforts
Visitor centers and exhibits do not reflect current scientific thinking or relationships between sites.
Visitors do not receive necessary information before they encounter sensitive resources
Artifacts cannot be displayed or stored onsite without damage
Staff and budget levels limit onsite interpretive presentations and outreach activities to schools and local communities
Building design limitations prevent installation of modern museum exhibits, audiovisual programs, or research libraries.
Encourage local volunteer individuals and organizations
Emphasize outreach and education
Increase interpretive programs; provide varying interpretations of sites
Display more objects now in storage
Improve informational services (directional signing, multi-lingual signing, more information at north entrance to Wupatki)
Provide photos of sites that are off limits; explain why sites are off limits
Surrounding Environment/Boundaries
Rapid regional growth and development adjacent to parks increase the potential for damage to resources, viewsheds, and visitor experience
Confusion sometimes arises from the presence of multiple agencies with common boundaries and/or resources, but different management policies and visitor use regulations
Place buffer zones between encroaching development and parks
Work with US Forest Service and state on land management, land trades, "friendly condemnation" issues near park boundaries.
Do not encroach on U.S. Forest Service lands for more buffers
Correct/expand boundaries at Sunset Crater Volcano
If any private land in park, people should be allowed to develop it (including grazing)
Funding
Many issues identified could be alleviated by appropriate funding and staffing
Enhanced operational budget is required
Charge entrance fees high enough to cover expenses and keep the money onsite
End senior citizen discounts
Planning Process
Provide for input from full range of age groups; from Native Americans
Provide more news coverage of this planning process

Issues were then categorized according to how they could be resolved. Much of basic good park management is specified in laws and policies, so no alternatives would be appropriate. Those issues that fall into that category from scoping have been classified as "mandates/servicewide laws and policies." The list of things to be addressed in the general management plan (labeled Decision Points) will include major planning issues, major values at stake, and the range of management prescriptions. The "potential elements of alternatives" are those goals, suggestions, or solutions identified during scoping that might be applied in GMP planning; the "ideas for future plans" are those goals, suggestions, or solutions identified during scoping that would be deferred to future implementation planning. There was one issue that was not a planning issue. We also developed a list of major values potentially at stake in the planning process.

Mandates/Servicewide Laws and Policies

- Basic resource data is lacking (need data to guide management decisions on fire management and exotic species and identify relationship of park resources to Hopi, Navajo, and other cultures)
- Encourage indigenous species
- Restore seasonal water flow in Walnut Canyon
- Handicapped accessibility is minimal for all impairments (mobility, hearing, visual, and mental)
- Need to explain entrance fee legislation/requirements to address suggestions to charge entrance fees high enough to cover expenses and keep the money onsite and end senior citizen discounts
- Provide for input from full range of age groups; from Native Americans

Decision Points

One matter we need to decide is to what extent we can provide visitor access to cultural and natural resources without unacceptable trampling and other impacts to resources.

Considerations:

- monitoring and protection of resources is difficult
- resources are being lost due to vandalism and theft; other popular resources are trampled by visitors
- additional research is needed to understand the relationships between numbers of visitors and resource impacts
- need to understand tribal requirements for access and use of resources without visitor conflicts

We need to decide the best ways of protecting, managing, and using park collections.

Considerations:

- inadequate library and museum storage facilities limit our ability to preserve and use information
- artifacts cannot be displayed or stored onsite without damage

We need to determine the appropriate mix and levels of visitor uses, experiences, and services, and identify future facility needs and locations.

Considerations:

- existing buildings do not meet current visitor or employee needs; visitation often exceeds VC and parking lot capacities
- park utility systems are old and inadequate
- some facilities are located in prime resource areas and may be causing undue impacts on those resources; other facilities are not sustainable nor designed for the landscape.
- trail use often exceeds design capacity, causing safety and resource protection concerns (trails are subject to erosion and rockfalls)

We need to determine the best strategies for delivering interpretation and other information to visitors.

Considerations:

- visitors do not receive necessary information before they encounter sensitive resources
- visitor centers and exhibits do not reflect current scientific thinking or relationships between sites and people
- the interpretation program needs to include onsite presentations and outreach activities to schools and local communities

We need to determine to what extent we can protect park values through agreements and/or partnerships with park neighbors and inholders, and/or boundary adjustments and land acquisition.

Considerations:

- rapid regional growth and development adjacent to parks increase the potential for damage to resources, viewsheds, and visitor experience
- confusion sometimes arises from the presence of multiple agencies with common boundaries and/or resources, but different management policies and visitor use regulations
- there are land management, land trades, "friendly condemnation" issues near park boundaries involving the state and the U. S. Forest Service
- strategies are needed for dealing with private land in the park while preserving private property rights

Potential Elements of Alternatives

Don't limit public access
Keep sites accessible to the public
Don't allow full access
Seek a balance among various public uses
Educate visitors to prevent unintentional resource damage
Plan for a shuttle transportation service
Start a reservation system
Reconstruct a few sites for public and restrict access to others
No new construction of visitor centers
Need small visitor center/kiosk at north entrance of Wupatki
Larger visitor center could be located in less sensitive areas
Need to increase awareness of resource protection efforts
Encourage local volunteer individuals and organizations
Emphasize outreach and education

August 20, 1998

Place buffer zones between encroaching development and parks
Do not encroach on U.S. Forest Service lands for more buffers
Correct/expand boundaries at Sunset Crater Volcano
Need extensive provision for viewing from automobiles

Ideas for Future Plans

Existing staffing and budget levels limit visitor services (Strategic Plan)
Many issues identified could be alleviated by appropriate funding and staffing (Strategic Plan)
Enhanced operational budget is required (Strategic Plan)
Set stiff fines for resource violations; return fines to vandalized parks for repairs
Display more objects now in storage (CIP)
Improve informational services (directional signing, multi-lingual signing, more information at north entrance to Wupatki) (CIP)
Provide photos of sites that are off limits; explain why sites are off limits (CIP)
Building design limitations prevent installation of modern museum exhibits, audiovisual programs, or research libraries. (CIP)
Increase interpretive programs; provide varying interpretations of sites (CIP)

Not a Planning Issue or Can't be Addressed by Plan

Provide more news coverage of this planning process

Major Values Potentially at Stake

- Long term integrity of archeological sites and their cultural landscapes.
- Long term scientific and traditional integrity of culturally sensitive areas (shrines, gathering sites, landfills, resource collection areas etc.).
- Access to culturally sensitive areas by traditional users.
- Access to park resources by the general public.
- Uncrowded visitor experiences.
- Ability to experience the full range of potential visitor opportunities.
- Preservation of micro-habitats.
- Preservation of unfragmented natural systems
- Personal freedom (inside and outside park boundaries)
- Long term integrity of natural systems and processes
- Exclusion of exotic species
- Preservation/protection of T/E species: spotted owls, peregrines, etc.
- Preservation of historic character of the built environment
- Traditional employee and visitor experiences (ex., personal services, access to favorite sites etc.)
- Long term integrity of geological features (esp. sunset)
- Preservation of riparian habitat (especially at Walnut Canyon)
- Scenic values external to park boundaries
- Perceived isolation of parks from their regional context
- Access to collections ("ability to see "the real thing")
- Integrity of natural systems for scientific research

- Movement of herd species
- Preservation of perceived "wild" character
- Traditional land uses external to boundaries
- "Traditional" recreation activities (ex., biking, climbing, etc.)
- Scientific integrity of cultural resources
- Employee and visitor health and safety
- Operational efficiency
- Economic contribution of parks to local economies
- Educational uses by regional educational institutions
- Quality of life to park neighbors
- Access to the information provided by collections
- Stability of public support for the parks
- Natural quiet/ability to hear natural sounds
- Visibility of night skies – "seeing"
- Accessibility to full spectrum of park resources for visitors with disabilities
- Ability to enforce park regulations and protect park values (ability to "know")
- Ability of public to understand park resources – park management
- Character and condition of grasslands at Wupatki

March 1993

Environmental Assessment for Road Improvement Alternatives

Boulder–to–Bullfrog (Burr Trail)

Capitol Reef National Park
Glen Canyon National Recreation Area
Escalante Resource Area
Henry Mountain Resource Area

Table 1: Scoping Issues Resolution

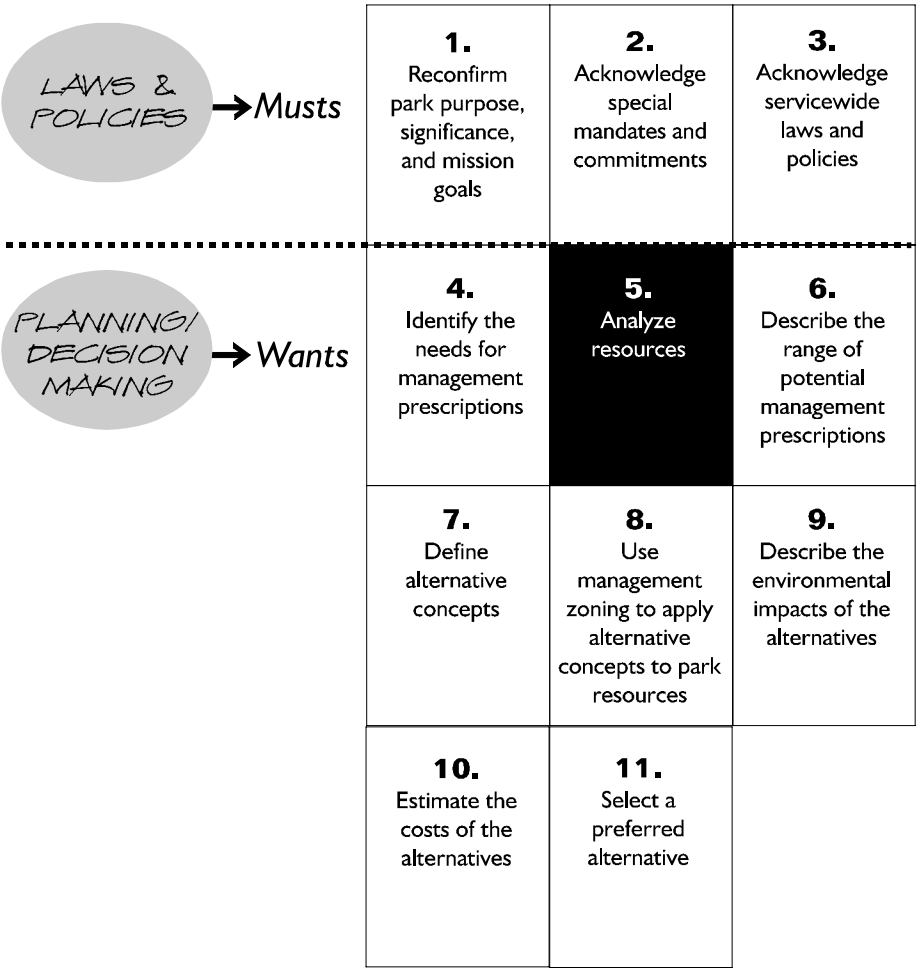
Issue	Location in EA
Access	
Gain faster access to Lake Powell	Purpose and Need, Issues Not Analyzed, Need for Study
Slow speed allows scenery viewing	Environmental Consequences, Alternatives B, C, D
Paving allows older citizens to enjoy area	Environmental Consequences, Garfield County Proposal, Visitor Use and Experience
Parks need to be usable by more than back-packers & those with rough terrain vehicles	Proposal and Alternatives, Garfield County Proposal
Some places should *require* effort and inconvenience	Proposal and Alternatives, Alternative D
Will traffic volume and type of traffic change?	Environmental Consequences, Garfield County Proposal and all alternatives, Visitor Use and Experience
Alternatives	
Various alternatives were proposed during scoping	Garfield County Proposal and Alternatives
Area Character and Aesthetics	
Paving will change wilderness character, ambiance, destroy solitude	Environmental Consequences, Garfield County Proposal and all alternatives, Natural Resources, Wilderness, Visual Quality and Visitor Use and Experience
Uncertainty, discomfort are part of the character	Environmental Consequences, Garfield County Proposal and all alternatives, Natural Resources, Wilderness, and Visitor Use and Experience
Unimproved roads help retain a diversity of options for NPS visitor	Environmental Consequences, Garfield County Proposal and all alternatives, Visitor Use and Experience
Graffiti, litter	Environmental Consequences, Garfield County Proposal, Park Operations
Heavy human traffic will change the natural area	Environmental Consequences, Garfield County Proposal and all alternatives, Visitor Use and Experience
Impacts on visual quality and scenic values	Environmental Consequences, Garfield County Proposal and all alternatives, Natural Resources, Visual Quality
Carrying Capacity	
Need carrying capacity study	Purpose and Need, Issues, Visitor Use and Experience

Issue	Location in EA
Cultural Resources	
The road deserves special protection	Purpose and Need, Issues Not Analyzed, Cultural Resources
Will adversely affect regionally significant cultural resources	Purpose and Need, Issues Not Analyzed, Cultural Resources
Question adequacy and intensity of resource inventory	Affected Environment, Cultural Resources, Archeological Resources
Defacing rock art and Native American sites, vandalism	Environmental Consequences, Garfield County Proposal and alternatives, Cultural Resources, Archeological Resources
Impacts on traditional cultural properties	Environmental Consequences, Garfield County Proposal and alternatives, Cultural Resources, Ethnographic Resources
Cumulative Effects/Mitigating Measures	
Cumulative effects of Boulder-to-Bullfrog Road and other roads	Environmental Consequences, Garfield County Proposal and all alternatives, Cumulative Effects
Cumulative effects of road construction and other future actions	Environmental Consequences, Garfield County Proposal and all alternatives, Cumulative Effects
Can mitigating measures be accomplished?	Proposal and Alternatives, Garfield County Proposal
External	
Impact of road improvement on exploration of mineral resources	Environmental Consequences, Garfield County Proposal and all alternatives, Cumulative Effects
Effects of road improvement on existing livestock grazing and leases	Environmental Consequences, Garfield County Proposal and all alternatives, Socioeconomic Resources
Interpretation/Facility Development/Staffing	
Need for additional interpretive facilities and visitor contact facility in Waterpocket District of Capitol Reef if visitation increases	Environmental Consequences, Garfield County Proposal and all alternatives
Need for increased staff because of road improvement	Environmental Consequences, Garfield County Proposal and all alternatives

NOTES

STEP 5

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

Because GMPs are becoming more conceptual, the analysis of resources will need to be performed at a broader level. However, the analysis must be sufficient to ensure that proposed resource conditions and visitor experiences are both logical and feasible in terms of protecting resource values. Detailed analyses for small sites or individual facilities will typically be done as part of site or development concept planning after the GMP has been approved.

Suggested Methods and Tools

Scoping. The scope of the plan has major implications for the scope and cost of the analysis.

- *Ensure that the level of analysis is consistent with the level of the major decision points and the park resources and human values potentially at stake in the planning (including the standard NEPA impact topics listed under step 4).*

- *Ask, "What major decision point does the analysis relate to?" or "What specific questions should it answer?" For example, "Where are use conflicts occurring now?" or "Which areas have resources that are particularly vulnerable to visitor use?"*
- *Find out what analyses were conducted for similar projects and what lessons were learned.*
- *Develop at least an initial understanding of the questions before the need for various analyses are identified.*

  Planning is not a linear process, however, so it is essential to keep checking assumptions as the analyses proceed.

Data Needs. Data needs should be fully considered when a GMP project is nominated to the servicewide priority list. GMP program funds are not available for basic data gathering. (If the regional director cannot certify at the time the project agreement is approved that adequate data will be available to support planning, then the project should be deferred.)

- *Do enough in the way of resource analysis, including field checks, to ensure that management zones are appropriately placed and that the types and intensities of development proposed in GMP alternatives are feasible and appropriate from a land resource perspective.*
- *Avoid analysis paralysis.*

  Making decisions with the best available information is better than making no decisions. If you don't have complete data with which to do comprehensive overlay mapping, do the best you can with what you have. Consult experts, substitute information about related indicators if particular information is unavailable, and rely on field reconnaissance of specific sites if necessary.

  Much useful data may be available from sources outside the National Park Service, such as the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the Federal Emergency Management Agency, or the Historic American Buildings Survey. Many of these sources are listed in the Planning Data Needs and Sources table attached to DO-2.

Inventory vs. Analysis.

- *Distinguish between an inventory and an analysis:*

  An **inventory** involves gathering and displaying data, and it is typically completed before the analysis is conducted.

  An **analysis** usually makes use of an inventory; it is performed for specific purposes (like answering a specific question), and it involves assessing pertinent information, making value judgments about the data, and coming up with recommendations for suitability. Ideally, the analysis is performed with input from experts (NPS or other).

- *Use the people who know the resource best (researchers, park resource experts, etc.); find a way for them to provide input in a positive, collaborative way. To facilitate the uncovering and sharing of information, understand as much as you*

can up front, then ask questions along the way to be sure you're adequately considering the resource.

This process must be communicated to stakeholders to gain their confidence in the ultimate solution.

Geographic information systems don't determine values or make decisions; experts do. Don't expect a GIS analyst to make the value decisions in place of an expert. Develop a decision-making model (decide criteria, make value judgments) in advance.

Methods of Analysis. There is no cookbook approach to analysis. Each situation must be evaluated and a process developed that suits the need and circumstances, the availability of data and technology, and the capabilities and experience of the planning team. Analyses, when carefully planned and conducted, can allow planning teams to develop alternatives that minimize environmental impacts and improve visitor experiences. Even though there are no set rules about how to analyze resources, the following methods are often used: (1) existing conditions analysis, (2) overlay or suitability analysis, and (3) field checking.

(1) Existing conditions analysis. This analysis is critical to a basic understanding of a park, and it should be done before any further analysis. This task involves representing the pertinent characteristics of an area with text, symbols, and arrows on a map as a way of portraying land use and activity relationships, current problems, and resource concerns and values. It promotes an understanding of an area's physical and ecological characteristics and their possible implications for the plan.

Examples of information to include are base information (vegetation, roads, trails, etc.), existing use nodes, exceptional resources, and critical resource concerns. In some cases it may be necessary to document resource problems (such as degradation of air quality from concentrations of cars or snowmobiles) to justify addressing this problem in the GMP. In simple cases, information about existing conditions can be mapped or integrated with planning opportunities and constraints. In more complex situations it may be preferable to map and analyze opportunities and constraints separately.

If the park staff, the public, or other stakeholders tend to think of the park in terms of distinct geographic areas, it is important to retain these distinctions when presenting the analysis, even though an important purpose of the analysis is to look at the park as a whole.

(2) Overlay or Suitability Analysis. The purpose of this analysis is to identify areas with particular predetermined characteristics. In past years this method was performed with transparent Mylar resource overlays. Today it is usually performed with GIS, both for efficiency and because analyses can be quickly rerun with different criteria. Types of overlay mapping include the following:

Sieve or filter mapping, which identifies areas to be absolutely excluded. The *Yellowstone Winter Use Study* used this technique to filter out wilderness areas, low snow areas, and too steep areas, leaving potential areas for snowmobile use.

Sensitivity mapping, which grades the probable severity of impact. The Palo Alto NHS *General Management Plan* used this technique to overlay information about floodplains, habitat for threatened or endangered species, viewsheds, and historic resources. The areas with the fewest sensitive resources were identified as the best candidates for developed or high use zones.

Attractiveness mapping, which identifies the best areas for different kinds of visitor experiences. The Isle Royale *General Management Plan* used this technique to identify and overlay areas within a day's hike or boat ride from developed facilities, areas near key cultural features, and areas near interesting natural features. The areas with the most desirable characteristics were the most attractive candidates for frontcountry zones.

These three types of mapping are often combined. Resulting maps sometimes have three general categories: attractive areas with few potential impacts, unattractive areas with few potential impacts, and attractive areas with many potential impacts. Although it's best to avoid development in the latter category, if you have few options, it may be possible to avoid or minimize impacts with careful planning and design.

(3) Field Checking. The purpose of this type of analysis is to make sure that preliminary ideas or alternative actions are feasible. At Isle Royale, for example, the park's backcountry management group field checked areas zoned to allow campgrounds with docks to determine if feasible sites existed.

You need to be sure to have done enough analysis (including existing conditions) before generating alternatives to ensure that they have a solid basis. Too often this step is short-changed in the schedule, and projects have been set back because alternatives were formulated before existing conditions and suitability analyses were performed.

Conclusions.

- *Develop and document a set of specific conclusions from the analyses.*

  Time should be set aside in advance in do this step so that it is not overlooked.

- *Discuss possible ways and appropriate times to use these conclusions in developing alternatives.*

  If this step is overlooked, the analysis effort may be wasted. Once preliminary alternatives have been developed, check to be sure that they maximize attractiveness factors (like maintaining corridors for wildlife movement or providing a variety of settings) and minimize sensitivity factors (like wildlife habitat fragmentation or outside development that threatens prime viewsheds), as identified during the analysis.

  The analysis should provide justification or rationale for some proposals. But good judgment is required to interpret and draw conclusions from analyses. An overlay analysis, for example, may indicate the presence of a very sensitive area, but professional judgment is needed to determine if

immediate protection measures such as full-time closures are justified, or if further study of resources or potential impacts are more appropriate first steps.

Documentation.

- *Document the analysis.*

  This is an important part of the planning process, and as such, it should be briefly described in the plan or one of its appendixes. Stakeholders must understand what types of analyses were performed in order to have confidence in the ultimate solutions.

Pointers for Documenting the Analysis

- *Collect and analyze information at an appropriate level of detail.*

  For general management planning purposes, for example, you may only need to know where there are potential wetlands; it may not be necessary to precisely delineate and classify each wetland area.

  What is collected, mapped, and analyzed may be different from what actually appears in the GMP/EIS. Only those park resources or human values that would be affected by one or more of the alternatives are described in the "Affected Environment" portion of GMP/EIS. (See the typical table of contents on pages 5–6 of the "Introduction.")

- *In those instances where an analysis early in the planning process leads to the avoidance of impacts on resources or values that might have been affected, dismiss those impact topics from further consideration and analysis in the GMP/EIS.*

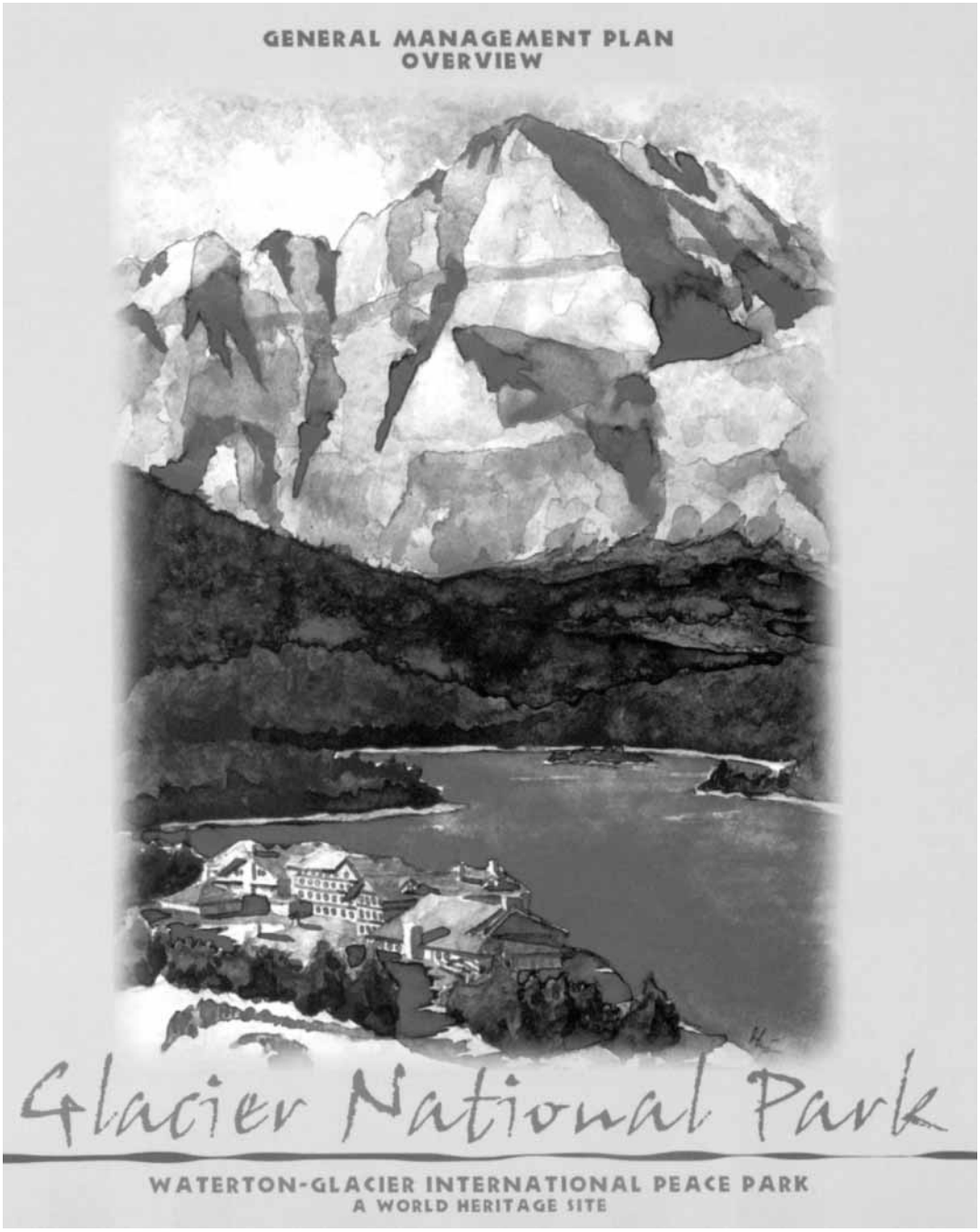
  The dismissal of resources and values, if any, from further consideration is documented in the GMP/EIS in the "Purpose of and Need for Action."

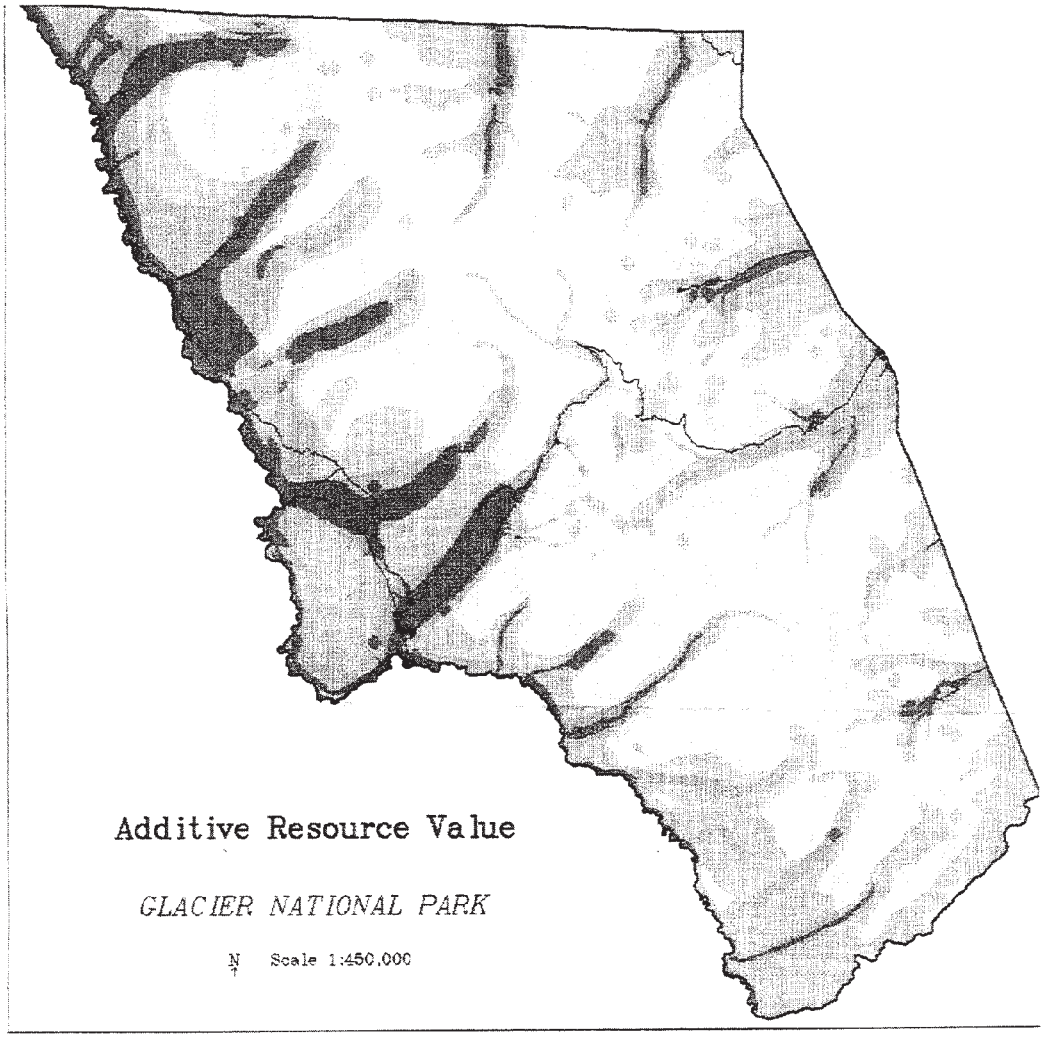
- *As part of the discussion of resources and human values at stake in the planning process, describe enough of the analyses and conclusions to demonstrate that a logical, trackable rationale was used to develop alternatives that would protect sensitive resource values while meeting visitor use goals.*

  This discussion may reference a more comprehensive overview in an appendix that describes the processes used to analyze the park resources and values and to develop alternatives.

NOTES

EXAMPLES


GENERAL MANAGEMENT PLAN
OVERVIEW
Glacier National Park
WATERTON-GLACIER INTERNATIONAL PEACE PARK
A WORLD HERITAGE SITE


Additive Resource Value
GLACIER NATIONAL PARK
N
Scale 1:450,000
SCALE: 1 : 419510
5433800
REGION: 244600 334600
5344400
gnp.boundary.vect (PERMANENT)
mainroads (PERMANENT)
1
2
3
4
5
6
7
Low
High

SUITABILITY ANALYSIS

The purpose of this analysis was to evaluate the suitability of different areas in the park to withstand visitor use. Resource themes that most closely represented the park purpose and significance were selected for the analysis. The data for each resource theme was collected as a separate GIS layer. Each layer was evaluated for sensitivity to moderate to high levels of visitor use and ranked by subject matter experts (based on professional judgement). The resulting GIS analysis was classified into 7 categories of sensitivity representing the added values of each layer.

PROS

- useful tool for indicating "hot spots" or areas of concern that may require attention in planning
- informs the planning process (does not necessarily provide answers)
- simple, graphic presentation

CONS

- can be misleading if used too literally - any conclusions based the results need to be confirmed with further site specific information
- value assignments are only as good as the level of professional judgment used
- must be used as part of a full array of other analytical tools, including common sense

WEIGHTED ANALYSIS: ABILITY OF RESOURCE TO WITHSTAND USE

Legend :

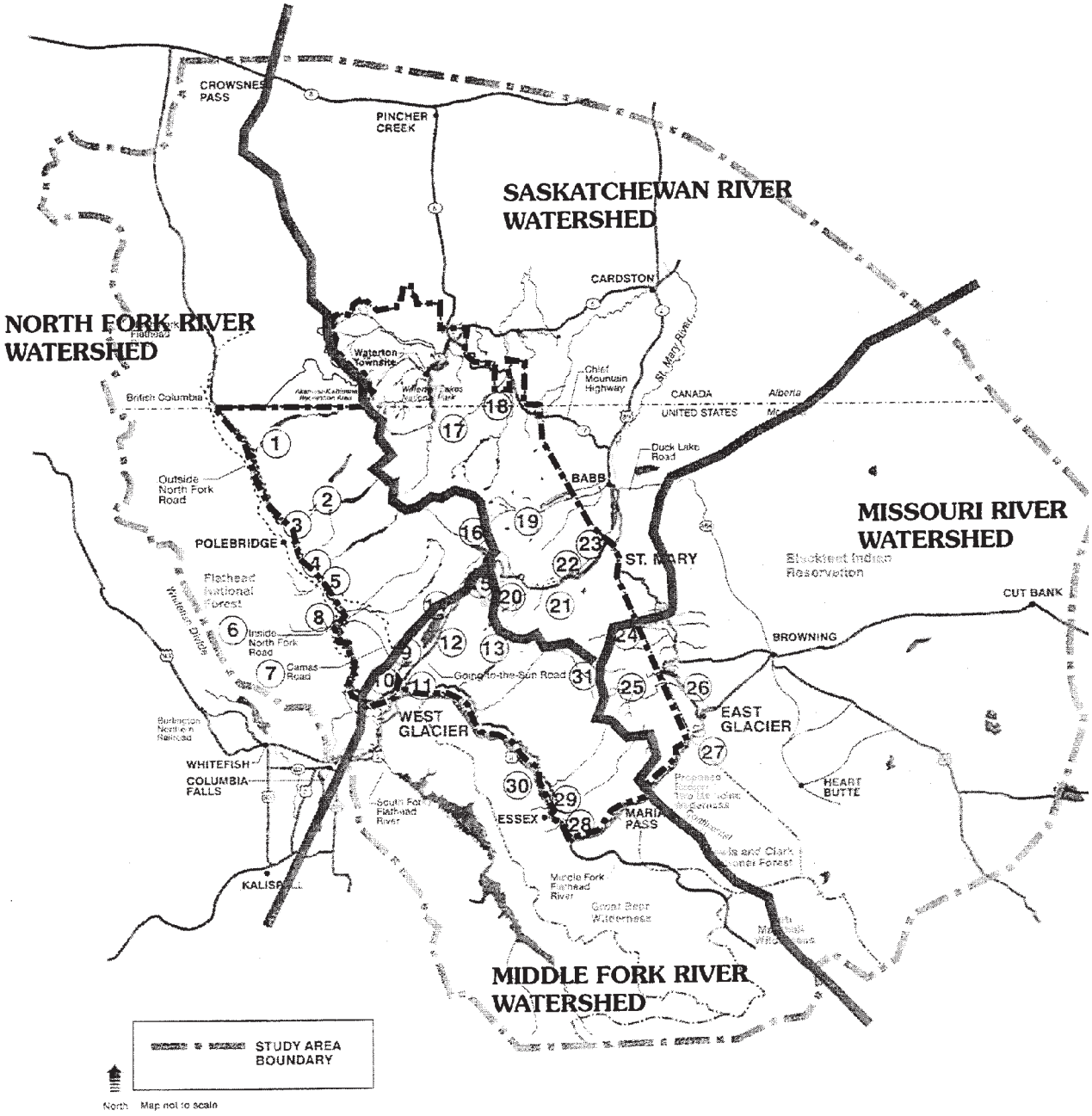
Color	Value	Reclassified values	Cell count (50m)	% of Total
white	1	4 - 10	237967	14.6 %
red	2	11-15	353871	21.7
green	3	16-20	503340	30.9
dark blue	4	21-25	479412	29.4
cyan/turquoise	5	26-30	52029	3.2
magenta	6	31-35	2534	0.1
yellow	7	36-37	40	< .1
		TOTAL	1,629,193	

Note: This map shows a reclassification of the original grid layer resulting from adding together 14 different resource-based GIS layers. That resultant grid contained 33 distinct classes - based on adding together weighted values, which were reclassified into 7 new classes based on ranges of data. The values used in reclassification are shown in column 3 of the legend. Layers used as inputs, and the weights assigned to those elements, are shown below:

1. surficial geology
   - unstable surface (organic dep, mass wasting) 5
   - more stable (t1/t2 till) 2
   - most stable (t3 till, alluvial) 1

2. lifezones/vegetation
   - alpine 5
   - riparian, mesic herbaceous 3
   - aspen/cottonwood, prairie, dry herb. 2
   - conifer (dry/open and dense/mesic) 1

3. wolf use	
denning areas	5
concentrated winter use	3
home range	2
4. wetlands	
palustrine (upland)	5
riverine/lacustrine	3
5. bald eagle	
nest zone (1/4 mile from nest)	5
primary use zone (1/2 mile from nest)	4
home range (2.5 miles from nest)	3
foraging/wintering habitat associated w/ nest	1
6. grizzly bear spring habitat	2
7. grizzly bear summer habitat	3
cut worm moth aggregation sites	4
8. grizzly bear autumn habitat	4
9. grizzly bear denning habitat	1
10. ungulate winter range	3
11. bighorn sheep & mountain goat habitat	3
12. harlequin duck	
regionally significant breeding habitat	5
other breeding habitat	3
travel corridors	1
13. wildlife movement corridors (buffered 400 m.)	4
14. aquatic areas of concern	
bull trout spawning (tributaries)	5
capshell limpet	4
pristine drainage	3
westslope ct trout (indigenous, no-hybrid)	3
bull trout & westslope ct, same site	3
meltwater stonefly	2
yellowstone ct trout (indigenous, no-hybrid)	2
hyophoreic zone	1


CROWSNEST PASS
PINCHER CREEK
SASKATCHEWAN RIVER WATERSHED
CARDSTON
NORTH FORK RIVER WATERSHED
Waterton Townsite
Chief Mountain Highway
St. Mary River
British Columbia
CANADA
UNITED STATES
Alberta
Duck Lake Road
BABB
Outside North Fork Road
POLEBRIDGE
MISSOURI RIVER WATERSHED
ST. MARY
Blackfeet Indian Reservation
CUT BANK
Flathead National Forest
Inside North Fork Road
Camas Road
BROWNING
Going-to-the-Sun Road
WEST GLACIER
EAST GLACIER
WHITEFISH
COLUMBIA FALLS
HEART BUTTE
ESSEX
MARIAS PASS
KALISPELL
MIDDLE FORK RIVER WATERSHED
STUDY AREA BOUNDARY
North
Map not to scale

WATERSHED ANALYSIS

This analysis was based on the GMP Study Area and the framework of 4 primary watersheds of the park to analyze resources, current and projected activities outside the park boundary. Resource information from other federal, state and local agencies could be applied within the watershed framework. 27 different resource maps identified what was happening in each watershed and what had the potential to affect the park and its resources. For each watershed the analysis documented: conclusions, supporting data (quantified wherever possible) and potential action strategies.

RESOURCE INFORMATION

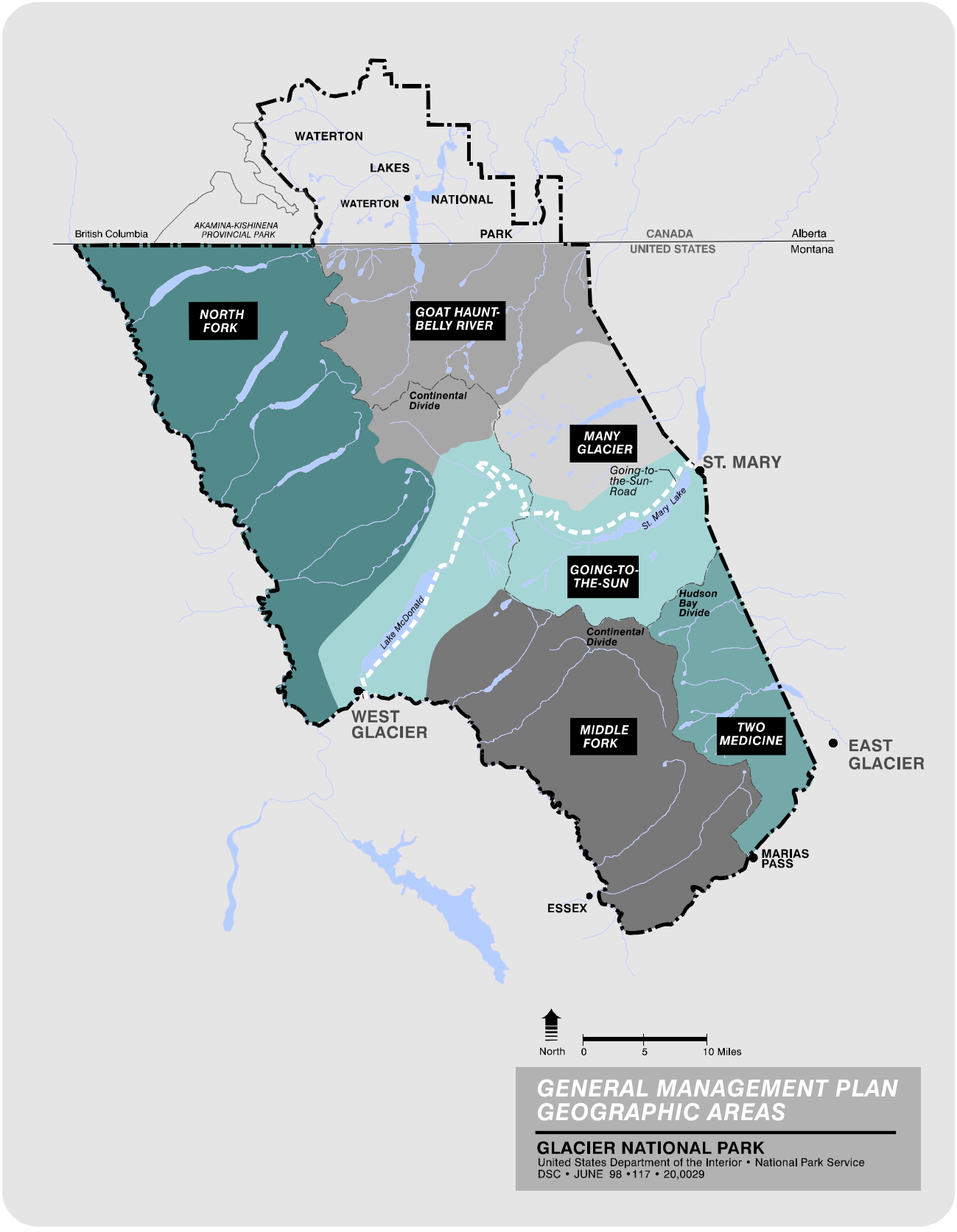
Life Zones
Geology
Mountain Lions
Cultural Resources
Views
Backcountry Day Use
Backcountry Overnight Use
Land Use Direction
Wetlands/Hydrology
Existing Development
Minerals
Resource Protection
Regional Ungulate
Aquatic Areas of Concern
Vegetation Management (timber)
Harelquin Duck
Rare Plants
Management Efforts
Grizzly Bear
Wildlife Corridors
Regional T & E
Natural Fire
Ecological Land Units
Goats & Sheep
Wolves

PROS

- improved understanding of regional trends affecting park resources
- helped identify potential opportunities for cooperative planning and parternerships
- identified areas where there was a lack of information

CONS

- other agencies were not actively involved in the GMP process which resulted in the lack of mangement commitment and backing
- conclusions overlapped watersheds (ie. same conclusions for multiple watersheds)
- cumbersome to align conclusions and strategies within framework
- framework did not relate well to public's understanding of park


WATERTON
LAKES
WATERTON
NATIONAL
PARK
British Columbia
AKAMINA-KISHINENA
PROVINCIAL PARK
CANADA
UNITED STATES
Alberta
Montana
NORTH
FORK
GOAT HAUNT-
BELLY RIVER
Continental
Divide
MANY
GLACIER
ST. MARY
Going-to-
the-Sun-
Road
St. Mary Lake
GOING-TO-
THE-SUN
Hudson
Bay
Divide
Lake McDonald
Continental
Divide
WEST
GLACIER
MIDDLE
FORK
TWO
MEDICINE
EAST
GLACIER
MARIAS
PASS
ESSEX
North
0
5
10 Miles
GENERAL MANAGEMENT PLAN
GEOGRAPHIC AREAS
GLACIER NATIONAL PARK
United States Department of the Interior • National Park Service
DSC • JUNE 98 •117 • 20,0029

GEOGRAPHIC AREA ANALYSIS

During the course of the planning process, it became apparent that the overwhelming majority of the people who commented during the GMP indicated that they would like to "keep Glacier the way it is" - that Glacier should be managed to retain its classic western national park character. This became the basis for developing the guiding philosphy for the GMP. In order to define what *is* Glacier, it was important to recognize that its character is comprised of distinctive areas that collectively define Glacier. The geographic area framework was based on sub-areas of the park commonly used by both the public and the park staff when describing different areas of the park. Each of these areas has distinctive resource characteristics and visitor experience values that needed to be retained and managed to preserve for the future. Also many issues and visitor experience issues varied according to these different areas within Glacier. Six geographic areas were identified:

- Many Glacier
- Goat Haunt-Belly River
- Going-to-the-Sun Road corridor
- Two Medicine
- Middle Fork
- North Fork

Resource characteristics and values were defined for each area as well as visitor experience values. This analysis provided the basis for developing a management philosophy for each area.

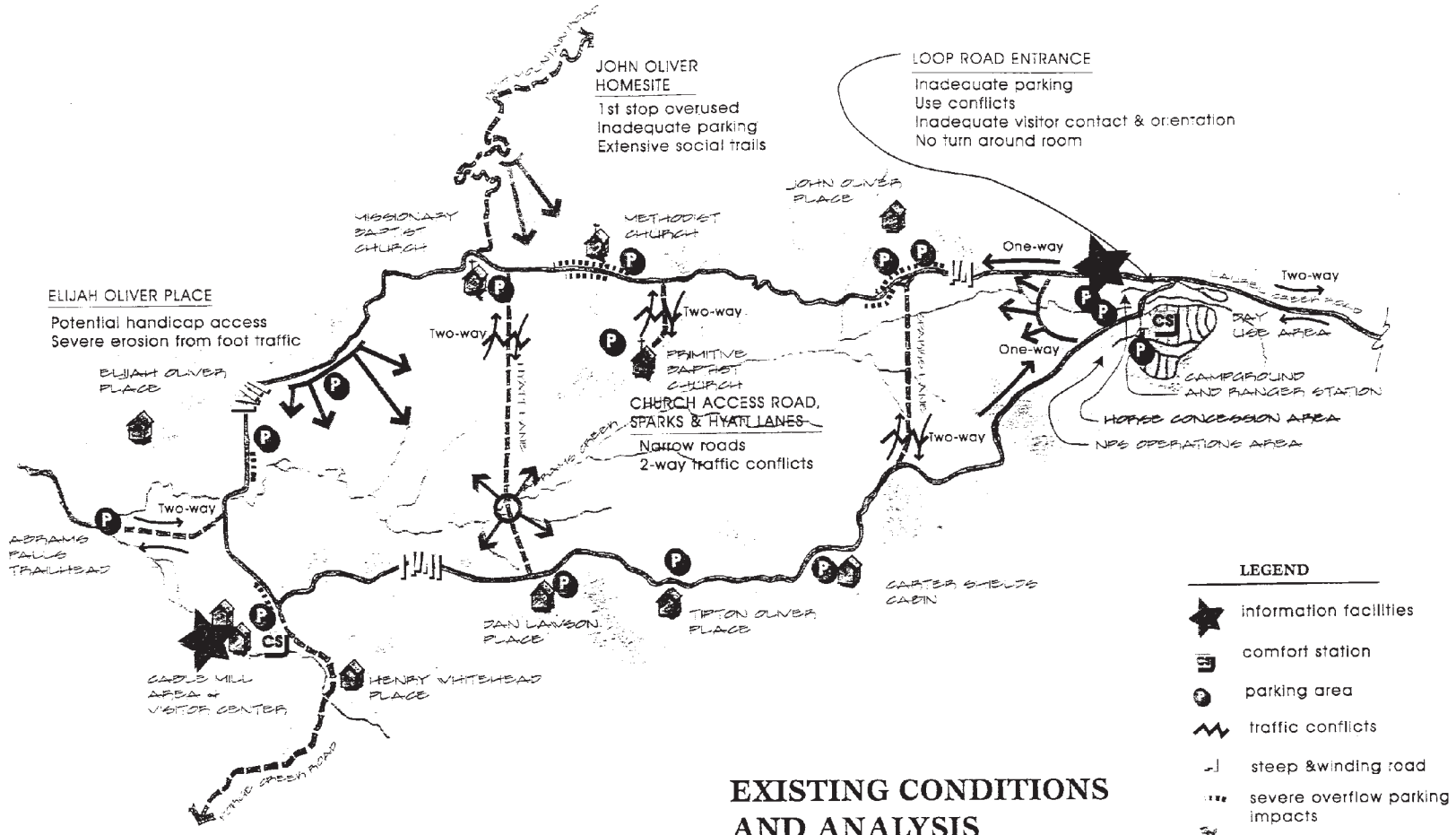
This analysis led to applying management zones as appropriate for the mangement objectives.

PROS

- very effective for analyzing visitor experience related issues
- very good tool for communicating to public
- helpful for evaluating existing conditions of a large complex area

CONS

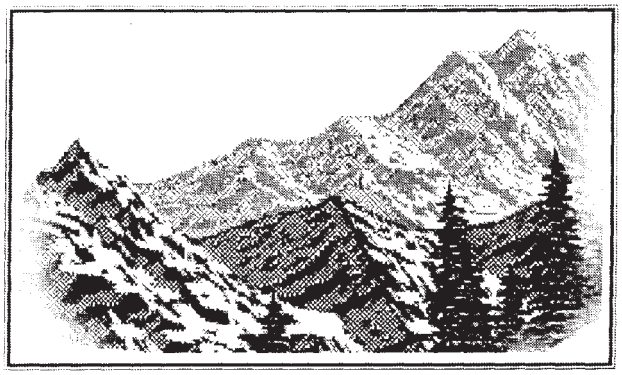
- more difficult to maintain consistency among the geographic areas
- requires strong overall philosophy to create cohesive whole among areas



EXISTING CONDITIONS AND ANALYSIS

CADES COVE
GREAT SMOKY MOUNTAIN NATIONAL PARK

WINTER VISITOR USE MANAGEMENT: A MULTI-AGENCY ASSESSMENT



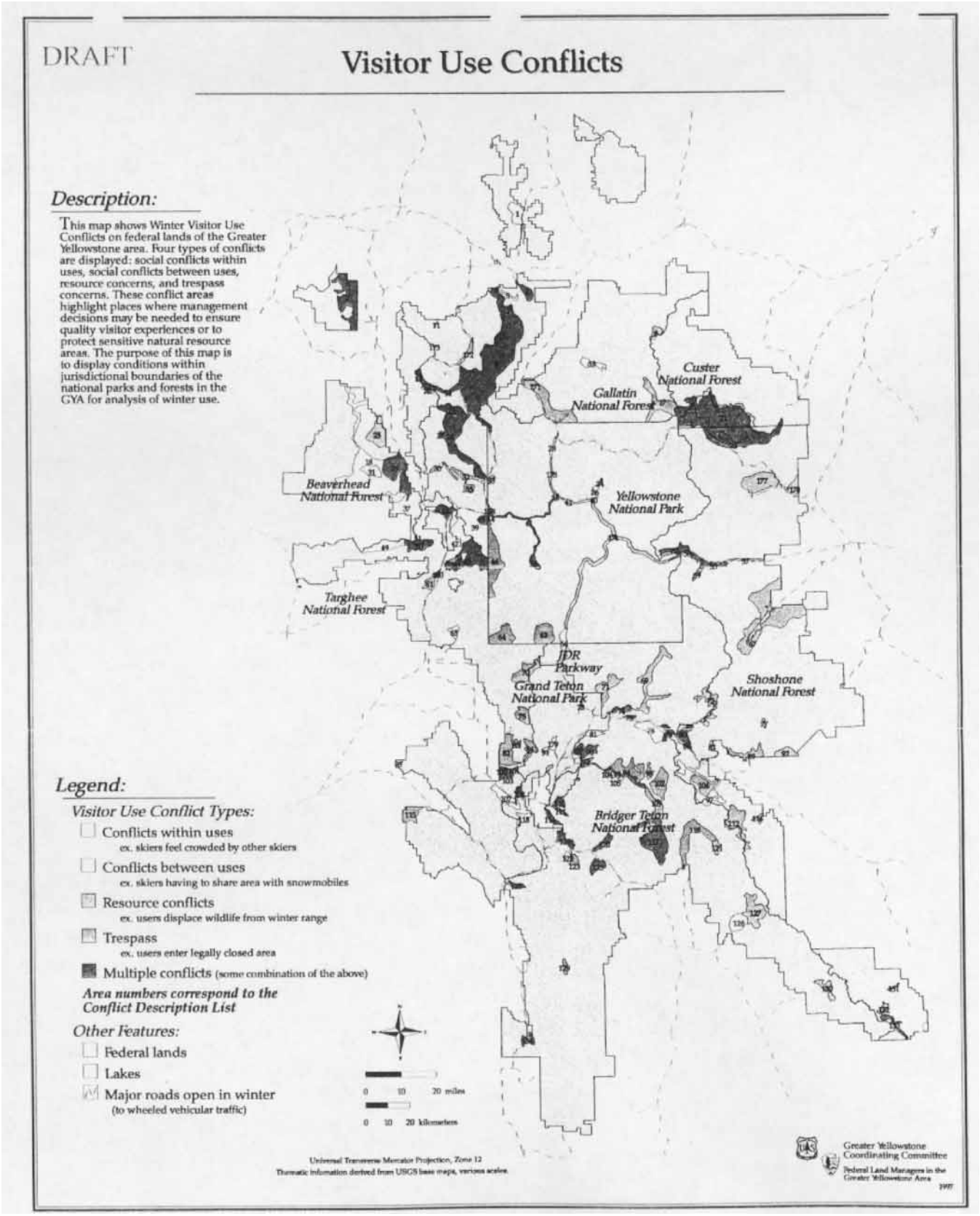
PRELIMINARY REPORT OF INFORMATION
FOR COORDINATING WINTER RECREATION
IN THE GREATER YELLOWSTONE AREA

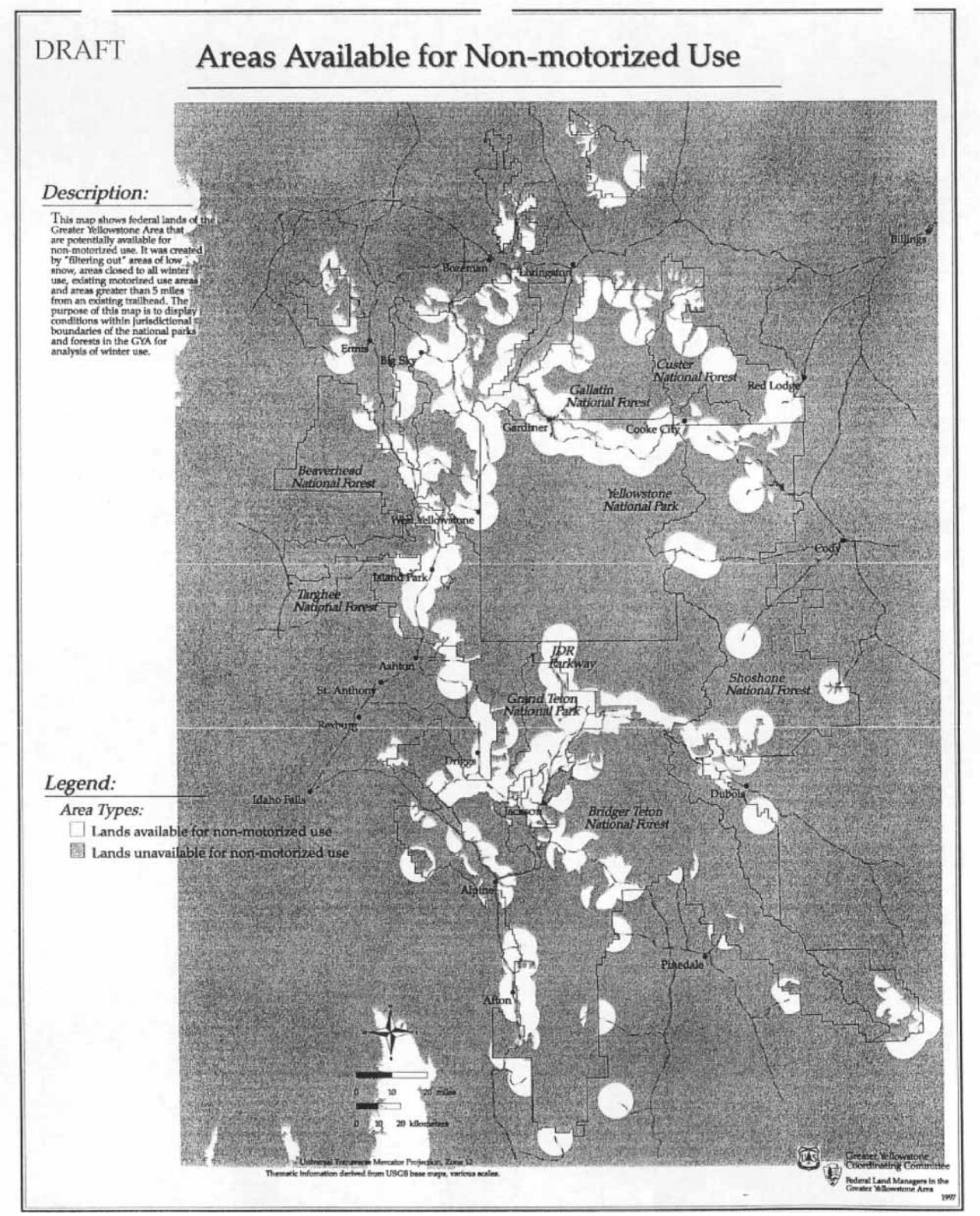
Greater Yellowstone Winter Visitor Use
Management Working Group:

Targhee National Forest
Custer National Forest
Gallatin National Forest
Shoshone National Forest
Bridger-Teton National Forest
Beaverhead-Deerlodge National Forest
John D. Rockefeller, Jr., Memorial Parkway
Grand Teton National Park
Yellowstone National Park

Greater Yellowstone Coordinating Committee

April 1997


DRAFT
Visitor Use Conflicts
Description:
This map shows Winter Visitor Use Conflicts on federal lands of the Greater Yellowstone area. Four types of conflicts are displayed: social conflicts within uses, social conflicts between uses, resource concerns, and trespass concerns. These conflict areas highlight places where management decisions may be needed to ensure quality visitor experiences or to protect sensitive natural resource areas. The purpose of this map is to display conditions within jurisdictional boundaries of the national parks and forests in the GYA for analysis of winter use.
Custer National Forest
Gallatin National Forest
Beaverhead National Forest
Yellowstone National Park
Targhee National Forest
JDR Parkway
Grand Teton National Park
Shoshone National Forest
Bridger Teton National Forest
Legend:
Visitor Use Conflict Types:
Conflicts within uses
ex. skiers feel crowded by other skiers
Conflicts between uses
ex. skiers having to share area with snowmobiles
Resource conflicts
ex. users displace wildlife from winter range
Trespass
ex. users enter legally closed area
Multiple conflicts (some combination of the above)
Area numbers correspond to the Conflict Description List
Other Features:
Federal lands
Lakes
Major roads open in winter
(to wheeled vehicular traffic)
0 10 20 miles
0 10 20 kilometers
Universal Transverse Mercator Projection, Zone 12
Thematic information derived from USGS base maps, various scales
Greater Yellowstone Coordinating Committee
Federal Land Managers in the Greater Yellowstone Area
1997


DRAFT
Areas Available for Non-motorized Use
Description:
This map shows federal lands of the Greater Yellowstone Area that are potentially available for non-motorized use. It was created by "filtering out" areas of low snow, areas closed to all winter use, existing motorized use areas and areas greater than 5 miles from an existing trailhead. The purpose of this map is to display conditions within jurisdictional boundaries of the national parks and forests in the GYA for analysis of winter use.
Legend:
Area Types:
Lands available for non-motorized use
Lands unavailable for non-motorized use
Bozeman
Livingston
Billings
Ennis
Big Sky
Custer National Forest
Red Lodge
Gallatin National Forest
Gardiner
Cooke City
Beaverhead National Forest
Yellowstone National Park
West Yellowstone
Cody
Island Park
Targhee National Forest
Ashton
IDR Parkway
St. Anthony
Shoshone National Forest
Grand Teton National Park
Rexburg
Driggs
Idaho Falls
Dubois
Jackson
Bridger Teton National Forest
Alpine
Pinedale
Afton
0 10 20 miles
0 10 20 kilometers
Universal Transverse Mercator Projection, Zone 12
Thematic information derived from USGS base maps, various scales.
Greater Yellowstone Coordinating Committee
Federal Land Managers in the Greater Yellowstone Area
1997

DRAFT

GENERAL MANAGEMENT PLAN

ENVIRONMENTAL IMPACT STATEMENT

ISLE ROYALE

NATIONAL PARK • MICHIGAN

Example: Building a Suitability Model

Question: Which areas of Isle Royale National Park are good candidates for the frontcountry zone?

Hint: the frontcountry zone description for Isle Royale includes the following information:

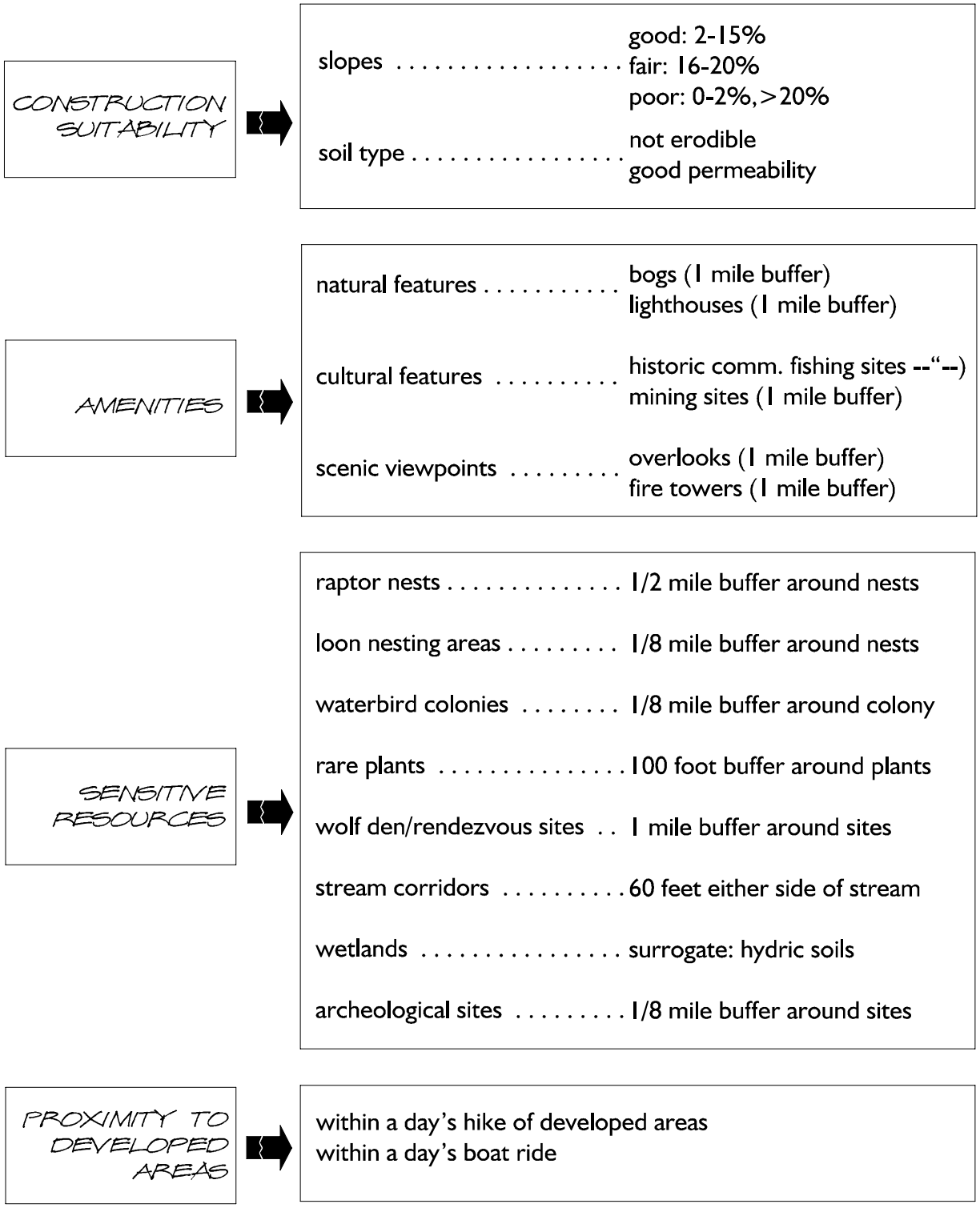
Visitor Experience:
fairly structured experience with on-site interpretation and education
not more than a day's hike or boat ride from developed facilities
limited challence and adventure
high probability of encountering other visitors
moderate probability of encountering NPS staff
ample opportunity for social interaction

Resource Condition or Character:
intensively managed to ensure resource protection and public safety
natural environment could be modified for essential visitor and park needs
low tolerance for resource degradation
not near sensitive natural or cultural resources if they could not be adequately protected

Appropriate Kinds of Activities or Facilities:
large campgrounds
hardened trails
interpretive facilities and signs

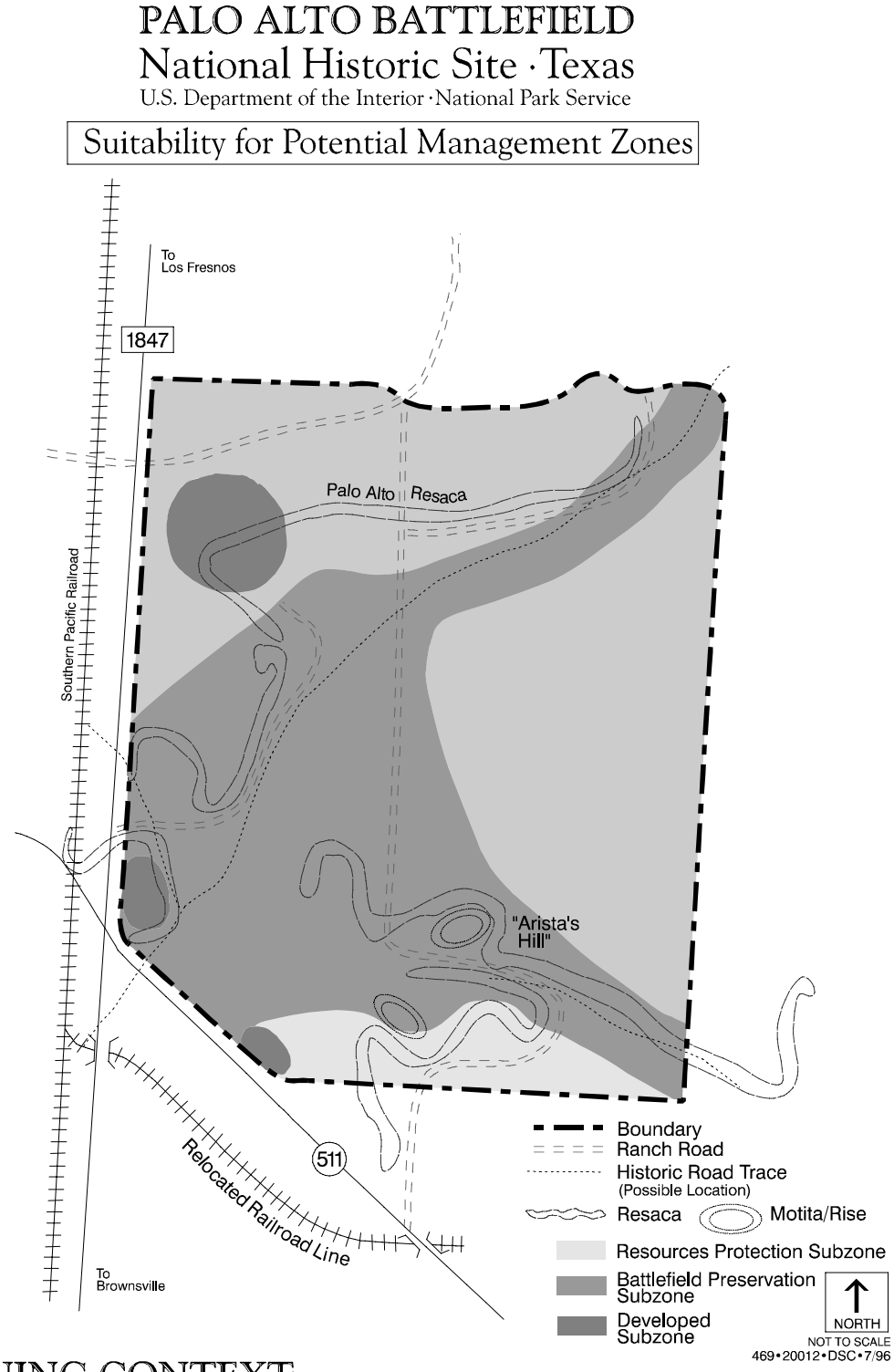
(turn the page for one possible model)

One Possible Model:



Draft
General Management Plan
Environmental Assessment

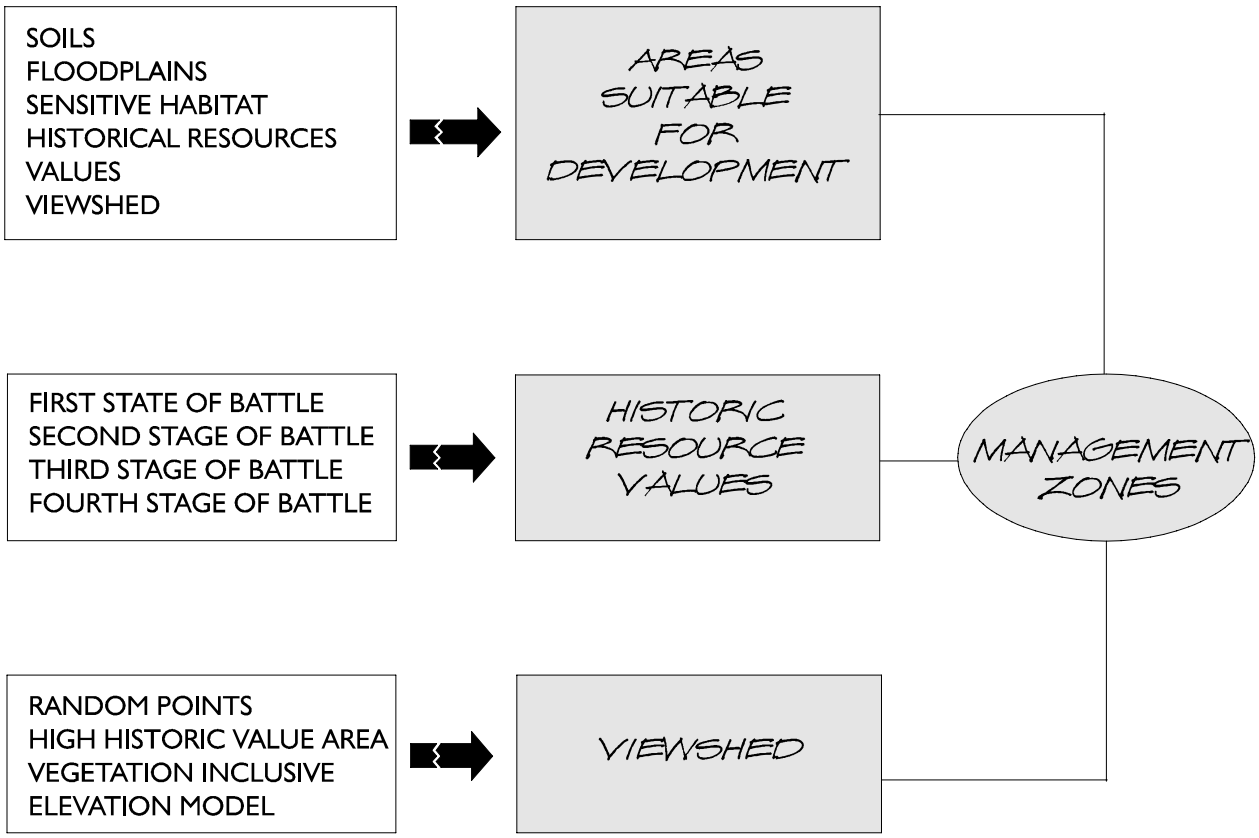
PALO ALTO BATTLEFIELD
National Historic Site • Texas
U.S. Department of the Interior · National Park Service



PLANNING CONTEXT:

Using the analysis process to develop management zones

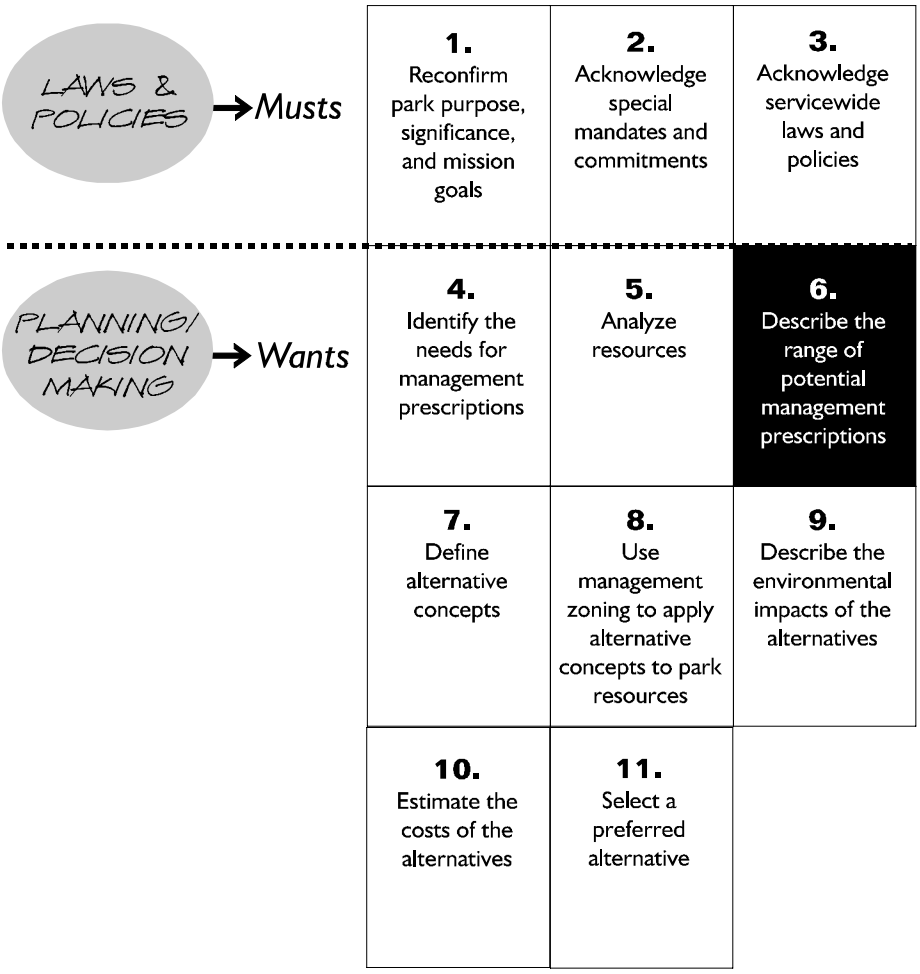
Figure B-1: Flow Chart of GIS Analysis for Management Zones



PALO ALTO BATTLEFIELD • NATIONAL HISTORICAL SITE
Brownsville, Texas

STEP 6

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

Management prescriptions are ways to integrate visitor use with resource management. They specify the desired resource conditions for different areas of the park and describe the desired visitor experiences based on resource management concerns and also on a concern to maintain a diversity of experiences for park visitors.

In the past park managers and planners did not always try to define and maintain an appropriate range of visitor experiences for a park. They may not have recognized that successive changes in kinds and levels of use, the associated impacts, and management reactions to those impacts profoundly affect the diversity of visitor experiences in parks, as well as affecting park resources. Traditionally, most visitors go to park areas with special attractions (like Old

Faithful or Yosemite Valley) and to places that are easily accessible. Park managers and planners have usually responded to higher visitor use levels with more infrastructure and more intensive management to protect park resources. But as sites have been altered to accommodate more visitor use, the characteristics of those places and the visitor experiences have been altered, as well.

This approach is now being changed as a result of having to address complex carrying capacity issues and to develop a planning and management system to address them. Generating management prescriptions as part of the GMP can help park managers and planners become proactive

- in determining what visitor experiences should be provided in a park
- in identifying what the essential elements of those experiences are, how much of the resource base should be allocated to various visitor experiences, and where in the park the experiences should be provided

This approach helps ensure that diverse and appropriate visitor experiences, as well as ecologically sound natural systems and the integrity of cultural resources, are maintained in a park. It does not ensure that diverse experiences will be maintained at any particular site (in fact, it may not be possible to provide a range of opportunities at unique attractions such as Old Faithful), but it does ensure that the park's overall diversity of experiences, environmental quality, and cultural integrity are not inadvertently eroded by a series of actions to address specific problems and "urban sprawl." By providing a range of opportunities, visitors can theoretically self-select the settings and activities that are the most conducive to fulfilling their expectations. Also, planning for diverse opportunities helps avoid use conflicts when different visitors want different experiences.

There are two kinds of management prescriptions:

(1) Zone-specific management prescriptions — management prescriptions that apply to specific geographic areas within a park (also referred to as management zones). These prescriptions establish detailed resource and experience goals for each distinct area within the park, help ensure a diversity of appropriate visitor experiences, and help set up carrying capacity decisions.

(2) Parkwide management prescriptions — management prescriptions that apply to a particular resource parkwide. Parkwide prescriptions tend to be those things that must be accomplished at all park locations, regardless of how they might be zoned. For example, the protection of threatened species habitat cuts across all zones and must occur in developed areas as well as wilderness. Such parkwide prescriptions are derived primarily from the park's legal and policy mandates and are requirements. Therefore, most parkwide prescriptions do not involve a decision. They are acknowledged as part of the park's direction (things that must be done) and included as an important part of the park's final management plan, but they are not generally addressed as part of the planning alternatives. In the few cases when a decision is needed about a parkwide prescription, then that prescription is included in the planning alternatives along with the zone-specific prescriptions.

This planning step deals primarily with zone-specific prescriptions.

Suggested Methods and Tools

- *Consider a "menu" of potential zone-specific management prescriptions before actually mapping them (that is, before developing management zoning alternatives).*

  Identifying an appropriate range of potential management prescriptions before tying them to specific resource areas helps ensure that all possible prescriptions are considered, rather than simply using existing management zones in the park. Some prescriptions may already exist in the park, but others may not. Different GMP alternatives will contain different allocations or combinations of various management prescriptions (see the graphic on the divider page).

- *Use the planning team to develop potential management prescriptions and have them reviewed and refined by larger groups and the public.*

  It is critical to involve a cross section of resource managers and individuals who interact with park visitors, since the prescriptions will direct and affect both resource conditions and visitor experiences.

- *Use NPS management policies for natural and cultural resources as a guide for a desired range of resource conditions and appropriate kinds and levels of management activity.*

  NPS policies describe basic conditions to be achieved and maintained throughout a park, and they allow for different conditions when special considerations apply. One of the purposes of general management planning is to determine where special considerations apply within a park and where different conditions would be desirable.

- *Look at the list of people's wants and concerns regarding resource conditions and experiences (this list was generated in step 4). Start to group those things that are mutually supportive into prescriptions for resource management and visitor use.*

- *For each zone-specific management prescription describe desired resource conditions, desired visitor experiences, and the kinds and levels of management activity, visitor use, and development that would be appropriate to achieving and maintaining the desired conditions and experiences.*

  Together, these elements describe a qualitative carrying capacity for the park.

- *Use a matrix as a good way to begin characterizing potential management prescriptions. List the potential prescriptions along one axis and the factors to be considered along the other axis.*

  In the matrix the potential prescription (zone) names are relatively unimportant, but they should describe as closely as possible the desired resource conditions and visitor experiences. (Avoid naming them for the kinds and levels of development they might support — that is secondary to the resource conditions and experiences.)

Potential Management Prescriptions

	BACKCOUNTRY RECREATION ZONE	PRIMITIVE NATURAL AREA ZONE	MOTORIZED SIGHTSEEING ZONE	SENSITIVE RESOURCE PROTECTION ZONE	DEVELOPED ZONE
DESIRED RESOURCE CONDITIONS	natural conditions and processes	natural conditions and processes	historic designed landscape	natural conditions and processes	highly managed conditions and processes
DESIRED VISITOR CONDITIONS	moderate challenge / adventure / solitude	high challenge / adventure / solitude	very low challenge / adventure / solitude	N/A	no challenge / adventure / solitude
	few interpretive programs	no interpretive programs	moderate amount of interpretive programs	N/A	extensive interpretive programs
APPROPRIATE KINDS AND LEVELS OF MANAGEMENT ACTIVITY	moderate resource management	nonintrusive resource management	intensive resource management	nonintrusive resource management	intensive resource management
APPROPRIATE KINDS AND LEVELS OF VISITOR USE	hiking, bicycling, horseback riding	hiking, backpack camping	scenic driving, sightseeing, picnicking	no visitor use	orientation, sightseeing, support services for day and overnight use
	encounters with others moderate	encounters with others very low	encounters with others very high	N/A	encounters with others very high
APPROPRIATE KINDS AND LEVELS OF DEVELOPMENT	narrow, unsurfaced trails	none	surfaced roads, pullouts, surfaced trails	N/A	overnight accommodations, concession services, camp-grounds, surfaced trails, 6' wide

The Potential Management Prescriptions chart at the left shows a partial example of the kinds of information that might be included in a range of potential management prescriptions. The team may need to fill in blanks if all the elements of a potential prescription were not identified during scoping.

The objective in filling in the matrix is to seek consensus about the range of potential prescriptions to be used in management zoning and to clarify how they qualitatively differ from each other. As the management team moves through this process, some team members will tend to be "lumpers" and some "splitters." The group will need to avoid going to extremes in either direction. Lumpers can make the prescriptions useless by including so much variability that the management direction is not clear. Splitters can bog down the process by trying to define different management prescriptions for every different experience or activity (for example having separate prescriptions for camping, hiking, and horseback riding when all three may be appropriate kinds of visitor use in a single zone managed to give visitors an opportunity to experience wild lands with opportunities for challenge and adventure). A middle ground should be sought that defines each prescription enough to clarify the appropriate kinds and levels of management activity, visitor use, and development, without overcomplicating the zoning scheme. Depending on the desired experience, it is possible that one potential zone might provide opportunities for many different activities.

Pointers for Writing Management Prescriptions

Potential management prescriptions are included in the GMP/EIS under the heading "Alternatives, Including the Proposed Action." (See the typical table of contents on pages 5–6 of the "Introduction.") The potential prescriptions can be presented as a tool for creating a range of management zoning alternatives.

- *Make prescriptions specific enough so managers can use them to judge the appropriateness of future proposals.*

  It is not necessary to be quantitative at this stage of planning. Words like relatively large or small, dispersed, moderate, relatively high- or low-density, extreme, and minuscule may be used to qualify the potential management prescriptions.

- *Use parallel construction (either in a table or in text, or both) to help readers understand the differences among the prescriptions and to help ensure that the prescriptions are complete and include all necessary elements.*

- *Avoid writing only prescriptions that are descriptive of existing conditions rather than prescriptive of what might be in the future.*

  Potential opportunities may be missed if the team is narrowly focused on what is, rather than on what could be.

- *Avoid including incompatible conditions in the same prescription.*

  For example, describing the experience as being "either highly active and social, or quiet and introspective, depending on the day of the week" may describe existing conditions, but it does not provide management direction for the future.

- *Avoid separate prescriptions for subtle differences in experience.*

  Some variations in visitor experiences and many different visitor activities may occur in a single zone.

- *When trying to describe potential management prescriptions for a particular park, look at prescriptions used for other parks, and then modify and build on them to fit your park's purpose, significance, mandates, and those things that the National Park Service and the public want to achieve in this particular park.*

  Once the range of different combinations of management prescriptions has been developed, the team needs (1) to analyze how each prescription would differ from the existing conditions in each park area, and (2) to assess the magnitude of change that would be needed to implement the prescription. This happens in a subsequent planning step (see step 8).

EXAMPLES

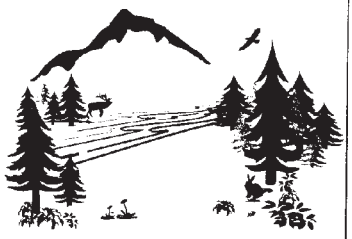
General Management Plan

Black Canyon of the Gunnison National Monument and Curecanti National Recreation Area

Prepared by the staffs of
Black Canyon of the Gunnison National Monument,
Curecanti National Recreation Area
and the Rocky Mountain System Support Office

December 1998

Table 1. Land-Based Prescriptions

	Setting	Experience	Activities
PRIMITIVE 	• Natural-appearing landscape • Encounters with others are infrequent • No facilities unless required to protect resources • No motorized access	• Isolation from sights & sounds of man • Feeling of closeness with nature • Opportunity to experience solitude, tranquility, & quiet • High degree of challenge, self reliance, & risk • Knowledge & use of outdoor survival & wilderness skills • Infrequent encounters with	• Primitive camping • Fishing • Nature observation • Hiking • Climbing • Kayaking
SEMI PRIMITIVE 	• Predominantly natural-appearing landscape • More frequent encounters than in primitive setting • Evidence of facilities that blend with surroundings may be present • Evidence of human occupation	• Predominantly isolated from sights & sounds of man • Opportunity to experience solitude, tranquility, & quiet • Interaction with nature predominates • Knowledge & use of outdoor recreation, survival, & wilderness skills • Occasional encounters with other humans	• Semi-primitive camping • Fishing • Nature observation • Hiking
MOTORIZED RURAL 	• Predominantly natural-appearing landscape with small-scale modifications • Encounters with others & vehicles are expected • Service facilities present • Evidence of human occupation	• Limited opportunity to experience solitude, tranquility, & quiet • Knowledge & use of outdoor survival & wilderness skills is not essential • Encounters with other humans & vehicles expected	• Semi-primitive camping from boats & vehicles • Fishing • Nature observation • Hiking • Interpretive activities
DEVELOPED 	• Predominantly modified landscape with facilities to provide for major visitor services in a substantially modified environment with a natural-appearing backdrop • Constant encounters with others & vehicles • Area shows definite signs of human occupation • Motorized access	• Sights & sounds of man are dominant • Limited opportunity to experience solitude, tranquility, & quiet • No knowledge & use of outdoor survival & wilderness skills necessary • Near constant encounters with other humans & vehicles	• Developed camping • Park tours • Interpretive activities • Bus tours/recreation • Vehicles • Fishing

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DRAFT

GENERAL MANAGEMENT PLAN

ENVIRONMENTAL IMPACT STATEMENT

ISLE ROYALE

NATIONAL PARK • MICHIGAN

be intrusive. Zoning in wilderness allows for a range of experiences.

Land Zones (Including Inland Lakes)

Developed Zone.

Visitor Experience — In this highly developed zone, facilities would be convenient and accessible; there would be little need for visitors to physically exert themselves, use outdoor skills, or make a long time commitment to see the area. Opportunities for adventure would be relatively unimportant. These areas would provide many social experiences, and the probability of encountering other visitors or NPS staff would be very high.

Resource Condition or Character — The NPS tolerance for resource degradation would be moderate. Resources would be modified for visitor and park operational needs. Visitors and facilities would be intensively managed in this zone for resource protection and visitor safety. Although buildings, structures, and other signs of human activity would be fairly obvious, there would be natural elements present. The zone would not be in designated wilderness nor would it be located near sensitive natural or cultural resources if such resources could not be adequately protected. This zone would be confined to relatively small areas.

Appropriate Kinds of Activities or Facilities — This land-based zone would include visitor and administrative facilities such as visitor centers, lodges, maintenance areas, and residences. Primary ferry landings, large docks, and marinas could be included in this zone. Paved paths and other walkways connecting facilities could be appropriate.

Frontcountry Zone.

Visitor Experience — Compared to most other zones, the frontcountry zone would offer visitors a fairly structured experience with onsite interpretation and education. Visitors would feel that they were in a natural park setting, but they would not be more than a typical day's hike or a short boat ride from developed facilities. To use this area visitors would make a short time commitment and would have to physically exert themselves to some degree. There would be limited challenge or adventure, and there would be little need for outdoor skills. At certain times of day or season there would be opportunities for solitude, but in general the probability of encountering other visitors would be high; the probability of encountering NPS staff would be moderate. These areas would provide ample opportunity for social interaction.

Resource Condition or Character — Visitors, sites, and trails would be intensively managed in the frontcountry zone to ensure resource protection and public safety. The areas in this zone would be predominantly natural, but the sights and sounds of people would be evident. The natural environment could be modified for essential visitor and park operation needs, but changes would harmonize with the natural environment. Except for essential changes, NPS tolerance for resource degradation would be low. This land-based zone could be in designated wilderness or in nonwilderness. The zone would not be near sensitive natural or cultural resources if such resources could not be adequately protected.

Appropriate Kinds of Activities or Facilities — This zone would be comprised of heavily used areas adjacent to developed zones and heavily used trail corridors that access prime park features such as cultural sites or scenic areas. Relatively large campgrounds, hardened trails, and interpretive facilities and signs might be present in nonwilderness. Some trails might be accessible to visitors with disabilities.

Wilderness Portal Zone.

Visitor Experience — These portal or gateway areas would provide the access and facilities needed to experience or manage other zones, such as the backcountry and primitive zones.

There could be pulses of activity, especially around the times of ferry or water taxi landings. Mixing of different types of users would be common, and solitude and quiet would be available some of the time. Visitors would have some need for self-sufficiency, but adventure or challenge would be relatively unimportant.

Resource Condition or Character — NPS tolerance for resource degradation in this zone would be low. The zone would appear mostly natural, but there would be some evidence of human facilities and use. Resources could be altered for essential visitor and park operational needs, but alterations or facilities would blend with the natural environment. This zone could be located in designated wilderness or in nonwilderness and would be confined to relatively small areas. Like the developed and frontcountry zones, it would not be near sensitive natural or cultural resources if such resources could not be protected.

Appropriate Kinds of Activities or Facilities — Facilities in this zone could include moderate-sized campgrounds with shelters, trailheads, trails, and docks. Secondary ferry landings could be located in this zone. Some interpretive activities could be appropriate when presented with sensitivity to the zone character.

Backcountry Zone.

Visitor Experience — The backcountry zone would provide a sense of being immersed in a natural landscape, and it would feel somewhat distant from most comforts and conveniences. There would be possibilities for challenge and adventure. Visitors would have to commit a block of time, have outdoor skills, and exert themselves. The probability of encountering other hikers would be moderate, and there would be a good chance of solitary experiences. There would be chances for social interaction. Quiet generally would be expected, but occasional noise would be tolerated.

Resource Condition or Character — The backcountry zone could be applied to trail corridors and areas of a somewhat more primitive nature than those in the frontcountry zone. This land-based zone would be appropriate in designated wilderness areas. A relatively high level of management would be provided for resource protection and visitor safety. Some resource modifications would be evident, but they would harmonize with the natural environment. NPS tolerance for resource degradation would be low. Facilities would not be placed near sensitive resources that could not be protected.

Appropriate Kinds of Activities or Facilities — This zone could include moderate to high-use trail corridors. Small campgrounds, small docks, and unpaved but maintained trails would be the only facilities.

Primitive Zone.

Visitor Experience — This zone would provide a sense of being immersed fully in nature and would feel farther away from comforts and conveniences than the frontcountry and backcountry zones. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills would be common. The probability of encountering other visitors would be low. Use of this area would require a relatively long time commitment and a high level of physical exertion. The environment would offer a relatively high degree of challenge and adventure. Tolerance for noise, visual intrusions, and social interaction would be low.

Resource Condition or Character — The primitive zone could be applied to lightly used trail corridors and associated areas. It would be located in designated wilderness. A moderate level of management would be provided for resource protection and visitor safety. Subtle onsite controls and restrictions could be present, such as placing downed trees near trail edges, restricting off-trail use, and requiring that visitors demonstrate knowledge of environmental sensitivity before entering the zone. A few resource modifications could be evident, but they would harmonize with the natural

environment. NPS tolerance for resource degradation due to visitor use in this zone would be very low. Any facilities in the zone would avoid sensitive resources.

Appropriate Kinds of Activities or Facilities — Facilities would be limited to primitive trails and small campsites with minimal facilities. Docks would not be located in this zone.

Pristine Zone.

Visitor Experience — Visitors to the pristine zone would experience a pure wilderness setting, free of development. There would be no facilities or trails. Little or no sign of humans would be evident. Use of this zone would require a relatively high degree of physical exertion and a long time commitment. The environment would offer challenge and adventure. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills would be common. There would be a very low probability of encountering other visitors. Evidence of visitor impacts would be minimal.

Resource Condition or Character — This zone would be the most natural of the land zones. It would be in designated wilderness and would encompass large areas. It could include areas where very low use is desirable to protect certain resources and areas of the park that are difficult to access. Management for resource protection and safety in the pristine zone would be very limited; the area would be managed in such a way that onsite controls and restrictions would be minimized and those that were present would be subtle. However, offsite management of visitors could be intensive and could include eligibility requirements before entering the zone and limits on length of stay in the area. NPS tolerance for resource modifications or degradation would be very low.

Appropriate Kinds of Activities or Facilities — No facilities would be appropriate in this zone, including trails and docks. Cross-country hiking and camping would be permitted but regulated to protect resources.

Zones for Lake Superior Waters

Open Water Motorized Zone.

Visitor Experience — This zone would appear predominantly natural, but there would be evidence of human use and activity. There would be few restrictions on visitor activities. The probability of encountering other visitors could be high. There would be ample social contact and limited solitude. Visitors would expect to hear noise. The zone could be dangerous under certain conditions. Visitors traveling independently would have to be self-sufficient and would need marine skills because of the unpredictable nature of Lake Superior.

Resource Condition or Character — The mood and character of this zone would tend to change according to Lake Superior fog, rain, wind, and wave conditions. The zone could include most Lake Superior waters inside the park. It would be located away from resources that are sensitive to intense human activity or noise. Management would be the minimum necessary to ensure safety and resource protection.

Appropriate Kinds of Activities or Facilities — Boating of all types, fishing, and scuba diving could be common.

Motorized Sensitive Waters Zone.

Visitor Experience — Motorboaters and others could find relatively tranquil, natural marine surroundings. The probability of encountering other visitors would be moderate, and solitude would be possible. Tolerance for noise, visual intrusions, and social interaction would be moderate. Any challenge would probably relate to navigating in difficult conditions. Visitors would have to be relatively self-sufficient.

Resource Condition or Character — This zone could be in sheltered Lake Superior harbors and

bays where calm water and relative quiet are desirable for safety, resource, or visitor experience reasons. It might be appropriate in harbors or bays where waterbirds nest or where there are visitor centers or campgrounds. A moderate level of management would be provided for resource protection and visitor safety. NPS tolerance for resource degradation would be low.

Appropriate Kinds of Activities or Facilities — Human-powered and motor-powered watercraft could be found in this zone. Boats would leave no wake. Anchorages would be appropriate.

Nonmotorized Waters Zone.

Visitor Experience — This zone would provide visitors with an experience similar to that provided by the primitive land zone but in a water setting. Tolerance for noise and visual intrusions on the natural scene would be low. Few other visitors would be encountered. Opportunities for independence, closeness to nature, tranquility, and application of outdoor skills would be common. Visitors would have to be self-sufficient.

Resource Condition or Character — This zone might include logical, secluded, protected routes for travel by human-powered watercraft only. It also might be applied to shallow water and sensitive resource areas. Narrow bays that are naturally buffered from outside noise could be candidates for this zone. There would be few restrictions, but access might be limited. NPS tolerance for resource impacts in this zone would be very low.

Appropriate Kinds of Activities or Facilities — There would be few, if any, facilities in this zone. Kayaking and canoeing would be the most common activities. Boats with motors would not be permitted (not even NPS maintenance or patrol boats) except in emergency situations or when necessary for safe harbor in a storm.

EXAMPLE OF POTENTIAL MANAGEMENT PRESCRIPTIONS FROM THE FLAGSTAFF AREAS GMP (WORK IN PROGRESS)

PRELIMINARY RANGE OF EXPERIENCES — August 31, 1998

DISCOVERY

Visitor Experience: Visitors would explore remote areas in a wilderness-like setting free from modern intrusions. These areas could be trailed or untrailed. Trails would be primitive in nature (unsurfaced and no wider than 2 feet) and no other facilities would be present. Solitude, natural quiet and undirected discovery would be key to this experience. Opportunities for independence, closeness to nature, challenge, and adventure would be common and there would be need for individual outdoor skills and self-sufficiency. There would be a very low probability of encountering other visitors or evidence of visitor impacts. Offsite management of visitors could include eligibility requirements before entering such an area, and limits on numbers of visitors and length of stay could be in place.

Resource Condition or Character: Resources would appear pristine. On-site controls and restrictions would be minimal and subtle. The tolerance for resource modifications and degradation would be very low.

Appropriate Kinds of Activities or Facilities: No facilities except for primitive trails would be appropriate in these areas. Cross-country hiking would be the predominant activity.

GUIDED ADVENTURE

Visitor Experience: Visitors would explore park resources as part of a guided group. Areas where this experience would be offered would usually be untrailed and free from developments. Intimacy with resources, learning, social interaction among the group, and the security of a guided experience would be key elements of this experience. The probability of encountering other groups would be low, and there would be some opportunities for individual solitude. The environment would offer a moderate level of challenge, but the need for individual outdoor skills would be low. Not all of the areas zoned as guided adventure will be used all the time; use of the area will depend on the knowledge of effects.

Resource Condition or Character: Resources in these areas would appear pristine. Low levels of management for resource protection and visitor safety would be appropriate in these areas, but any resource modifications would be minimal and would harmonize with the natural environment. Tolerance for resource degradation in these areas would be low.

Appropriate Kinds of Activities or Facilities: No facilities would be appropriate in these areas except for primitive trails if deemed necessary for resource protection. Hiking and camping with a guide would be the predominant activity in these areas.

OVERVIEW EXPERIENCE

Visitor Experience: Visitors would get an overview of park resources and significance in a short time frame and with a minimum of physical exertion. Park orientation and interpretation of primary park themes would be important elements of this experience. Interaction and encounters with other visitors and park staff would be common, but overcrowding would be avoided. While structured intimacy with some park resources could be possible, viewing resources from a distance or from trail or overlook facilities would be more common.

Resource Condition or Character: Resources would appear natural, but paving or other management actions would be taken as necessary to protect resources. Visitors would interact with resources only to the extent possible without undue impact to those resources. Because of the need for visitors to understand park significance, some primary resources must be available for visitors to view in these areas.

Appropriate Kinds of Activities or Facilities: Sightseeing, learning about the park, short walks, and attending interpretive programs would be common activities in these areas. Orientation and interpretation facilities such as visitor centers, kiosks, wayside exhibits, and other interpretive media would be appropriate. Support facilities such as restrooms and picnic facilities could also be present.

MOTORIZED SIGHTSEEING

Visitor Experience: The paved roadways and associated developments in this area would be used for touring the park, enjoying scenic overlooks and interpretive media, and gaining access into other park areas. Visitor attractions would be convenient and easily accessible. The visitor experience would be generally dependent on a vehicle or bicycle, would involve driving along a paved or unpaved improved road, and would be perceived as linear/sequential in nature. Observing the natural environment would be important, and there would be a sense of adventure, but there would be little need for visitors to exert themselves, apply outdoor skills, or spend a long time in the area. The probability of encountering other visitors would be high, and there is a moderate probability of encountering NPS staff.

Resource Condition or Character: Intensive management would be provided in this area to ensure resource protection and public safety (e.g. fences, intensive law enforcement, and restrictions on visitor activities). Resources might be modified (e.g. paving or felling hazard trees) for essential visitor and park operational needs.

Appropriate Kinds of Activities or Facilities: The motorized sightseeing experience would occur in a substantially developed area. The paved roads, pullouts, overlooks, and associated short trails and picnic areas, parking areas, and other facilities that support visitor touring would be included in these areas. Some trails and most facilities would be accessible in this area.

NATURAL AREA RECREATION

Visitor Experience: Emphasis in these areas would be on exercising in a natural setting. Visitors would be directed to utilize and stay on designated trails. Since the experience is primarily aimed at recreating in a natural environment, trails would be made of natural or natural-appearing materials. There would be a moderate probability of encountering other visitors. A moderate amount of offsite interpretive media would be available, but there would not be any onsite interpretation in these areas. Camping would be an acceptable use in this zone.

Resource Condition or Character: Resources along the designated trails may be paved or manipulated to provide for safety or prevent impacts off of the trail (e.g. erosion). However, such management actions would be primarily aimed at prevention of secondary impacts, and not at trail improvements. There would be a low tolerance for resource degradation in these areas.

Appropriate Kinds of Activities or Facilities: Facilities, including trails, would be primitive and lie lightly on the land. Improvements would only be used to prevent secondary impacts and provide the minimum safety required for natural setting recreation. Trails are designed to accommodate a variety of exercise pursuits that may vary from activities on foot to bicycles and horseback; the area would not include motorized conveniences.

PRESERVATION EMPHASIS

Visitor Experience: Access to these areas would be restricted and limited to permitted access only for the purposes of research, traditional cultural activities, or other well-justified special uses. The areas would provide maximum preservation of fragile and/or unique resources, endangered species, sacred sites, etc. Although access would be restricted, visitors could benefit from the experience of learning that particularly sensitive resources are preserved for future generations.

Resource Condition or Character: Resources in this area are fragile and may be in a range of conditions from pristine to endangered. Management actions for resource protection and safety would be high and tolerance for resource degradation would be very low.

Appropriate Kinds of Activities or Facilities: There would be no facilities or developments for visitors, but offsite interpretation would be very high to promote visitor education about the value of resource protection. Access would be by permit only for activities including scientific research, resource collection or use for traditional cultural activities, resource monitoring, etc.

EXTENDED LEARNING

Visitor Experience: The emphasis in this experience would be on visiting and learning about significant park resources. These experiences could be either self-guided or ranger-led. Intimate interaction with resources would be offered where possible without undue resource impacts. Structure and direction would be provided, (e.g. trails, interpretive media, signs), but some opportunities for discovery would also be available. Visitors would need to exert some physical effort and make at least a moderate time commitment. At certain times of the

day or season there could be opportunities for solitude, but in general there would be a moderate probability of encountering other visitors. The probability of encountering park staff and other evidence of NPS management would be high.

Resource Condition or Character: Visitors, sites, and trails would be intensively managed to ensure resource protection and public safety. Areas would be predominately natural, but the sights and sounds of people would be evident. Resources could be modified for essential visitor and park operation needs, but they would be changed in a way that harmonizes with the natural and cultural environment. Except for essential changes, the Park Service's tolerance for resource degradation would be low.

Appropriate Kinds of Activities or Facilities: Trails (which could be surfaced and up to 5 feet wide), overlooks, and wayside exhibits and other interpretive media would be appropriate in these areas. Support facilities such as restrooms and small picnic areas could also be present. Predominant activities would include hiking, viewing resources, and attending interpretive walks and talks.

HIKER

Visitor Experience: Visitors would explore the park using unpaved trails. Trails would be semi-primitive in nature (unsurfaced and no wider than 4 feet) and few other facilities would be present. There would be a low chance of encountering other parties, and visitors would need to make a moderate time commitment. There would be a moderate probability of encountering NPS staff and a low probability of encountering other visitors or evidence of visitor impacts. Offsite management of visitors could include eligibility requirements before entering such an area, and limits on numbers of visitors and length of stay could be in place.

Resource Condition or Character: Resources would appear pristine. On-site controls and restrictions would be used if needed for resource protection. The tolerance for resource modifications and degradation would be low.

Appropriate Kinds of Activities or Facilities: Few facilities except for trails, trailheads, occasional pit toilets, and minimal interpretation would be appropriate in these areas. Hiking would be the predominant activity.

MOTORIZED SEMI-PRIMITIVE

Visitor Experience: In this zone, established unpaved roads would be used for touring some areas of the park. The visitor experience would be dependent on a vehicle or bicycle and would involve driving along unpaved roads with high-clearance vehicles or mountain bikes. Visitors would travel at their own risk, with only minimal interpretation provided at road-heads. Observing the natural environment would be important, and there would be a sense of adventure, requiring a moderate time commitment. The probability of encountering other visitors would be low, and there is a very low probability of encountering NPS staff. However, when this is a guided experience, there could be interpretation along the route.

Resource Condition or Character: Only moderate levels of management would be provided in this area to ensure resource protection and public safety. The tolerance for resource modifications and degradation would be low.

Appropriate Kinds of Activities or Facilities: No development other than the roadway and primitive camping areas would be provided. Use could be seasonal to avoid the need to plow snow from roads.

ADMINISTRATIVE

Visitor Experience: These areas would not be intended for visitor use, however, if visitor use did not conflict with the primary use of the area, incidental use could be permitted.

Resource Condition or Character: The natural environment would be modified for park operation needs, but they would be changed in a way that harmonizes with the natural environment. These areas would not be near sensitive natural or cultural resources if such resources could not be adequately protected.

Appropriate Kinds of Activities or Facilities: Facilities necessary for park operation or surrounding land uses are appropriate in this area, including park maintenance yards, residential areas, access roads, utility areas and corridors.

Summary Comparison of Potential Management Prescriptions

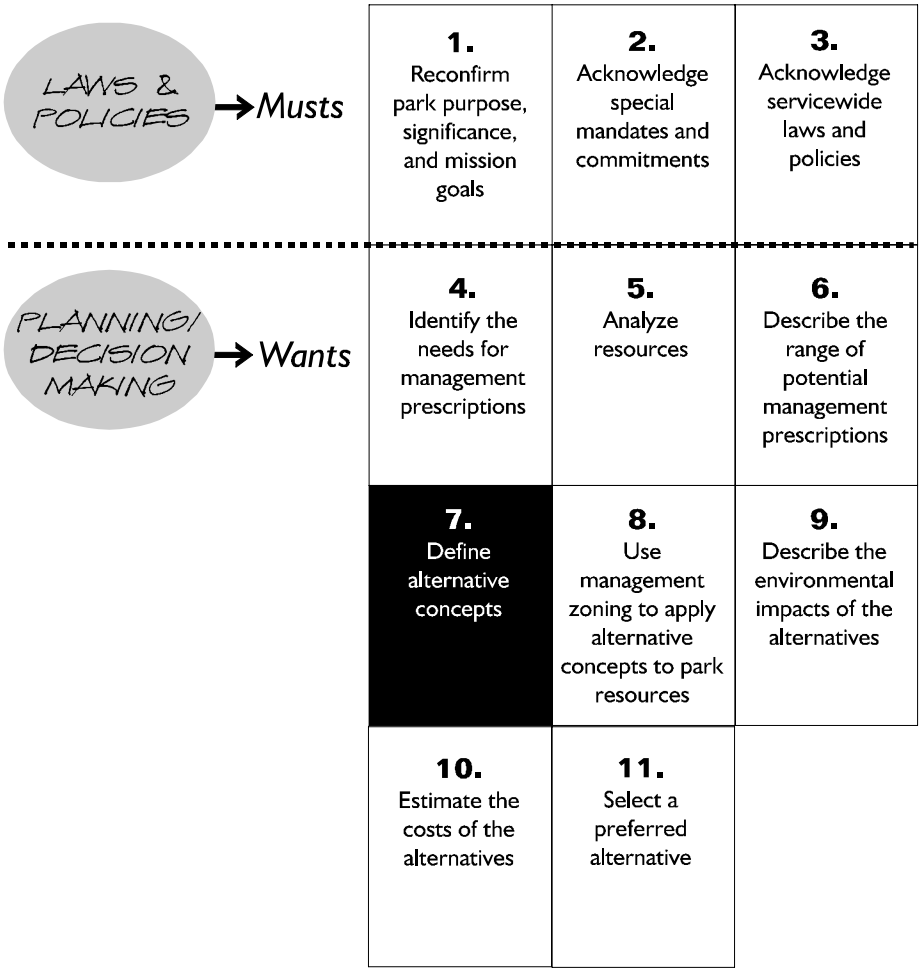
Zone	Challenge & Adventure of Experience	Facility Dependency	Visitor Encounter Expectations*	NPS Staff Encounter Expectations	Identified Corridors-Highest Standard-Roads	Identified Corridors-Highest Standard-Trails	Management Action for Resource Protection and Safety	Time Commitment	Tolerance for Resource Degradation	Opportunity for Solitude	Noise Level	Off-Site Model of Interpretation	On-site Mode of Interpretation
Overview	VL	VH	VH	VH	Paved, striped, two-lane, signed	Surfaced, wheelchair accessible, 8-feet wide	VH	L	H	VL	H	M	VH
Natural Area Recreation	M	M	M	NA	NA	Unsurfaced except as needed for resource protection	M	M	L	M	L	M	0
Guided Adventure	M	L	L	VH	NA	NA	L	H	L	M	L	L	VH
Discovery	VH	VL	VL	VL	NA	Primitive, unsurfaced, two-feet wide	L	NA	VL	VH	VL	VH	0
Extended Learning	L	M	M	H		Surfaced, 5-foot trail	H	M	M	L	M	L	VH
Preservation Emphasis	NA	NA	NA	NA	NA	NA	H	NA	VL	NA	NA	VH	0
Motorized Sightseeing	VL	VH	VH	L	Two-lane, paved or unpaved, signed, bike lane	Surfaced, wheelchair accessible, 8-feet wide	VH	L	H	VL	H	M	H
Administration	NA	VH	NA	VH	Paved, two-lane	NA	NA	NA	H	NA	H	NA	NA
Hiker	M	M	M	L	NA	Unsurfaced, 4-feet wide	M	M	L	L	L	M	L
Motorized Semi-primitive	H	L	L	VL	Unpaved, max 2-lane, seasonal use	NA	M	M	L	H	M	L	VL

*Does not include traveling group

NOTES

STEP 7

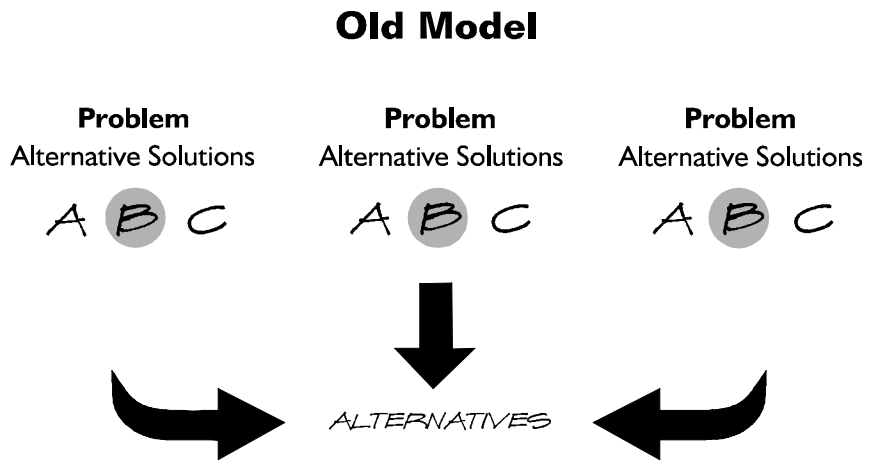
Key Steps in the NPS General Management Planning Process



WHAT'S NEW

In the past GMPs were frequently dominated by solutions to specific management problems and development proposals; the GMP alternatives were often created by "packaging" loosely associated alternative solutions to discrete problems.

For example, all the minimal development solutions might have been packaged together into a "low development" alternative, which could be compared to a "moderate development" alternative and a "high development" alternative. Or one package might be all the "preferred actions," which could be compared to "no action" and all the "other alternatives."

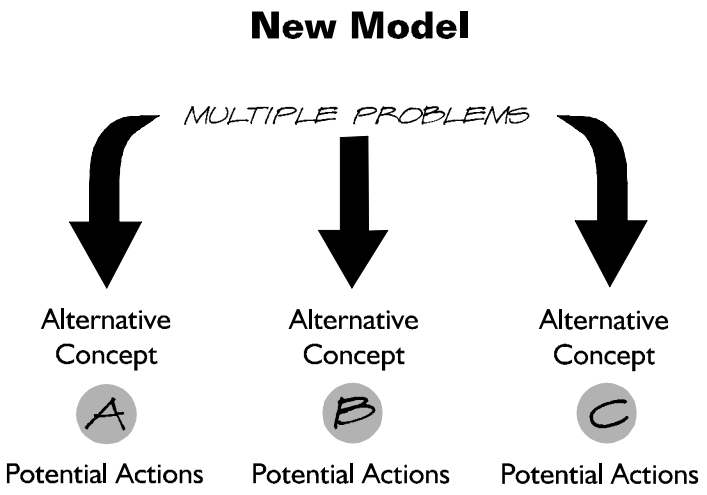


Under DO-2 park managers and staffs are being asked to focus first on what kinds of resource conditions and visitor experiences they want to maintain in the park and to let those decisions drive all actions that are subsequently taken in the park. This requires a fundamentally different way of looking at GMP alternatives.

Under this model the alternative concepts are the fundamental differences among competing sets of resource conditions and visitor experiences. The question is not "Do we want to develop this park a little bit, a moderate amount, or a lot?" The question is "What range of resource conditions and visitor experiences do we want to provide, in what proportion, and where?" Selecting one alternative concept over another can perpetuate, refine, or redefine a park's character.

For purposes of conceptual general management planning, the no-action alternative is defined as the current resource conditions/trends and the current visitor experiences/trends. These descriptions establish the baseline for comparing resource conditions and visitor experiences under the various alternatives. Even if legal and policy requirements are not currently being met, the no-action alternative describes the actual conditions/trends that are resulting from the current level of management activity. It is not necessary or even appropriate to assume that under the no-action alternative the National Park Service will take all the actions necessary to meet all legal and policy requirements in the park. The no-action alternative should not assume that management will change, even if changes are proposed in approved implementation plans. (Preexisting implementation plans should be reexamined as part of general management planning.)

In other words, the no-action alternative is for comparison purposes only. It does not have to meet legal mandates or be viable. In fact, the no-action alternative must be fully analyzed in the EIS even if another law prohibits the adop-



tion of the no-action alternative or the park is under legislative or other command to act.

Suggested Methods and Tools

The work to identify the major decision points in step 4 provides the foundation for identifying the alternative concepts in this step. It will probably be possible to group the issues, interests, and concerns expressed by the park staff, technical experts, other agencies, existing and potential visitors, and the general public into several overall approaches to park management and use. These approaches will represent the alternative concepts for the park's future.

- *When describing these overall approaches, stay focused on what resource conditions and visitor experiences should be achieved in the park, not on how they might be achieved.*

  Common pitfalls to avoid are alternative concepts (and decision points) that consider whether the park should have "few, some, or many facilities" or whether the plan should be implemented primarily through "federal funding, partnerships, or a combination of the two." These are not the most important questions for the park in setting overall direction for the future. The most important questions should focus on what results should be achieved.

- *Avoid alternative concepts that consider whether the park should be managed as a "natural area, cultural area, or balanced between the two."*

  Such a question should be answered by the park's purpose and significance. Alternative concepts should be tested against the park mission, mission goals, and other givens to ensure that they are consistent with what must be done in the park.

Alternative concepts may also be tested by discussing in general how prescriptive management zoning might vary from one alternative to another (for example, alternative A might have large areas of zones 1 and 3, while alternative B might have small areas of zone 1 and large areas of zones 3 and 4.) If the prescriptive management zoning would not change from alternative to alternative, it may mean that the alternative concepts are too similar, or that the team is developing options at the how level (actions) rather than the what level (conditions).*

- *Avoid looking at only one approach to park management and use.*

  It is relatively rare when only one approach to park management and use can reasonably be considered, and it is not recommended because NEPA and sound management require the consideration and analysis of all reasonable alternatives, even if they require legislation to accomplish. Even in parks with strong traditions and entrenched patterns of use and development, managers may benefit from stepping back and reassessing the overall goals, particularly if resources are threatened, sites are crowded, or the park's built environment requires extensive rehabilitation or maintenance. The planning team may start with a wide look at various possible concepts and move relatively quickly to consensus about a single concept.

- *In rare cases when only one concept is feasible, identify the proposed concept, describe the resulting resource conditions and visitor experiences, and compare those conditions and experiences to the current conditions (a no-action alternative).*

  Even in these cases it may be useful to document the analysis and the rationale that led to selecting one alternative concept over the others. In these cases the GMP should be relatively simple and noncontroversial.

- *Develop no more than four new alternative concepts.*

  Five alternative concepts is probably the maximum number that people can comprehend and follow through a planning process. Since one alternative must be the no-action alternative, that means no more than four new concepts.

**Planning can then proceed to implementation planning (how best to implement the management prescriptions approved through the GMP). DO-2 states that implementation planning for one or more projects or activities may overlap general management planning and strategic planning if it is appropriate for the purposes of planning efficiency or public involvement. Just make sure that the decisions needed at the general management planning and strategic planning levels are approved before investing too much time or money in an implementation project, and make sure the project has a high enough priority that it can be implemented within the next three to five years. Even if they are conducted simultaneously, the GMP and implementation plan(s) should be contained in a separate document or separate parts of a single document, because the GMP will continue to provide guidance after the implementation plans are implemented and no longer needed for reference. Also, remember that only the GMP portion of this decision making is to be funded through the GMP program.*

ZONE CONCEPT	BACKCOUNTRY CULTURAL	SAMPLE THE CONTINUUM	LOOK, BUT DO NOT TOUCH	NO ACTION (EXISTING CONDITION)
PRIMITIVE DISCOVERY	some	some	none	
GUIDED ADVENTURE	some	some	little bit	
MOTORIZED SIGHTSEEING	no	lots	some to lots	
DEVELOPED ZONE	little bit	some	some	
PRESERVATION EMPHASIS	some	some	most of park	
EXTENDED LEARNING	little bit	lots	nodes	
BACKCOUNTRY	most of park	some	little bit	

Pointers

The alternative concepts are included in the GMP/EIS under "Alternatives, Including the Proposed Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

- *Construct the concept descriptions as parallel as possible to help highlight the differences.*

  Parallel construction will help make the differences among alternative concepts clear to the reader.

NOTES

EXAMPLES

POSSIBLE ALTERNATIVE CONCEPTS

ALTERNATIVE CONCEPT 1

General Concept

In this alternative, emphasis would be placed on providing visitors with high quality wilderness experiences. The management of the park and its resources would be conducted in such a manner as to provide ample solitude and escape from the intrusion of the modern world. Visitors would be encouraged to sample a broad range of wilderness experiences.

ALTERNATIVE CONCEPT 2

General Concept

In alternative 2, visitors would be able to select from a wide range of park experiences. Park management would emphasize the separation of motorized and nonmotorized uses in order to reduce conflicts and enhance the quality of experiences for all park users. To accomplish these ends, various trade-offs would be necessary for all users.

ALTERNATIVE CONCEPT 3

General Concept

In this alternative visitors would find a concentration of facilities and amenities on both ends of the island and increasingly primitive wilderness experiences toward the middle of the island. Park management would emphasize visitor convenience and varieties of experiences in the two developed areas and reductions in amenities in the wilderness area.

ALTERNATIVE CONCEPT 4

General Concept

In alternative 4, emphasis would be placed on providing visitors with a superlative wilderness experience. Management of the park and its resources would be conducted so as to provide only wilderness experiences throughout the island. Of all the alternatives, alternative 4 would provide the greatest opportunity for park users to find solitude and to escape from intrusions of the modern world.

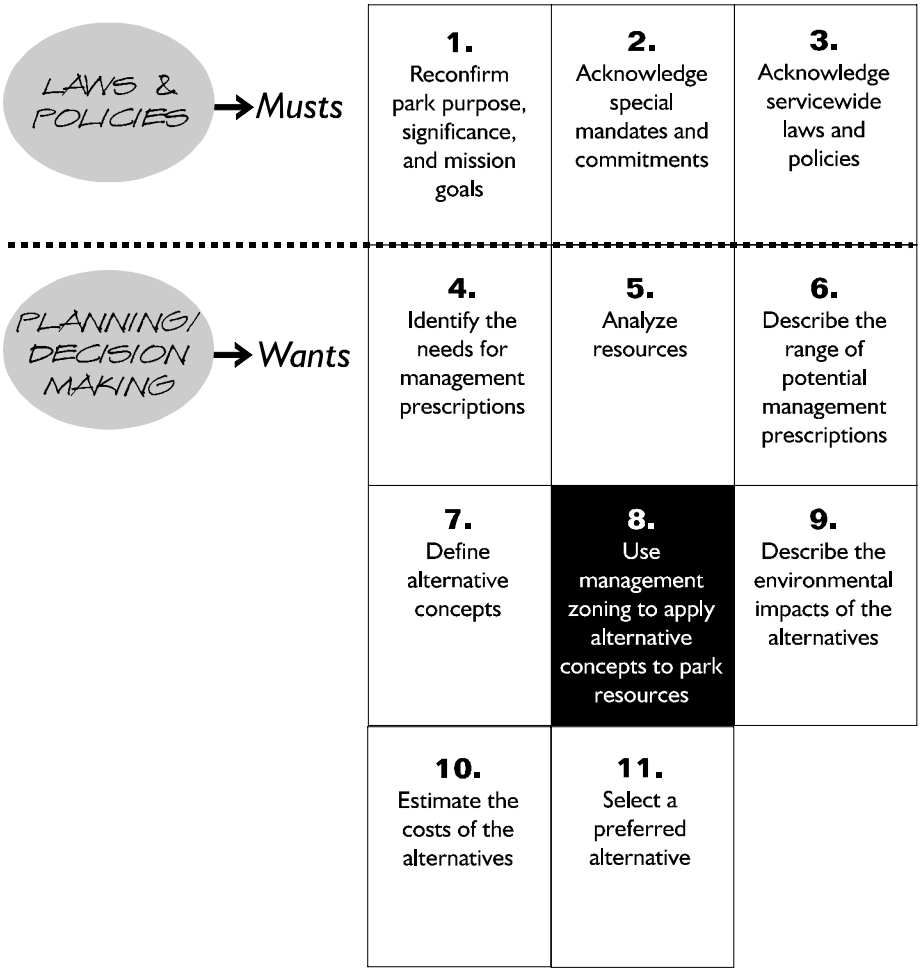
ALTERNATIVE CONCEPT 5

General Concept

In alternative 5, emphasis would be on improving the quality and maintaining the wide range of visitor experiences. To provide better quality experiences without restricting visitors' activities, visitor numbers would be controlled at lower levels than exist now. The management of the park and its resources would other wise remain essentially unchanged.

STEP 8

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

Associating management prescriptions with specific geographic areas results in management zoning.* In the past management zoning was a descriptive exercise. Once a preferred plan was selected, zoning was done as part of the documentation of the plan. This was an appropriate approach when plans tended to center around specific issues and new developments.

Now, because the emphasis is on describing desired future conditions, zoning is prescriptive rather than descriptive. It plays a pivotal role in driving decisions rather than documenting them, and it takes place much earlier in the planning process.

**To avoid confusion with local zoning ordinances, the term "management area" may be substituted for "management zone."*

With the new planning model, all planning elements from steps 1 through 7 — the park's purpose, significance, and mandates; the full range of relevant public and agency "wants"; the primary decisions that need to be made; the potential management prescriptions; and the analysis of what is at stake in the planning — are brought together to help develop alternative management zoning configurations.

It is at this point in the process that the logical, trackable rationale of the team's thought process should be most apparent.

Suggested Methods and Tools

- *Base management zoning on the concept for the alternative and the resource data analyzed for the park.*

  All elements contained in each alternative must be consistent with its concept, and all activity and development decisions must reflect a consideration of resource data.

  Even though they may contain several parkwide management prescriptions, alternatives will be developed primarily by allocating different zone-specific management prescriptions to specific geographical areas. Occasionally, in small parks with homogeneous resources, each alternative may have only one management prescription and therefore only one management zone.

- *For each alternative zone all the land and water within the park (in small, simple parks there may be only one zone per alternative). Ensure that management zones have boundaries that are distinguishable in the field, since different management will be applied to different zones.*

  Each area should be included in only one zone in each alternative because no area can be managed more than one way at a time. However, if the team decides that an area should be managed differently in different seasons, the area could be placed in different seasonal zones. There is no minimum area a zone can cover; however, in general, separate zones for tiny portions of a park or for a single feature should not be created. When needed, specific management strategies for a small area in a larger zone may be identified.

  Some zones may be narrow or linear, such as zones that follow vehicle corridors or rivers; other zones may be large polygons. Zones will not necessarily have the same boundaries in each alternative (in fact, different zone boundaries would help distinguish alternative concepts).

  If it is not considered necessary to explore alternative approaches, certain resource conditions or experiences may be common elements of all alternatives. For example, a park may have all the development it needs and have no issues related to facilities or their locations. In such a case, the areas zoned for development might be the same in all alternatives. The team should make sure, however, that the rationale for not considering alternatives is sound and does not represent an inappropriate pre-decision.

- *If a previous GMP did not establish a management zoning scheme for the park, do not create one for the no-action alternative.*

If there is no management zoning for a park, the no-action (existing conditions) alternative will not have a zoning map. This alternative will simply describe what is happening under existing conditions to serve as a baseline for comparing the other alternatives. Then, the impact analysis can compare the current conditions (the results of taking no new action) with the prescribed conditions (the results of taking the needed or appropriate actions that would fulfill the prescriptions).

If a previous GMP established a management zoning scheme, show it for the no-action alternative.

- *Once the zoning for each alternative is established, describe the major changes that would be required under each alternative to move from existing conditions to desired conditions in the various zones.*

  These descriptions will form the basis for the required environmental impact analysis and cost estimates and help decision makers and the public understand the implications of the prescribed zoning. A good way to identify needed changes and to review the rationale and feasibility of the zoning decisions is to make a scenario chart for each alternative that lists

  (1) the location(s) and rationale for why each particular part of the park was zoned a particular way

  (2) the desired conditions prescribed by the zone (desired natural and cultural resource conditions, visitor experiences, appropriate visitor uses, appropriate development)

  (3) the existing conditions for natural and cultural resources, visitor experiences, etc.

  (4) the kinds of changes that would be needed or allowed to move from existing to desired conditions (resource management or visitor management activities, the removal or the development of facilities, changes in access or circulation patterns, etc.)

  When preparing the scenario charts, concentrate on the major changes that will be important decision-making factors and do not get bogged down in details that will more appropriately be considered during implementation planning.

  When describing the needed or allowable changes, it is just as useful and often more appropriate to describe the criteria for how much or how many of something might be needed or allowed than to try to estimate quantities. For example, rather than estimating that "10-15 miles of trails" might be needed, it is just as useful to say that new trails will be needed and that their number and extent will be determined by the following criteria (one trail cannot be visible from another, trails may only be developed in areas with suitable soil, slope, etc.).

- *Compare the scenario charts for each alternative to test whether all the alternatives are complete and comparable.*

  The scenario charts differ from the potential management prescription charts prepared in step 6 because they describe the site-specific implications of applying those management prescriptions to a particular area of

Needed or Allowable Changes, Alternative A

ZONE	LOCATION / RATIONALE	DESIRED CONDITIONS AND FACILITIES	EXISTING CONDITIONS AND FACILITIES	NEEDED OR ALLOWABLE CHANGES
PRIMITIVE DISCOVERY	**Spanish Rancho** The Rancho is an important part of the story of Spanish colonization. Low use levels are desirable because of difficulty in patrolling the site.	Visitors can "discover" the site along the historic trace and learn parts of the story with minimum resource impacts. Resources appear to be representative of the period.	• There is no interpretation at the Rancho. • The historic road trace is not easy to follow. • Some structures are in poor condition. • Structures are from both the Rancho and cattle ranching eras.	• Develop interpretive media. • Mark route. • Stabilize Rancho structures. • Remove cattle ranch related structures.
EXTENDED LEARNING	**Spanish Mission** These physical remnants of the Spanish mission juxtaposed with American Indian dwellings provide outstanding opportunities for visitors to learn about early contact and interactions between the Spanish and American Indians.	Visitors can easily tour the site by trail and receive in depth interpretation of the story. Resources are preserved to present a historically accurate scene.	• Visitors currently wander among the mission ruins and often infringe on the Indian pueblo site (establishing legislation for the park prohibits public access to the Indian pueblo site). • People who are mobility impaired have difficulty negotiating the narrow trail and steps. • Modern intrusions exist in some key resource areas.	• Reroute trail away from pueblo access points, fence or provide barriers as necessary. • Improve the trail to encourage visitors to stay on the trail through design or other techniques. • To improve accessibility, provide an overlook from the parking lot with interpretive media. • Remove modern intrusions. • Increase interpretive media.

the park. Prescribed zoning may be similar to or different from current conditions in particular locations, and the resulting needed changes may be minor or major. Decision makers and the public need to understand the implications of the alternative zoning schemes before a preferred alternative is selected.

Pointers for Alternatives

Management zoning alternatives are described in the GMP/EIS in the "Alternatives, Including the Proposed Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

- *For each alternative, include the concept, the management prescriptions by zone (or parkwide if applicable), and the changes required to implement the zone prescriptions in each area of the park.*
- *Describe the alternatives in parallel organization to clearly show differences among them.*

- *Avoid using a section titled "actions common to all alternatives" as a catchall for elements that do not vary by alternative. If there are actions that must be done under every alternative because they are required by law or policy, describe them in step 3, not as part of the alternative.*

  The new model changes the way you document actions that do not vary from alternative to alternative (the old "actions common to all alternatives"). If the actions are required by servicewide law or policy, such "givens" are now addressed in step 3 (see "Acknowledge Servicewide Laws and Policies"), and they are included in the GMP/EIS under the "Purpose of and Need for Action." They are not part of the alternatives because they do not require decisions.

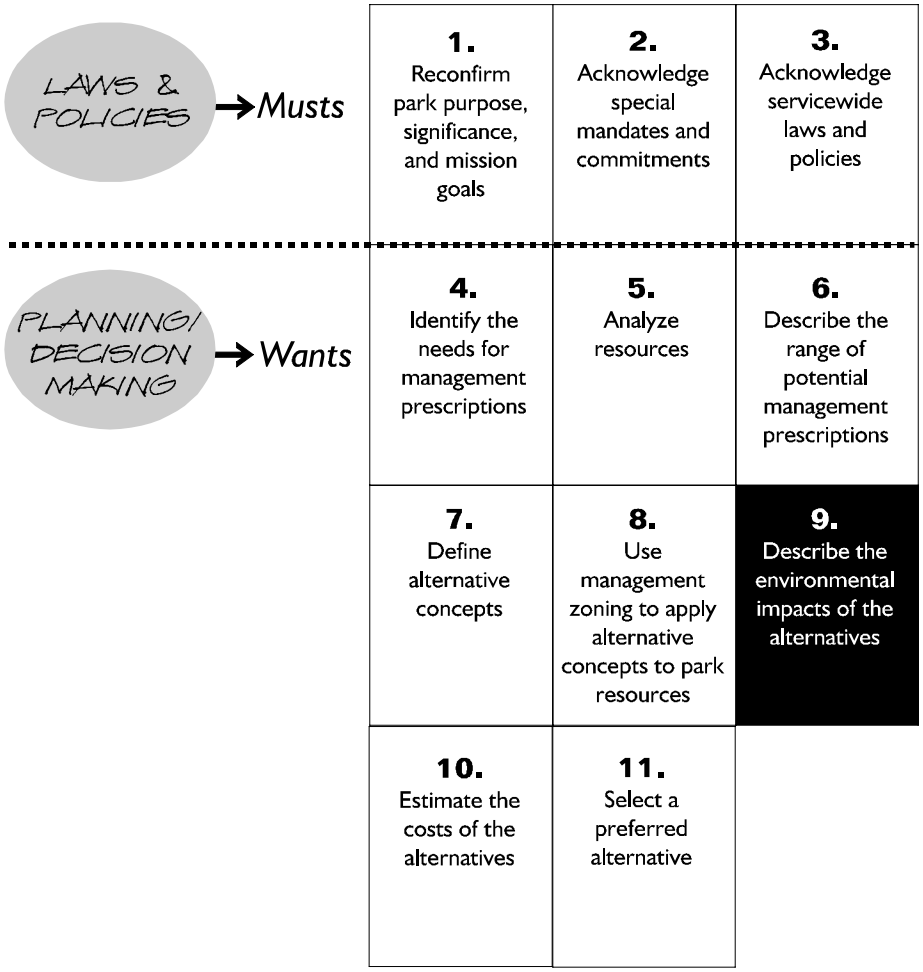
  In cases where the management prescriptions are not dictated by law or policy but would still not vary among the alternatives (for example, prescriptions for a particular resource type or visitor experience that will be applied regardless of how a particular area is zoned), then incorporate these prescriptions into each alternative. The goal is to make it easier for readers to understand whole alternatives; otherwise alternatives become fragmented by being put in various sections.

NOTES

EXAMPLES

STEP 9

Key Steps in the NPS General Management Planning Process



WHAT'S NEW?

The better the National Park Service becomes at integrating the NEPA process with the park planning process, the easier this step becomes because many potential adverse impacts will have been anticipated and avoided as planning progresses. In proactive, goal-driven planning and decision making, impact analysis does not begin after a proposal has been made, or even after a range of alternatives has been selected; it begins when possible alternatives are being considered and formulated. The analysis of impacts helps focus the team on the potential effects of possible actions and helps them describe a range of alternatives that are as protective as possible of all the major resources and human values at stake, recognizing that some tradeoffs must be considered.

The idea that impact analysis should help identify a range of alternatives and guide the selection of a preferred alternative is not new. However, the methods

and tools for tracking this process are getting better. As a result, the planning team can establish a logical, trackable linkage between (1) the major decision points and the major tradeoffs, (2) the impact topics used to analyze the environmental impacts of the alternatives, and (3) the factors used to select the NPS proposal.

GMPs are now defined as conceptual plans that focus on what conditions should be achieved and maintained in parks — with little or no detail about specific actions. Decisions made through a GMP have the potential to affect a park's resources and values on a broad scale, and they are even more likely than smaller-scale implementation plans to have significant long-term impacts and to qualify as major federal actions. These GMPs/EISs are ideal places to discuss ecosystem sustainability and management, biodiversity, community or regional land use planning, and other larger scale issues. These are the kinds of decisions CEQ believed would benefit from EISs and their comprehensive environmental planning and public involvement efforts. Furthermore, courts have been consistent in requiring EISs for large-scale agency decision making.

When a large-scale plan such as a GMP is prepared, the information can and should be less detailed than the site-specific information required in an implementation plan. In most GMPs it will be difficult to conduct the traditional impact analysis where the focus is on quantifiable impacts (the amount of acreage disturbed or the number of archeological sites affected) because of the conceptual nature of the plan. Subsequent implementation proposals are "tiered" (procedurally connected) to the broadscale GMP/EIS. Tiering allows the Park Service to "focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe" (CEQ, 40 CFR 1508.28).

In programmatic GMPs the challenge for the planning team is to meaningfully describe the fundamental differences in effects on resources from one alternative to the next. This requires a more focused identification and disclosure of the major resources and human values at stake and the major changes that an action or alternative would have from the current situation.

Suggested Methods and Tools

- *Clearly identify the impact topics, and be as specific as possible in defining them.*

  Impact topics are derived from scoping and should be linked to the identification of the resources and values potentially at stake in the planning process (see step 4).

  Once the alternatives have been formulated, the impact analysis can be more finely focused on those resources and human values that would be affected by one or more of the alternatives. These resources and values are no longer defined as potentially at stake; they are at stake, which makes them impact topics.

  The impact analysis must clearly describe the context, duration, and intensity of impacts on all the major resources and values affected by one or more of the alternatives. If, however, a major resource or value that was identified as potentially at stake in step 4 would not be affected as a result

of implementing an alternative, then that value can be dismissed from further analysis, with a discussion in the document of why it is not analyzed further. For example, if the alternative zoning schemes would have no effect on geology, prime farmland, or threatened or endangered species habitat, those resources and values would be dismissed from further analysis and not described in either the "Affected Environment" or the "Environmental Consequences" section.

By focusing on specific impact topics, the planning team can avoid needless descriptions in the "Affected Environment" and help decision makers and the public focus on the important differences among alternatives. An impact topic of "threatened and endangered species" is not as effective as "critical habitat for the endangered plover." In this example, the endangered plover is the major resource that has been identified as being potentially affected. There is no reason to analyze all the threatened and endangered species in the region or the state if only the plover could be affected.

- *Use "needed changes" to focus the impact analysis; avoid describing the needed changes in too much detail.*

  Assuming that the alternatives contain management prescriptions and scenarios about needed changes, then the impact analysis should focus on the areas where a change in management could be expected. For example, zoning a wilderness area as "wilderness" would require little or no change in proposed management, use, or experience and would not be expected to have a major effect on resources. However, zoning an area that is currently used for visitor services as "primitive" would most likely require major changes in management and use and would be expected to affect resources, visitor use, and perhaps adjacent land use.

  The scenario charts of needed or allowable changes started in step 8 can be used to focus the impact analysis. A simple running matrix of changes required by the alternatives and the associated impact topics can be a valuable tool for the team to track decisions, modify alternatives, and ultimately select the preferred alternative.

  When referring to the chart of needed changes, avoid the "trap" of thinking that the changes must be described in detail to adequately analyze the impacts. For example, not all trail locations need to be plotted so that specific acres of affected soils and vegetation can be calculated. Instead, describe the typical kinds of effects expected from trail construction and the mitigating measures needed to reduce or eliminate effects. An analysis based on elaborate scenarios that have gone to the site design level may jeopardize the usefulness and shelf life of the GMP/EIS because if the assumptions about site design do not prove accurate, critics may question the validity of the entire document.

- *Describe the implications of an impact (follow the chain of cause and effect) and give an indication of how important the effect is.*

  It is not enough to say that alternative A would require the removal of 30 acres of pinyon/juniper habitat, whereas alternative B would require the removal of 15 acres. The analysis is incomplete unless it states how the resource is affected and gives an indication of how important the effect is.

Neither is it enough to state that under alternative A, more of the park would be zoned primitive; therefore, the impact to natural resources would be minimal. Zoning, like removing timber, is an action, not an impact.

The environmental impact analysis needs to examine the chain of cause and effect. Impacts should be written in the following manner: action [define] causes something to happen [define], affecting a resource [define] in some manner [define in terms of context, intensity, and duration]. An example of this chain at the GMP level for two alternatives might be:

> Under alternative A zoning 1,500 acres in the northeast section of the park as primitive would result in fewer patrols to monitor and control potential impacts by visitors in this area. This would have a long-term adverse moderate impact on the Brainard site by making it moderately more susceptible to trespass, vandalism, and looting than it is under current conditions.
>
> Under alternative B zoning 1,300 acres in the northeast section of the park as low-density use would result in periodic patrols to monitor and control visitor activities. This would have a long-term adverse minor impact on the Brainard site by making it slightly more susceptible to trespass, vandalism, and looting than it is under current conditions.

Mitigating measures are an important part of the chain of cause and effect. By eliminating or reducing some of the potential effects of an action, mitigating measures can greatly influence the final condition of the resource. The effect on the resource should be the net impact with mitigating measures in place.

- *Assess impacts in terms of context, intensity, and duration.*

  Context — Consider the impact in a site-specific, regional, national, and even international context, as appropriate. The same effect may be minor in one context but major in another. For example, in a regional context where there is relatively little critical habitat for plovers anywhere in the region, changing even a small area adjacent to plover habitat from primitive use to high-density development might have a major impact on plovers.

  Intensity — Use consistent terms to describe and compare the intensity of impacts. Establishing criteria for descriptors of intensity is a good practice. For example:

  > *Negligible:* The impact is at the lower levels of detection.
  >
  > *Minor***:** The impact is slight, but detectable.
  >
  > *Moderate:* The impact is readily apparent.
  >
  > *Major***:** The impact is severely adverse or exceptionally beneficial.

  Note that all of the above descriptors can be used to describe adverse or beneficial impacts.

  Using scientific criteria is also useful, but more difficult. For example, if best professional judgment says that any increase in disturbance to nesting plovers during critical nesting times would impact the birds' abilities to

have a successful mating season, then changing the zoning of an area from primitive to low density might be considered to have a major long-term adverse impact on this resource, even though the change might not be readily apparent or even detectable in the short term.

CEQ requires that the analysis section include the methodology, the sources of information, and the criteria used for assessing the intensity of the impacts.

Some planning team members may be reluctant to judge intensity because they feel it is up to the public to judge whether something is a major impact, or less. Using professional judgment to assess the intensity of an impact is an important part of the NEPA analysis. However, team members should avoid arguments for or against the selection of any proposal or alternative.

Duration — State how long the impact is expected to be present.

- *Disclose both direct and indirect effects in the NEPA analysis.*

  Direct effects — those impacts caused by the proposed action or alternatives and that occur at the same time and in the same place as the action. For example, changing the management in the northeast section of the park by zoning it primitive when it is now managed for high-density visitor use would have a direct impact on the concession services provided there.

  Indirect effects — those impacts caused by the proposed action or alternatives that occur later in time or farther in distance from the action. For example, changing the management in the northeast section of the park by zoning it primitive when it is now managed for high-density visitor use would have an indirect impact on businesses outside the park because they would be affected by changes in visitor use patterns.

- *Consider the effects of connected, similar, and cumulative actions.*

  Connected actions — those actions "closely related" to the proposed action that would not happen without the proposal (or vice versa). For example, if one action is to place a new rail line in a road corridor, a connected action is the relocation of the road to another alignment.

  Similar actions — those actions that have similar geography, timing, purpose, or any other feature that provides a basis for evaluating their combined impacts. For example, if one action is to provide visitor lodging, similar actions are to provide appropriate support facilities (like food service). All these actions should be analyzed in the same NEPA document.

  Cumulative actions — the culmination of the proposed action added to past, present, and reasonably foreseeable future actions having additive impacts on a particular resource. It doesn't matter who takes the actions, whether they occur inside or outside the park, or whether they took place in the past, are happening now, or may happen in the future. For example, if one action is to provide for a significant increase in winter use in important elk winter range, a cumulative action is last year's timber cut on the adjacent federal forest in elk winter range. Because this action has an additive impact on the elk population, it must be included as part of the cumu-

lative actions impacting elk. Yet another cumulative action might be a large housing development proposed for next year on private land in elk habitat, which would also have an adverse effect and should be assessed if it is reasonable to presume the homes would be built. The planning team will have to consult with gateway communities, surrounding neighbors, and ecosystem partners to understand the additive impacts of past and future cumulative actions.

Cumulative impact analysis is critical when making decisions about a park's future direction. Without looking at what is happening outside the park boundary, it could be meaningless for park managers to consider what direction should be taken inside the park to protect resources. Make a more comprehensive analysis of cumulative impacts when analyzing the effects of alternatives and identify what factors were considered in making conclusions on the degree of cumulative impacts.

The environmental impact statement also needs to identify possible conflicts with local, state, or tribal land use plans.

- *Draw and document conclusions.*

  End the assessment of each impact topic with a concise conclusion stating the context, intensity, and duration of the impact. Draw conclusions for the impact of the action both without and with the cumulative effects of other actions (two separate statements). Make sure the conclusions are appropriately supported by the analysis described above. The brief statements out of this conclusion section are put verbatim in the impact comparison matrix required for the "Alternatives" chapter of the GMP/EIS.

- *Address tradeoffs.*

  Considerations of long-term impacts and the effect of foreclosing future options should pervade the EIS. For each alternative include a separate section that focuses on the following required discussions (more detail will be available in DO-12):

  relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity

  any irreversible or irretrievable commitments of resources should the alternative be implemented

  any adverse impacts that cannot be avoided should the action be implemented

- *Ensure compliance with section 106 of the National Historic Preservation Act.*

  Interpretation of §106 requirements varies by region and state (different state historic preservation officers like to see information in various formats), so check before you spend a lot of time on detailed charts and analyses. If plans are very general, and if specific details on the treatment of properties listed on or eligible for listing on the National Register of Historic Place are unavailable, you may be unable to complete the §106 consultation process. Instead, the procedures described in §VI. C-G of the servicewide programmatic agreement would be followed:

Notify the state historic preservation officer / Advisory Council on Historic Preservation that a GMP is underway.

Request comments on preservation concerns.

Determine which undertakings are programmatic exclusions and for all others, determine if there is enough information to complete §106 consultation, or if additional consultation will be required.

If additional consultation is needed, list all undertakings and the stage of planing where consultation is likely.

Include a statement on the status of the park's cultural resource inventory and needs for additional cultural resource information, plans, or studies required before any alternative can be implemented.

Pointers for Writing Environmental Impacts

Environmental impacts of the proposed action and alternatives are described in the GMP/EIS under "Environmental Consequences." (See typical table of contents on pages 5–6 of the "Introduction.")

There are a number of ways to format the impact analysis section of the GMP/EIS. One of the most effective ways, in keeping with CEQ's requirements, is the following:

- Alternative A
  - Impact Topic 1
    - Methodology for Analyzing Impacts
    - Analysis of Impacts
    - Cumulative Impacts
    - Conclusions
  - Impact Topic 2
    - Methodology for Analyzing Impacts
    - Analysis of Impacts
    - Cumulative Impacts
    - Conclusions
  - Impact Topic 3
    - Methodology for Analyzing Impacts
    - Analysis of Impacts
    - Cumulative Impacts
    - Conclusions
  - Relationship between Local Short-Term Uses and Long-Term Productivity
  - Irreversible or Irretrievable Commitments of Resources
  - Adverse Impacts that Cannot be Avoided
- Alternative B (same as above)
- Alternative C (same as above)

- *Avoid simply redescribing an action or resource. Concentrate on the change in the condition of the resource or environment caused by the action.*
- *Test the completeness of the chain of cause and effect by asking "How does that ultimately affect the environment?" If this question hasn't been completely answered, the chain is not finished.*
- *Use descriptors such as major, moderate, minor, and negligible consistently throughout the impact analysis.*

  The consistent use of terms helps readers judge and track the differences in effects of the alternatives. If the writer says that the impact of one alternative on the plover would "not be significant," but that the impact of another alternative would be "minimal," the reader then has to figure out if there is truly a difference and what that difference is.

- *Avoid including irrelevant information. If a resource is not affected, do not describe it.*

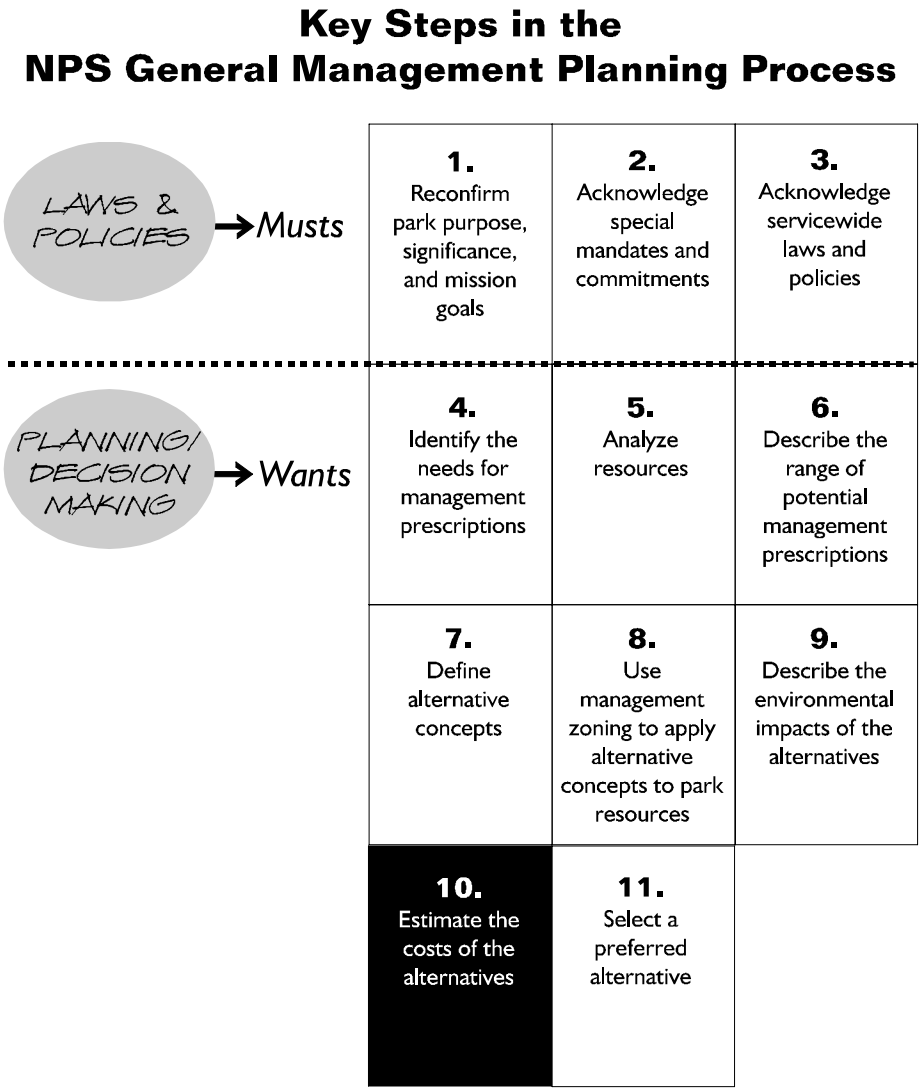
EXAMPLES

Example of Analysis for One Impact Topic:

METHODOLOGY	A study (Braun 1978) has demonstrated that repeated encounters with motorized vessels tend to displace some molting bird species and disrupts nesting activities, causing them to seek shelter at outlying lakes. Motorized vessels have caused flushing of adults from nests, which results in lowered success of egg incubation, lowered success of rearing chicks, and increased predation of chicks. This disturbance and relation can also have serious physiological effects on adult birds, stressing the birds and requiring them to expend energy from already depleted reserves. When subjected to repeated disturbances, molting seabirds and waterfowl tend to abandon sites. Therefore, any disturbance of nesting or molting birds was considered to be a major effect.
ANALYSIS OF IMPACT: This is the action that causes something to happen: This is the something that happens:	Under alternative A, the Beardslee Islands, Adams Inlet, and Skidmore Bay would all be designated wilderness. Motorized vessel use would be eliminated from all of the sensitive seabird/waterfowl habitat in these areas. Eliminating motorized vessel use would ensure that seabirds and waterfowl would be able to use this habitat for molting, nesting, and feeding without the disturbances caused by motorized vessels and associated onshore human activity.
This is the effect on the resource evaluated in terms of context, intensity, and duration	This would be a major beneficial effect on these species. The current populations would be perpetuated over the long term in all the identified habitat areas. This is especially important because the park provides the last large uninterrupted stretch of seabird and waterfowl habitat in the region,
CUMULATIVE IMPACT	Past actions outside the park have resulted in extremely fragmented seabird and waterfowl nesting habitat. The local community development plan calls for an increase in beach development for recreational activities, resulting in further loss of waterfowl nesting habitat. Eliminating motorized vessel use in the park would increase the amount of sensitive seabird/waterfowl habitat regionally.
CONCLUSION	This alternative would have a long-term major beneficial effect on sensitive seabird and waterfowl habitat. This beneficial effect would be partially offset by some of the regional negative effects on this habitat. However, the net effect would be an increase in the amount of sensitive seabird/waterfowl habitat in the region and the provision of the only large uninterrupted stretch of such habitat in the region.

NOTES

STEP 10



WHAT'S NEW

The National Park Service, along with other governmental agencies, is under increasing public and congressional scrutiny to ensure that its programs and projects are cost-effective. A recent criticism by Congress aimed directly at GMPs was that these are "unrealistic documents which tend to include expensive wish list projects which may not be essential to the central mission of the unit" (House Subcommittee on National Park Appropriations report for FY 1999). Clearly, the National Park Service must consider costs in GMPs. The questions are how to estimate the costs of conceptual plans and how to most effectively use cost information in setting the broad, long-term direction for a park.

Because GMPs deal primarily with what conditions and experiences should be achieved in a park, rather than how to achieve them, the primary question related to cost is, "Are the anticipated results (proposed conditions and experiences) worth the anticipated cost?" An equally important question is, "What is economically feasible?" However, this latter question is more appropriately addressed in the shorter time frames of strategic and implementation planning. What is considered feasible to accomplish in various five-year periods may differ considerably based on rapidly changing socioeconomic, environmental, and political conditions.

The question about whether the results are worth the cost directly addresses the need to ensure that the Park Service and the parks spend money on those things that are essential to the central mission of the agency and the individual units. The general management planning process has been redesigned to clearly define each park's central mission and to determine the most appropriate mix of resource conditions and visitor experiences for achieving that mission. In the new framework of park planning and decision making, all projects and programs, including all development proposals, will be tested against the management prescriptions in the GMP, and only those that are needed to meet the GMP prescriptions for fulfilling park purpose and significance will be considered for implementation.

Because the GMP will establish the direction for all future park programs and activities, it is critical that a full range of feasible alternatives be considered before choosing one direction. For each GMP alternative, the question should be asked, "Is the difference in the results of this alternative compared to the other alternatives worth the difference in the cost?" Through a process known as choosing by advantages (described under step 11), the planning team, park staff, decision makers, and the public can compare the relative advantages of alternatives and compare them to the relative costs. Cost estimates do not have to be detailed or precise to use this tool; they have only to be based on reasonable assumptions that are applied evenly to all alternatives.

In the past GMPs included "class C" estimates for specific facilities (such estimates are based on unit costs for comparable facilities, factoring in a specific quantity, such as number of miles, square feet, or campsites). Previous plans also identified the numbers and types of staff needed to implement proposed programs. The new GMPs stop short of describing specific facilities and programs. Therefore, it is no longer necessary to include class C cost estimates or detailed staffing plans if that level of estimating would require inventing a level of detail about needed changes that is not already known or readily apparent. If more detailed estimates are available because of previous or concurrent implementation planning, they should be used. Otherwise, more general estimates can be identified, as described below. Either level of estimate will meet the requirements of Public Law 95-625 to include indications of types and general intensities of development, including anticipated costs, in GMPs.

Suggested Methods and Tools

- *Working off the list of needed and allowable changes for each alternative, identify and chart those changes that would be expected to result in major capital improvements or major new programs.*

- *Using the best information reasonably available from comparisons with other park programs and facilities or comparisons with generally similar facilities or programs in other parks or regional areas, estimate the probable initial capital costs and ongoing operating costs of each element. Document all the assumptions made about what constitutes a major new element and document the sources of comparable costs.*

  The probable anticipated costs for each alternative will necessarily be general and may have a relatively large margin of error. What is required is to anticipate and consider costs as fully and comprehensively as is reasonable at this early stage of decision making. Acknowledging that it is impossible to anticipate all the actions needed to implement a given set of management prescriptions, let alone to accurately estimate their future cost, it is still reasonable to assume that some alternatives will cost more than others to implement. These assumptions need to be made and documented so that the public and decision makers can consider whether the anticipated difference in the results of one alternative compared to another is worth the anticipated cost differential.

- *In addition to considering how major capital improvements and major new programs would differ among the alternatives, consider how the different alternatives would be expected to affect basic park operations.*

  For example, differences in access and circulation routes among various alternatives might have implications for staff travel times and maintenance costs that would drive up (or reduce) the costs of basic park operations. Or search-and-rescue costs might be expected to be higher (or lower) in some alternatives than in others. The full park management team should participate in discussing and projecting what effects the various alternatives might have on park operations. Based on these discussions the planning team needs to make and document broad assumptions about the effects of each alternative on the park's annual operating costs.

  The conclusions about effects on annual operating costs can be as general as whether each alternative would be expected to result in about the same operating costs as at present, increase those costs by 15%-25%, by 25%-45%, double them, etc. Again, it is critical that the assumptions be as thoughtful and comprehensive as possible, given the general nature of the alternatives, and that they be applied consistently to all the alternatives so that comparisons are valid.

- *Use ranges; present information in orders of magnitude appropriate to the issues being addressed.*

  The planning team may have to make a number of assumptions and judgments about how to most reasonably anticipate and compare the costs of the alternatives. So long as the assumptions and judgments are applied consistently to all alternatives, the resulting comparisons will be valid for this

level of planning. In fact, as with impact analysis, trying to be more precise than is reasonable may invalidate the analysis if the assumptions prove to be inaccurate.

Capital and annual costs can be more accurately aggregated and compared by computing life-cycle costs. Standard formulas can be applied to the items entered into the following chart to estimate and total life-cycle costs. Whether life-cycle costs should be included in GMPs is still being discussed.

The cost estimates developed through these methods will most appropriately be used to compare the relative costs and advantages of the alternatives at a highly conceptual level using the choosing by advantages methodology discussed in the next step. None of these methods implies precision, only comparability. GMP-level cost estimates should not be used for budgeting purposes.

Major Capital Improvements and New Programs

ELEMENT	INITIAL CAPITAL COSTS	ONGOING OPERATING COSTS	POTENTIAL FOR COST-SHARING
Preserve three lighthouses	$6.5 million (range of $4 – $9 million)	$100,000/year	to be pursued only if partners can be found
Replace docks	Replace docks	None	
Modify concession facilities	$3 million	None	
Subsidize concessioner	None	$400,000/year	
Add three historic structures to the interpretive program		$200,000/year	
ONPS (currently $2.5 million)		$2.5 million/year (no change from current levels)	
Total anticipated costs	$9.5 million	$3.2 million/year	

Pointers

Cost estimates are included in the GMP/EIS under "Alternatives, Including the Proposed Action." (See the typical table of contents on pages 5–6 of the "Introduction.")

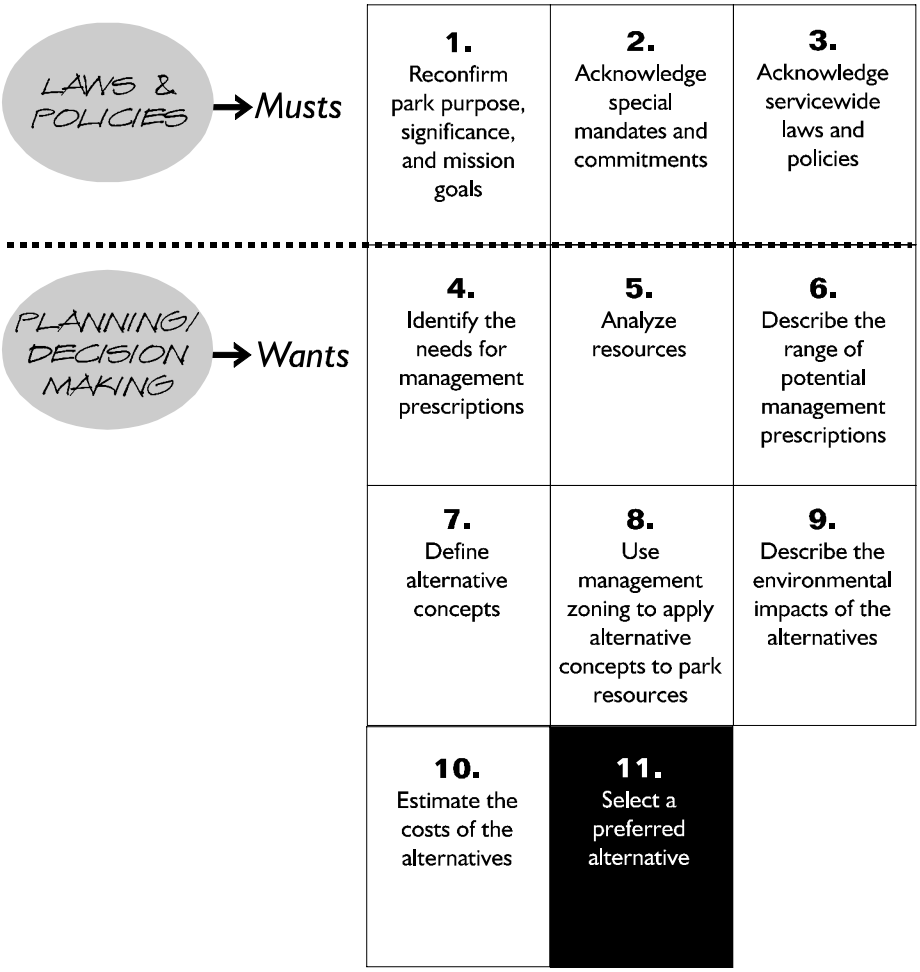
- *Summarize the result of the cost analysis in a simple chart (see the Major Capital Improvements and New Programs matrix).*

  The assumptions used in the analysis should be documented in an appendix.

NOTES

STEP 11

Key Steps in the NPS General Management Planning Process



WHAT'S NEW

The National Park Service selected choosing by advantages (CBA) in response to congressional concern about the arbitrary approach that had been used in deciding priorities for line-item construction. Congress recommended that the Park Service find a process that was objective and could document the rationale behind decisions. CBA, which was selected after researching many different decision processes, is now extensively used throughout the Park Service.

CBA is a decision-making process based on determining the advantages of different alternatives for a variety of factors or goals. The advantages are then weighed and summarized to help identify the preferred alternative.

One of the greatest strengths of the CBA system is its fundamental philosophy: decisions must be anchored in relevant facts. For example, the question "Is it

more important to protect natural resources or cultural resources?" is "unanchored"; it has no relevant facts on which to make a decision. Without such facts, it is impossible to make a defensible decision.

The CBA process instead asks us to decide which alternative gives the greatest advantage in protecting natural resources and cultural resources. To answer this question, relevant facts would be used to determine the advantages the alternatives provide for both kinds of resources. For example, we may have facts that show that two alternatives disturb or restore equal amounts of vegetation, so neither alternative would be more advantageous than the other in protecting natural resources. On the other hand, we may have facts that show that one alternative would disturb five known archeological sites, while the other alternative would disturb only one. This alternative, then, would be more advantageous since it provides natural resource protection (equal to the other alternative) and also provides the greatest advantage for cultural resources.

With CBA it is no longer necessary to argue whether certain park resources are more important than others. Based on relevant facts, the advantages that each alternative provides for each kind of park resource can be determined, and this information can be used to make the decision.

Suggested Methods and Tools

- *Use a facilitator trained in the CBA process.*

  CBA has been developed to track the logic in decision making, but it is important to ensure the process is followed correctly to have confidence in the results.

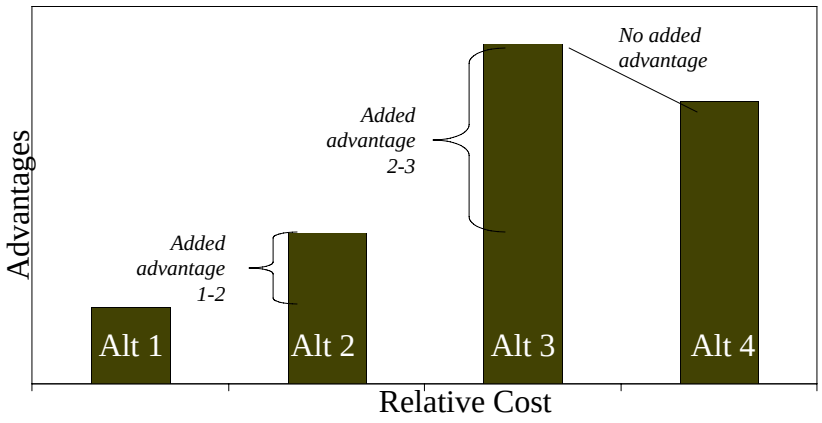
  Currently the numbers of NPS facilitators is limited. However, more people are being trained on this process every year. Contact region and system support offices for facilitators. The Denver Service Center and Washington Office of the Associate Director, Professional Services, also have facilitators.

Pointers

The factors used in the CBA process to select the proposed action should be documented in the GMP/EIS in the discussion of the planning process under "Consultation and Coordination." (See the typical table of contents on pages 5–6 of the "Introduction.") If needed, include the specifics of the decision-making process in an appendix.

EXAMPLES

Relative Advantages and Costs of Alternatives



NOTES

Appendix A: Legislation

NATIONAL PARK SERVICE ENABLING LEGISLATION

Act of June 30, 1864, 13 Stat. 325, 16 U.S.C. §48

Authorizes a grant to California for the "Yo-Semite Valley," and for land embracing the "Mariposa Big Tree Grove." This tract was "to be held for public use, resort, and recreation" by the state of California, and to "be inalienable for all time."

Act of March 1, 1872, 17 Stat. 32, 16 U.S.C. §21 et seq.

Sets aside a certain tract of land near the headwaters of the Yellowstone River as a public park. Generally, the act signified establishment of a new public policy; namely, that portions of the public lands were to be reserved and withdrawn from settlement, occupancy or sale under the laws of the United States and dedicated and set apart as a public park or pleasuring ground for the benefit and enjoyment of the people. . . . That . . . the Secretary of the Interior . . . shall provide for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities or wonders within said park, and their retention in their natural condition.

Lacey Act of 1900, as amended by P.L. 97-79, 18 U.S.C. §§42-44, Title 50 CFR

Outlaws interstate traffic in illegally killed birds and other animals (one of the first federal wildlife laws and aimed at the "pot hunter," who killed large amounts of wildlife for sale). Aids states in enforcing conservation laws. As amended in 1981, is a single comprehensive statute that provides more effective enforcement of state, federal, Indian tribal, and foreign conservation laws protecting fish, wildlife, and rare plants. Gives authority, in addition to CFR regulations, to park superintendents and U.S. attorneys to prosecute criminal or civil violations involving the taking of fish, wildlife, and rare plants in park units.

Act of August 25, 1916 (National Park Service Organic Act), P.L. 64-235, 16 U.S.C. §1 et seq. as amended

Establishes the National Park Service, allows for the administration of Yellowstone and Sequoia national parks, and provides for criminal penalties if certain infractions occur.

> *The Service thus established shall promote and regulate the use of the Federal areas known as National Parks, Monuments, and Reservations . . . by such means and measures as to 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 same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.*

Authorizes the secretary of the interior to make rules and regulations for the use and administration of NPS areas. Allows the sale and disposal of timber under certain conditions, and the destruction of animal and plant life detrimental to the use of the park. Allows concessioners to be granted leases, and livestock grazing permits to be issued if not detrimental to the area, except there is to be no grazing in Yellowstone.

Act of June 5, 1920, 41 Stat. 917, 16 U.S.C. §6

Begins to formulate a new policy for establishing parks and monuments (up to this time they were established from the public domain). Authorized the secretary of the interior to accept patented lands, rights-of-way over patented lands or other lands, buildings, or other property within the various national parks and monuments, and moneys which may be donated for the purposes of the national park and monument system.

Act of February 21, 1925, 43 Stat. 958 (temporary act, not codified)

Further extended policy direction initiated in 1920, providing for securing lands in the southern Appalachian Mountains and Mammoth Cave regions of Kentucky for perpetual preservation as National Parks.

Led to the authorization of Great Smokies, Mammoth Cave, and Shenandoah National Parks.

Act of May 26, 1930, 16 U.S.C. §17-17j

Authorizes the purchases of equipment and supplies, contracts for services and accommodations, temporary care and removal of indigents from parks, reimburse employees for losses, hire and purchase work animals and property, and to pay employee travel expenses.

Reorganization Act of March 3, 1933, 47 Stat. 1517

Reorganized the executive branch of the government, and through Executive Orders 6166 and 6228 (5 U.S.C. §§124-132) transferred to the Department of the Interior for administration by the National Park Service the national memorials and parks of the nation's capital, national monuments, historical and military parks administered by other federal agencies. The number of units in the national park system virtually doubled overnight.

Parks, Parkways, and Recreational Programs Act, June 23, 1936, 49 Stat. 1894, 16 U.S.C. §§17k-n

Directs the secretary of the interior to study public park, parkway, and recreational area programs; aid states in planning; and allows states to negotiate and enter into compacts or agreements on planning, establishing, developing, improving, and maintaining any park, parkway, or recreational area.

Act of August 8, 1953, 16 U.S.C. §1b-1c

Authorizes the secretary of the interior to render emergency rescue, fire-fighting, and cooperative assistance to nearby law enforcement and fire prevention agencies; erection and maintenance of fire protection facilities,

water lines, telephone lines, electric lines, and other utility lines; reimbursement of utility services to concessioners, contractors, or other users; and contracting for utilities. Also allows for acquiring rights-of-way and operating, repairing, and maintaining equipment. Section 2 defines the "national park system" as "any area of land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational, or other purposes" and requires that "each area within the national park system shall be administered in accordance with the provisions of any statute made specifically applicable to that area."

Act to Improve the Administration of the National Park System, August 18, 1970; P.L. 91-383, 84 Stat. 825, as amended by P.L. 94-458, P.L. 95-250, and P.L. 95-625; 16 U.S.C. § 1a1 et seq.

Recognized that that national park system had grown considerably and now included a great variety of natural, historic, and recreation areas in every major region of the United States and its territories. Clarify the authorities applicable to the national park system. Authorizes administrative activities such as providing employee transportation, recreational facilities, purchasing special equipment for employees, provide air-conditioning in vehicles, etc. Also authorizes advisory committees regarding NPS functions. Substantially amended by the General Authorities Act.

General Authorities Act, October 7, 1976, P.L. 94-458, 90 Stat. 1939, 16 U.S.C. §1a-1 et seq.

Amends or repeals many provisions from previous acts and provides additional improvement and authorization for the administration of the national park system. Repeals virtually all previous arrest authority, authorizes law enforcement officers, and provides these officers with the authority to carry firearms, make arrests without warrant, execute warrants, and conduct investigations. Also addresses boating and other water regulations, meals and lodging, moving expenses for dependents, and uniform allowance. Amends the Freedom of Information Act in terms of exceptions. Requires the secretary of the Interior to transmit to Congress a detailed program for the development of facilities, structures, or buildings of each unit of the national park system consistent with general management plans no later than January 15 of each year. Also requires the National Park Service to investigate, study, and monitor areas of national significance. At the beginning of each fiscal year, the Park Service is required to submit to Congress a list of not less than 12 areas that appear to qualify for inclusion in the park system. Allows the secretary of the interior "to withhold from disclosure to the public, information relating to the location of sites or objects listed on the National Register whenever he determines that the disclosure of specific information would create a risk of destruction or harm to such sites or objects."

Act amending the act of October 2, 1968 (commonly called the Redwoods Act), March 27, 1978, P.L. 95-250, 92 Stat. 163, 16 U.S.C. §§1a-1, 79a-q

Amends the 1968 Redwood NP enabling legislation, and also provides additional guidance on national park system management:

> *Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System shall be consistent with and founded in the purpose established by the first section of the Act of August 25, 1916, to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.*

Senate Report No. 95-528 on S.1976 (this act) states on page 7:

The committee strongly endorses the Administration's proposed amendment to the Act of August 18, 1970, concerning the management of the National Park System to refocus and insure that the basis for decisionmaking, concerning the System continues to be the criteria provided by 16 U.S.C. §1 — that 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." This restatement of these highest principles of management is also intended to serve as the basis for any judicial resolution of competing private and public values and interests in the areas surrounding Redwoods National Park and other areas of the National Park System.

National Parks and Recreation Act, November 10, 1978, P.L. 95-625, 92 Stat. 3467; 16 U.S.C. §1 et seq.

Establishes 8 new river designations, authorizes 17 river studies, and improves management procedures for rivers program; raises acquisition ceilings in 29 units and development ceilings in 34; adjusts boundaries at 39 units; adds wilderness areas; triples size of national trails system; adds 12 new national park system units and authorizes studies for 8 more. Also authorizes moneys for Urban Recreation Recovery Programs, establishes a Pine Barrens Commission, purchases concession facilities at Yellowstone, extends program for recovery of historic and archeological data, and requires the secretary to review all federal lands proposed for sale or disposal to ensure values for recreation is considered. Requires the National Park Service to prepare and revise general management plans in a timely manner for each unit. Requires GMPs to include resource protection measures; general development locations, timing, and costs; carrying capacity analyses; and boundary modifications.

Alaska National Interest Lands Conservation Act of 1980, P.L. 96-487, 94 Stat. 2371, 16 U.S.C. §3161 et seq.

Adds to or expands existing units of the five national conservation systems in the Alaska national park system, national wildlife refuge system, national wild and scenic rivers system, national wilderness preservation system, and national forest system. Establishes 5 national parks; expands 3 existing parks (2 of which were monuments); establishes 2 national monuments and 10 national preserves (the latter are to be administered as parks except that sport hunting and trapping are authorized in them); and places 13 of the wild and scenic rivers established under NPS administration. More than doubles the size of the national park system by adding over 50 million acres. Also provides for specific exceptions to general NPS legal authorities for parks in Alaska, including special provisions related to subsistence and rights-of-way.

NPS resources, improve ability to manage, P.L. 101-337, 16 U.S.C. §19jj

Establishes liability for any person who destroys, causes loss of, or injures any park system resource; if finding of damage to resource, or absent response, damage would have occurred, allows the commencement of civil action to recover damages; requires undertaking of all necessary actions to prevent/minimize destruction; requires assessment/monitoring of damages; allows response costs and damages recovered may only be used to reimburse response costs or to restore/replace/ acquire equivalent of resources damaged; requires annual report to Congress on funds expended pursuant to act; authorizes acceptance of donations.

OTHER LAWS AFFECTING NPS

Accessibility

Americans with Disabilities Act, P.L. 101-336, 104 Stat. 327, 42 U.S.C. §12101

States that all new construction and programs will be accessible. Planning and design guidance for accessibility is provided in the Architectural and Transportation Barriers Compliance Board (36 CRF Part 1191). Additionally, NPS Special Directive 83-3 states that accessibility will be proportional to the degree of development, i.e., areas of intense development (visitor centers, museums, drive in campgrounds, etc.) will be entirely accessible and areas of lesser development, (backcountry trails and walk-in campgrounds) may have fewer accessibility features.

Architectural Barriers Act of 1968, P.L. 90-480, 82 Stat. 718, 42 U.S.C. §4151 et seq.

Makes buildings or facilities constructed, altered, leased, or financed by the federal government or a federal grant since August 12, 1968, subject to the statute. Establishes standards for design/construction or alteration of buildings to ensure that physically handicapped persons have ready access to and use of such buildings. Excludes historic structures from the standards until they are altered.

Rehabilitation Act of 1973, P.L. 93-112, 87 Stat. 357, 29 U.S.C. §701 et seq., as amended by the Rehabilitation Act Amendments of 1974, 88 Stat. 1617

Sets forth a broad range of services and basic civil rights for handicapped individuals. Establishes the architectural and transportation barriers compliance board to ensure compliance with standards set by GSA and other federal agencies. Contains data-gathering and reporting requirements. Prohibits discrimination (section 504) against persons with visual, hearing, mobility, and mental impairments.

CULTURAL RESOURCES

Abandoned Shipwreck Act of 1987, P.L. 100-298, 102 Stat. 432, 42 U.S.C. §2101-6

Asserts U.S. title to three categories of abandoned shipwrecks: those embedded in a state's submerged lands; those embedded in coralline formations protected by a state on its submerged lands; and those located on a state's lands that are included or determined eligible for inclusion on the National Register of Historic Places. The law then transfers title for a majority of those shipwrecks to the respective states, and provides that states develop policies for managing the wrecks so as to protect natural resources, permit reasonable public access, and allow for recovery of shipwrecks consistent with the protection of historical values and the environmental integrity of wrecks and sites.

American Folklife Preservation Act of 1976, P.L. 94-201, 89 Stat. 1130, 20 U.S.C. §§2101-2107

Establishes U.S. policy to "preserve, support, revitalize, and disseminate American folklife traditions and arts." Defines folklife, establishes American Folklife Center, and authorizes the librarian of Congress to promote various American folklife programs.

American Indian Religious Freedom Act, P.L. 95-341, 92 Stat. 469, 42 U.S.C. §1996

Declares policy to protect/preserve the inherent and constitutional right of the American Indian/Eskimo/Aleut/Native Hawaiian people to believe/express/ exercise their traditional religions and calls for a now-completed evaluation of federal procedures/programmatic objectives/policies. Imposes no specific procedural duties on federal agencies. Provides that religious concerns should be accommodated or addressed under NEPA or other appropriate statutes.

Antiquities Act of 1906, P.L. 59-209, 34 Stat. 225, 16 U.S.C. §432 and 43 CFR 3

Provides for the protection of historic or prehistoric remains, "or any antiquity," on federal lands; establishes criminal sanctions for unauthorized destruction or taking of antiquities; authorizes the president to declare national monuments by proclamation; authorizes the scientific investigation of antiquities on federal lands, subject to permit and regulations. Protects

historic monuments and ruins on public lands. Allows the National Park Service not to have to seek permits for activities carried out on NPS land by authorized personnel. Superseded by the Archeological Resources Protection Act (1979) as an alternative federal tool for prosecution of antiquities violations in national park system areas.

Archeological and Historic Preservation Act of 1974, P.L. 93-291, 88 Stat. 174, 16 U.S.C. §469

Amends and updates the Reservoir Salvage Act of 1960 to broaden legislation beyond dam construction. Provides for the preservation of significant scientific, prehistoric, historic, or archeological data (including relics and specimens) that might be lost or destroyed as a result of (1) the construction of dams, reservoirs, and attendant facilities, or (2) any alteration of the terrain caused as a result of any federal construction project or federally licensed project, activity, or program. Provides for the recovery of data from areas to be affected by federal actions.

Archeological Resources Protection Act of 1979, P.L. 96-95, 93 Stat. 712, 16 U.S.C. §470aa et seq. and 43 CFR 7, subparts A and B, 36 CFR 79

Secures the protection of archeological resources on public or Indian lands and fosters increased cooperation and exchange of information between the private/governmental/professional community in order to facilitate the enjoyment and education of present and future generations. Regulates excavation and collection on public and Indian lands. Defines archeological resources to be any material remains of past human life or activities that are of archeological interest and are at least 100 years old. Requires notification of Indian tribes who may consider a site of religious or cultural importance prior to issuing permit. Amended in 1988 to require the development of plans for surveying public lands for archeological resources and systems for reporting incidents of suspected violations.

Executive Order 11593: Protection and Enhancement of the Cultural Environment, 3 CFR 1971

Instructs all federal agencies to support the preservation of cultural properties; directs them to identify and nominate to the National Register of Historic Places cultural properties under their jurisdiction and to "exercise caution . . . to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered."

Historic Preservation Certifications Pursuant to the Tax Reform Act of 1976, the Revenue Act of 1978, the Tax Treatment Extension Act of 1980, and the Economic Recovery Tax Act of 1981, 36 CFR 67

Establishes procedures whereby owners or holders of long-term leases for old and/or historic buildings may obtain certifications to gain federal tax credits for rehabilitation; describes tax deductions for owners who donate interests in cultural resources for preservation purposes.

Historic Sites Act, P.L. 74-292, 49 Stat. 666, 16 U.S.C. §§461-467, and 36 CFR 65

This act establishes "national policy to preserve for public use historic sites, buildings and objects of significance for the inspiration and benefit of the people of the United States." Directs the secretary of the interior to carry out wide-ranging programs in the field of history and places with the secretary the responsibility for national leadership in the field of historic preservation. Authorizes the Historic American Buildings Survey, the Historic American Engineering Record, and the National Survey of Historic Sites and Buildings (national historic landmarks).

Management of Museum Properties Act of 1955, P.L. 84-127, 69 Stat. 242, 16 U.S.C. §18f

Authorizes the National Park Service to accept donations or bequests of museum properties, purchase them from donated funds, exchange them, and receive and grant museum loans.

National Historic Preservation Act, as amended, P.L. 89-665, 80 Stat. 915, 16 U.S.C. §470 et seq. and 36 CFR 18, 60, 61, 63, 68, 79, 800

Declares a national policy of historic preservation, including the encouragement of preservation on the state and private levels; authorizes the secretary of the interior to expand and maintain a National Register of Historic Places that includes properties of local, state, and national significance; authorizes matching federal grants to the states and the National Trust for Historic Preservation for surveys and planning and for acquiring and developing national register properties; establishes the Advisory Council on Historic Preservation; requires federal agencies to consider the effects of their undertakings on national register properties and to provide the advisory council opportunities to comment (§106). Amended in 1976 (P.L. 94-422) to expand §106 to properties eligible for, as well as listed on, the national register. Amended in 1980 (P.L. 96 515) to incorporate E.O. 11593 requirements, to give national historic landmarks extra protection in federal project planning, and to permit federal agencies to lease historic properties and apply the proceeds to any national register properties under their administration. Amended in 1992 to, among other things, redefine federal undertakings, address "anticipatory demolition," and emphasize the interests and involvement of Native Americans and Native Hawaiians.

National Trust Act of 1949, P.L. 81-408, 63 Stat. 927, 16 U.S.C. §§468c-e

Facilitates public participation in the preservation of sites, buildings, and objects of national significance or interest. Creates the National Trust for Historic Preservation and empowers it to acquire and hold property for historic preservation purposes. Supported in part by NPS-administered funds.

Native American Grave Protection and Repatriation Act, P.L. 101-601, 104 Stat. 3049, 25 U.S.C. §§3001-3013

Assigns ownership or control of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are excavat-

ed or discovered on federal lands or tribal lands after passage of the act to lineal descendants or culturally affiliated Native American groups; establishes criminal penalties for trafficking in remains or objects obtained in violation of the act; provides that federal agencies and museums that receive federal funding shall inventory Native American human remains and associated funerary objects in their possession or control and identify their cultural and geographical affiliations within five years, and prepare summaries of information about Native American unassociated funerary objects, sacred objects, or objects of cultural patrimony. Provides for the repatriation of such items when lineal descendants or Native American groups request it.

Protection of Historic and Cultural Properties, E.O. 11593; 36 CFR 60, 61, 63, 800; 44 FR 6068

See Executive Order 11593.

Public Buildings Cooperative Use Act of 1976, P.L. 94-541, 90 Stat. 2505, 42 U.S.C. §4151-4156

Requires GSA to acquire and use space to accommodate federal agencies in buildings of architectural or cultural significance where feasible. Amends the Architectural Barriers Act on accessibility.

Reservoir Salvage Act of 1960, P.L. 86-523, 70 Stat. 220, 16 U.S.C. §§469-469c

Provides for the recovery and preservation of "historical and archeological data (including relics and specimens)" that might be lost or destroyed in the construction of dams and reservoirs.

Tax Reform Act of 1976, P.L. 94-455, 90 Stat. 1916

Provides tax incentives to encourage the preservation of commercial historic structures, including those operated by park concessioners.

World Heritage Convention, 1980, P.L. 96-515, 94 Stat. 3000

Title IV of National Historic Preservation Act Amendments directs the secretary of the interior to nominate properties of international significance to the World Heritage List; requires federal agencies to consider the effects of their undertakings on properties outside the United States on the World Heritage List or on the applicable countries' equivalents of the National Register of Historic Places.

NATURAL RESOURCES

Acid Precipitation Act of 1980, P.L. 96-294, 94 Stat. 770, 42 U.S.C. §8901 et seq.

Seeks to identify the causes and sources of acid precipitation and to evaluate the environmental, social, and economic effects of acid precipitation. Calls for a comprehensive 10-year program to be implemented by the Interagency Acid Precipitation Task Force.

Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act, E.S. 80-3, 08/11/80, 45 FR 59109

Requires a determination of the effects of a proposed federal agency action on prime or unique agricultural lands as integral to the EIS process; requires such lands to be considered as a factor in deciding whether or not to prepare an EIS. (Prime and unique farmlands are identified by the Natural Resources Conservation Service.)

Bald and Golden Eagles Protection Act, as amended, P.L. Chapter 28, 54 Stat 250, 16 U.S.C. §§668-668d

Prohibits taking, possessing, and trade in bald and golden eagles. Provides criminal and civil penalties.

Clean Air Act, as amended, P.L. Chapter 360, 69 Stat. 322, 42 U.S.C. §7401 et seq.

Seeks to prevent and control air pollution; to initiate and accelerate research and development; and to provide technical and financial assistance to state and local governments in connection with the development and execution of air pollution programs. Establishes requirements for areas failing to attain national ambient air quality standards. Provides for the prevention of significant deterioration of areas where air is cleaner than NAAQS.

Coastal Barrier Resources Act of 1982, P.L. 97-348, 96 Stat. 1653, 16 U.S.C. §3501 et seq.

Establishes a coastal barrier resources system that identifies and maps certain essentially undeveloped coastal barrier features (islands, spits, etc.) and their associated aquatic habitats along the Atlantic and Gulf of Mexico coastlines. The act restricts certain federal actions (construction of bridges, roads, docks, shoreline stabilization features, etc.) or federal assistance for such actions in national park system areas. The act was amended by the Great Lake Coastal Barriers Act of 1988 to include coastal barriers in the shore areas of the Great Lakes.

Coastal Zone Management Act of 1972, as amended, P.L. 92-583, 86 Stat. 1280, 16 U.S.C. §1451 et seq.

States national policy to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zones" (including those bordering the Great Lakes) and to encourage and assist the states (through 1977) in developing their management plans for the nonfederal lands and waters of their coastal zones. Requires federal actions to conform to approved state coastal zone management plans to the maximum extent possible. Stipulates that applicants for federal licenses and permits certify that their activities are consistent with management programs of directly affected states.

Comprehensive Environmental Response Compensation and Liability Act (commonly referred to as CERCLA or the Superfund Act), P.L. 96-510, 94 Stat. 2767, 42 U.S.C. §9601 et seq.

Regulates the cleanup of hazardous or toxic contaminants at closed or abandoned sites. Establishes a fund available to states for the cleanup of abandoned sites (funds come from taxes levied on designated chemical feedstocks). Allows the government to recover the cost of the cleanup and associated damages by suing the responsible parties. Reauthorized in 1986 under the Superfund Amendment Reauthorization Act; §120 specifies that CERCLA applies to federal facilities.

Emergency Planning and Community Right-to-Know Act, P.L. 99-499, 100 Stat. 1725, 42 U.S.C. §1101

Sets up procedures for emergency planning, emergency notification, and community right-to-know reporting on chemicals and emissions inventory. Designed to protect communities from hazardous chemicals by making sure that advance planning occurs for potential emergencies. Exempts all federal agencies but the Department of the Interior strongly encourages voluntary compliance with all portions of the law.

Endangered Species Act of 1973, as amended, P.L. 93-205, 87 Stat. 884, 16 U.S.C. §1531 et seq.

Requires federal agencies to ensure that any action authorized, funded, or carried out does not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modifications of critical habitat. Section 7 requires all federal agencies to consult with Interior and to insure that any action authorized, funded or carried out by such agenc(ies) . . . is not likely to jeopardize the continued existence or destruction or adverse modification of habitat of such species which is . . . critical.

Endangered Species Conservation Act of 1969

Provides a program for the conservation, protection, restoration, and propagation of selected species of native fish and wildlife, including migratory birds that are threatened with extinction.

Estuary Protection Act, P.L. 90-454, 82 Stat. 625, 16 U.S.C. §1221

Provides a means for evaluating the nation's estuaries to maintain a reasonable balance between the need to protect their natural beauty and to develop them for further growth of our nation.

Executive Order 11514: Protection and Enhancement of Environmental Quality, as amended by EO 11991, 40 CFR

Declares that the federal government "will provide leadership in protecting and enhancing the quality of the Nation's environment to sustain and enrich human life. Federal agencies shall initiate measures needed to direct their policies, plans, and programs so as to meet environmental goals."

Requires CEQ to issue regulations to federal agencies concerning the implementation of the procedural as well as substantive provisions of

NEPA. Strengthens CEQ's power by requiring agencies to comply with their regulations.

Executive Order 11988: Floodplain Management, 42 FR 26951, 3 C.F.R. 121 (Supp. 177)

Requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modifications of floodplains, and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Directs all federal agencies to avoid, if possible, development and other activities in the 100-year (or base) floodplain. Requires that existing structures or facilities in such areas and needing rehabilitation, restoration, or replacement be subject to the same scrutiny as new facilities or structures. (In the case of historic structures, this scrutiny will be but one factor in determining their preservation.) Prohibits locating highly significant and irreplaceable records, historic objects, structures, or other cultural resources in the 500-year floodplain. Also prohibits any critical actions (actions for which even a slight risk is too great, such as clinics, hazardous materials storage, major fuel storage facilities, and 40,000 gpd or larger sewage treatment facilities) from occurring in the 500-year floodplain.

Executive Order 11990: Protection of Wetlands, 42 FR 26961, 3 CFR 121 (Supp. 177)

Requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.

Federal Cave Resources Protection Act of 1988, P.L. 94-377, 102 Stat. 4546, 16 U.S.C. §4301

Requires the identification and preservation of significant caves on federal land and fosters increased cooperation and information exchange between government agencies and others on the use of these caves for scientific, educational, and recreational purposes.

Federal Insecticide, Fungicide, and Rodenticide Act, P.L. 92-516, 86 Stat. 973, 7 U.S.C. §136 et seq.

Requires that all pesticides be registered, and that pesticides be used in accordance with this registration. Restricts the use of certain pesticides and regulates others as toxic pollutants under the Clean Water and Safe Drinking Water Acts.

Federal Water Pollution Control Act (commonly referred to as Clean Water Act), P.L. 92-500, 33 U.S.C. §1251 et seq., as amended by the Clean Water Act, P.L. 95-217

Furthers the objectives of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters and of eliminating the discharge of pollutants into navigable waters by 1985. Establishes effluent limitation for new and existing industrial discharge into U.S. waters. Authorizes states to substitute their own water quality management plans developed

under section 208 of the act for federal controls. Provides an enforcement procedure for water pollution abatement. Requires conformance to permit required under section 404 for actions that may result in discharge of dredged or fill material into a tributary to, wetland, or associated water source for a navigable river.

Fish and Wildlife Coordination Act of 1958, as amended, P.L. 85-624, 72 Stat. 563, 16 U.S.C. §661 et seq.

Applies to major federal water resources development plans (impounding, diverting, deepening the channel, or otherwise controlling or modifying streams or other bodies of water). Requires federal agencies to consult the Fish and Wildlife Service and parallel state agencies whenever such plans result in alteration of a body of water. Requires that wildlife conservation receive equal consideration with other features of water resource development. Triggers coordination with the Fish and Wildlife Service upon application for a 404 permit.

Flood Disaster Protection Act of 1973, P.L. 93-234, 87 Stat. 975, 12 U.S.C. §24, §1709-1

Substantially increases the coverage limits of the national flood insurance program. Requires state and local communities, as a condition of future federal assistance, to participate in the program and to adopt adequate floodplain ordinances and enforcement mechanisms. Requires property owners acquiring or improving land or facilities in identified flood hazard areas, and who are being assisted by federal institutions (including by federally regulated or insured institution), to purchase flood insurance.

Food Security Act of 1985 (Swampbuster Act)

Restricts a number of federal benefits to farmers who, after December 23, 1985, produce agricultural commodities on certain "converted wetland."

Geothermal Steam Act of 1970, as amended, 84 Stat. 1566, 30 U.S.C. §§1001-1027

Authorizes leasing of lands for exploration, development, and production of geothermal steam (which is broadly defined to include more than simply steam). Amended in 1988 to prevent issue of geothermal leases if there is an adverse effect on national park system units. Also prevents the use of existing or new geothermal sources in Corwin Springs, near Yellowstone, until after the U.S. Geological Survey/National Park Service prepare a study for Congress.

Geothermal Steam Act Amendments, P.L. 100-443, 30 U.S.C. §§1001, 1105, 1026, 1027

Provides added protection for selected parks by requiring the Bureau of Land Management to obtain National Park Service consent before issuing a geothermal lease on lands adjacent to listed park units. (The regulations at 43 CFR 3200 govern geothermal leasing on lands adjacent to park units.)

Manguson Fishery Conservation and Management Act of 1976, P.L. 94-625, 90 Stat. 331m 16 U.S.C. §1801 et seq.

Provides for the protection, conservation, and enhancement of U.S. fishery resources. Extends the exclusive U.S. fisheries zone from 12 to 200 miles effective July 1, 1976, and provides for the development of regional fisheries management plans and regulations to govern fishing within the fisheries zone and to provide control over anadromous fish to the extent of their range.

Marine Mammal Protection Act, P.L. 92-552, 86 Stat. 1027, 16 U.S.C. §1361 et seq.

Provides marine mammals with necessary and extensive protection from commercial exploitation, technology, and possible extinction. Exceptions are allowed for specific, approved research and incidental taking in the course of certain commercial fishing operations. Any Indian, Aleut, or Eskimo who resides in Alaska and who dwells on the coast of the North Pacific Ocean or the Arctic Ocean is exempt from the moratorium on taking if such taking is for subsistence purposes or is done for the purposes of creating and selling authentic native articles of handicrafts and clothing, in each case accomplished in a non-wasteful manner.

Marine Protection, Research, and Sanctuaries Act of 1972 (commonly known as Ocean Dumping Act), P.L. 92-532, 86 Stat. 1052, 16 U.S.C. §1361 et seq.

Establishes a policy to regulate ocean dumping and to prevent or strictly limit ocean dumping of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. Titles I and II: deal with ocean dumping and have little relation to most NPS activities. Title III: allows designation of marine sanctuaries. Requires consideration of the relationship between alternative actions and existing or proposed marine sanctuaries in the region, as well as the desirability of establishing marine sanctuaries within the park or its regions where appropriate. Authorizes the Corps of Engineers (§103) to issue permits for the transportation of dredged material for the purpose of dumping into ocean waters.

Migratory Bird Conservation Act, P.L. Chapter 257, 45 Stat. 1222, 16 U.S.C. §715 et seq.

Aids in the restoration of scarce or extinct species and regulates the introduction of American or foreign birds or other animals.

Migratory Bird Treaty Act of 1918, P.L. 186, 40 Stat. 755

Prohibits the taking, possession, and trade of migratory birds, except as permitted by regulations. Provides search, arrest, and seizure authority to authorized USDA employees; provides for civil and criminal penalties for violation; allows states to impose more restrictive measures to protect migratory birds; and allows for taking for scientific and propagating purposes.

National Environmental Policy Act of 1970, P.L. 91-190, 83 Stat. 852, 42 U.S.C. §4321 et seq.

Establishes policy, sets goals, and provides means for carrying out the a national policy for environmental protection. Contains an "action-forcing" provision to ensure that federal agencies act according to the letter and spirit of the law. Requires a systematic analysis of major federal actions that will consider all reasonable alternatives as well as an analysis of short-term and long-term, irretrievable and irreversible, and unavoidable impacts. Also establishes the Council on Environmental Quality.

National Flood Insurance Act of 1968, P.L. 90-448, 82 Stat. 572, 42 U.S.C. §4001 et seq., as amended

Establishes a national flood insurance program, encouraging state and local governments to institute planning and land use programs to help reduce damage in flood risk areas, and ensuring that federal actions, including licensing and permitting, are coordinated with these efforts

National Park System Final Procedures for Implementing E.O. 11988 and 11990, 45 FR 35916, as revised by 47 FR 36718

E.O. 11988 and 11990 direct the Water Resources Council to prepare guidelines for federal agencies, which it did February 10, 1978. The Department of the Interior issued guidelines in 520 DM on June 20, 1979. The National Park Service published final procedures May 28, 1980 (45 FR 35916) that were amended August 23, 1982 (47 FR 36718). The Park Service wrote new floodplain guidelines as Special Directive 93-4. Wetland guidelines are being revised.

Protection and Enhancement of Environmental Quality, E.O. 11514, as amended by E.O. 11991, 35 FR 4247; 1977, 42 FR 26967

See Executive Order 11514.

Resource Conservation and Recovery Act, P.L. 94-580, 30 Stat. 1148, 42 U.S.C. §6901 et seq.

Governs the disposal of hazardous and/or solid waste, including landfills (NPS Staff Directive 76-20). Establishes guidelines for the collection, transport, separation, recovery, and disposal of solid waste. Creates a major federal hazardous waste regulatory program. Provides assistance to establish state or regional solid waste plans.

Rivers and Harbors Act of 1899, 33 U.S.C. Chapter 425, as amended by P.L. 97-332, October 15, 1982, and P.L. 97-449, 33 U.S.C. §§401-403

Establishes Army Corps of Engineers' regulatory authority over U.S. navigable waters. Establishes permit requirements for the construction of bridges, causeways, dams, or dikes within or over navigable waters of the United States. (Bridge and causeway construction is regulated by the secretary of transportation, while dam and dike permits are reviewed by the Corps of Engineers.) §10: requires a Corps permit for the construction of any "obstruction of navigable waters" of the U.S., and for any excavation, fill, or other modification to various types of navigable waters. §13: requires a Corps permit for the discharge of refuse of any kind (except liq-

uid from sewers or urban runoff) from land or vessel, into the navigable U.S. waters or into their tributaries. Similarly prohibits the discharge of refuse upon the banks of navigable waters or their tributaries where the refuse could be washed into the water.

Safe Drinking Water Act, P.L. 93-523, 88 Stat. 1660, 42 U.S.C. §300f et seq., 42 U.S.C. §201 and 21 U.S.C. §349

Directs the Environmental Protection Agency to publish and enforce regulations for the maximum allowable contaminant levels in drinking water. Establishes the mechanism of national drinking water standards. Regulates the underground injection of wastes and other materials.

Soil and Water Resources Conservation Act of 1977

Requires appraisal by secretary of agriculture of information and expertise on the conservation and use of soils, plants, woodlands, etc.

Water Resources Planning Act of 1965 (P.L. 89-80, 42 U.S.C. § 1962 et seq.) and Water Resource Council's Principles and Standards, 44 FR 723977

States a national policy "to encourage the conservation, development, and utilization of water and related land resources on a comprehensive and coordinated basis by the federal government, states, localities, and private enterprises with the cooperation of all affected federal agencies, states, local governments, individuals, corporations, business enterprises, and others concerned." Establishes the Water Resources Council, which has the responsibility to assess the adequacy of water supplies, study the administration of water resources, and develop principles, standards, and procedures for federal participants in the preparation of comprehensive regional or river basin plans. Establishes the framework for state and federal cooperation through a series of river basin commissions. (WRC principles and standards for planning water and related land resources have been revised to achieve national economic development and environmental quality objectives.)

Watershed Protection and Flood Prevention Act, P.L. 92-419, 68 Stat. 666, 16 U.S.C. §100186

Authorizes the secretary to cooperate with state and local governments, including soil and water conservation districts and flood control districts, in planning and analyzing trends in flood protection and watershed conservation activities and facilities. The secretary is to be consulted about such proposed "works of improvement," with regard to activities or facilities that may affect DOI lands.

OTHER

Administrative Procedures Act, 5 U.S.C. § 551-559, §§701-706

Requires public participation in agency rulemaking and institutionalizes an appeals process. Attempts to avoid "arbitrary and capricious" decisions.

Aircraft Overflights Study Act of 1987, P.L. 101-91, 101 Stat. 674

Airport and Airway Development Act of 1970, P.L. 91-258, 84 Stat. 226, 49 U.S.C. § 2208

Requires airport development projects to provide for the protection and enhancement of the natural resources and environmental quality and limits the secretary of transportation in frustrating this purpose. No airports can be authorized with adverse environmental impact unless it is determined in writing that no feasible and prudent alternatives exist and steps have been taken to minimize adverse effects. Relationship is identical to §4(f) of Department of Transportation Act.

Airports In or Near National Parks Act, 64 Stat. 27, 16 U.S.C. §§ 7a-e

Allows the secretary of the interior to plan, acquire, establish, construct, enlarge, or improve airports in or close to national park system units if necessary to the proper performance of DOI functions. Requires all airports to be operated as public airports.

Arizona Desert Wilderness Act (contains NPS boundary study provisions), P.L. 101-628, 16 U.S.C. §§1a-5, 460ddd, 460fff, and many more

Expands San Antonio Mission NHP; establishes Amistad and Lake Meredith as national park system units; authorizes Underground Railroad Study of Alternatives; includes Civil War Sites Study Act; revises NPS Advisory Board by increasing from 12 to 16 and expanding disciplines, requires recommendations on the designation of national natural and historic landmarks; establishes an NPS Advisory Council to provide advice to Advisory Board; requires the National Park Service to prepare a boundary report; requires the development of boundary adjustment criteria; requires consultation with state and local governments, affected landowners, and private national, regional, and local organizations; requires cost estimates and priorities by area and by the National Park Service for boundary adjustments.

Concessions Policy Act of 1965, P.L. 89-249, 79 Stat. 969, 16 U.S.C. § 20 et seq.

Requires that public accommodations/facilities/services in national park system areas be provided only under carefully controlled safeguards to protect against despoliation. Limits development to those areas that are necessary and appropriate for public use and enjoyment and that are consistent to the highest practicable degree with the preservation and conservation of the areas. Must afford the concessioner a reasonable opportunity to make a profit. Also includes protection against loss of investment in tangible property, comparable rates to be charged, preferential right to provide new or additional accommodations, possessory interest in improvements on land owned by the federal government, and record-keeping.

Department of Transportation Act of 1966, P.L. 89-670, 80 Stat. 931, 49 U.S.C. §303

Restricts the use of park lands for federally supported highways and other projects requiring DOT approval. Section 4(f): mandates that no project that requires use of land from a public park, a recreation area, or a wildlife or waterfowl refuge of national, state, or local significance be approved

unless there is no feasible or prudent alternative and that all possible planning be done to minimize the harm to such an area.

Disposal of Materials on Public Lands (Material Act of 1947), 30 U.S.C. §§601-604

Prohibits the sale of "salable" or "common variety" minerals in national park system units (petrified wood, sand, stone, gravel, pumice, pumicite, cinders, limestone, and clay). However, the secretary may sell for limited purposes sand, gravel, and rock to the residents of the Stehekin community in Lake Chelan NRA (30 U.S.C. §90c-1b).

Energy Supply and Environmental Coordination Act of 1974

Provides the basis for issuing Executive Order 12003 and Staff Directive 78-10.

Executive Order 11987: Exotic Organisms, 42 FR 26407

Restricts the introduction of organisms into the United States that are not part of its natural ecosystem.

Executive Orders 11989 (42 FR 26959) and 11644: Offroad Vehicles on Public Lands

Promulgates guidelines for the controlled use of off-road vehicles on public lands.

Executive Order 12003: Energy Policy and Conservation, 3 CFR 134 (Supp. 1977), 42 U.S.C. §2601

Requires all agencies to submit an overall energy conservation plan, with a goal of 20% savings in 1985 compared to 1975. For new buildings, the goal is 45% savings. Applies to government-owned buildings assigned to the concessioners and "concession-owned" buildings if they are office buildings, hospitals, schools, prison facilities, multi-family dwellings, or storage facilities.

Executive Order 12008: Federal Compliance with Pollution Control Standards

Establishes procedures and responsibilities to ensure that all necessary actions are taken to prevent, control, and abate environmental pollution from federal facilities and activities.

Executive Order 12372: Intergovernmental Review of Federal Programs, 47 FR 30959

Section 2(b): requires federal agencies to communicate with state and local officials as early in the planning process as is feasible to explain plans and actions.

Federal Advisory Committee Act, P.L. 92-463, 5 U.S.C. App.

Controls the growth and operation of the "numerous committees, boards, commissions, councils, and similar groups which have been established to advise officers and agencies in the executive branch of the Federal Government." Does not apply to a meeting of nongovernment employees

if the intent of the group meeting is to obtain information or viewpoints from individual attendees as opposed to gathering advice, opinions or recommendations from the group acting in a collective mode. Potentially becomes an issue if the function/mission of the group changes over time and the agency begins to use the group as a source of consensus advice or recommendations. (The more static the group composition, i.e., the same attendees at each meeting, the more likely an issue of FACA's applicability will arise.)

Federal Coal Leasing Amendments Act of 1976, P.L. 94-377, 90 Stat. 1083, 30 U.S.C. §201

Prohibits coal leasing in national park system units. Also requires inclusion of various environmental protection measures in coal leases issued under the Mineral Leasing Acts of 1920 and 1947 in order to help reduce the adverse impacts generated from coal development adjacent to parks.

Federal Land Policy and Management Act, P.L. 94-579, 90 Stat. 199, 43 U.S.C. §1714 et seq.

Provides for grazing on public lands and the issuance or renewal of rights-of-way. Establishes that the principles of multiple use management and sustained yields be used in the management of public lands. Requires the preparation and maintenance of inventories of all public lands and their resources and other values; requires the development and maintenance of land use plans for the use of public lands; provides for the sale, exchange, or purchase of lands. Provides for personnel in the Bureau of Land Management. Also contains a land exchange authority under which the secretary of the interior may exchange federal lands or interests in lands outside national park system units for nonfederal lands or interests in lands within national park system units.

Federal Power Act of 1920, P.L. Chapter 285, 41 Stat. 106, 16 U.S.C. §791a et seq.

Authorizes the Federal Energy Regulatory Agency (FERC) to issue licenses for the construction, operation, and maintenance of dams, water conduits, reservoirs, power houses, transmission lines, and other physical structures of hydropower projects. Also authorizes FERC to grant licensing exemptions to facilities 15MW or less on nonfederal lands and to small hydroelectric power projects of 5000 KW or less at existing dams. (The exemptions require FERC to consult with state and federal fish and wildlife agencies and to include the terms and conditions the agencies consider appropriate to mitigate the loss of, or damage to, fish and wildlife resources.)

Federal Water Power Act, P.L. Chapter 285, 41 D 1063, 16 U.S.C. §823a, as amended, 16 U.S.C. §797

Prescribes that what is now the Federal Energy Regulatory Commission cannot authorize, permit, lease, or license any facilities for the development, storage, and transmission of water and/or power within a national park without specific authority from Congress. Exceptions are where a park's enabling legislation or other statute specifically provides for such activities (Lake Mead, Glen Canyon, etc.).

Federal Water Project Recreation Act, 79 Stat. 213, P.L. 89-72, 16 U.S.C. §§460l-12 to 460l-21

Requires that full consideration be given to recreation and fish and wildlife enhancement in the construction of water resource projects. Gives the secretary of the interior authority to provide recreation development at projects and may operate, maintain, and acquire lands for these purposes for existing, authorized, or reauthorized projects. Allows for lands acquired for recreational purposes at any project by any federal agency to be transferred to the Department of the Interior. Funnels recreational use fees to the Land and Water Conservation Fund.

Forest and Rangeland Renewable Resources Planning Act, P.L. 95-307, 92 Stat. 353, 16 U.S.C. §1600 et seq.

Establishes land and resource management planning system for the Forest Service and also expresses congressional insistence on inventory and monitoring of natural resources on all public lands.

Freedom of Information Act, P.L. 93-502, 5 U.S.C. §552 et seq.

Requires the government to make its records available to any person upon written request unless an item is exempt from disclosure.

Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the Nationwide Inventory, 45 FR 59189, 08/15/80, ES 80-2

Intergovernmental Cooperation Act of 1968, P.L. 90-577, 40 U.S.C. §§531–535 and 31 U.S.C. §§6501-6508

Governs grants-in-aid to states, assignment and consultation by federal employees to state/local government units, and operation between federal actions and state and local units regarding planning.

Intergovernmental Coordination Act of 1969, 42 U.S.C. §§4101, 4231, 4233

Requires floodplain consultation among numerous federal agencies.

Land and Water Conservation Fund Act of 1965, as amended, P.L. 88-578, 78 Stat. 897, 16 U.S.C. §§460l-4 to 460l-11

Establishes a conservation fund to assist state and federal agencies in meeting present and future outdoor recreational demands. Funds the federal government in its efforts to provide public recreation and to preserve threatened fish and wildlife. Requires the preparation of state comprehensive outdoor recreation plans. Authorizes fee collection activities. §6(f): requires that no property acquired or developed with assistance from the LWCF be converted to other than public outdoor recreation uses without approval of the secretary of the interior. Allows the secretary to approve a conversion only upon a finding that it is in accord with the current comprehensive statewide plan and that there will be a fair substitution of other recreation properties.

Mineral Leasing Act of 1920, 30 U.S.C. §181 et seq., as amended

Provides authority for disposal of leasable minerals on "public domain" federal lands. Prohibits the leasing of federally owned minerals in national park system units except where specifically authorized by law (Glen Canyon, Lake Mead, Whiskeytown).

Mineral Leasing Act for Acquired Lands of 1947, P.L. Chapter 681, 61 Stat. 681, 30 U.S.C. §351 et seq.

Authorizes the disposal of leasable minerals (including coal, oil, and gas) from federal lands that were acquired by the United States, i.e. lands that were nonfederally owned prior to U.S. obtaining title. Like the Mineral Leasing Act of 1920, prohibits the leasing of federally owned minerals in national park system units except where specifically authorized by law.

Mineral Materials Disposal Act of 1947, 30 U.S.C. §601 et seq.

Mining Law of 1872, 30 U.S.C. §22 et seq.

Provides that all public domain lands not withdrawn are open to prospecting and the staking of claims. Allows individuals to file mining claims for federal minerals on federal lands open to mineral entry. Gives claimants a possessory right on unpatented mining claims, which permits them to extract and remove federal minerals from claims but does not give them ownership of the land. Allows full title to the mineral from the federal government, and in most cases, the surface and all resources as well, to be obtained through the patent process. (Most national park system units were closed to mineral entry under this law by their enabling laws or proclamations. The Mining in the Parks Act of 1976 closed the last six NPS units that were still open to claim location.)

(All NPS units are closed to the location and filing of new mining claims, the selling of federal mineral materials, and the leasing of federal minerals with the exception of four NPS-managed national recreation areas where mineral leasing has been authorized by Congress and permitted under regulation. However, the holders of valid claims and leases that predate the establishment of a unit or exist in one of the four NRAs open to federal mineral leasing do possess rights to develop the mineral associated with their claims or leases. Their ability to exercise these rights is dependent on the nature of potential impacts on park resources and values. If the potential impacts are deemed unacceptable, the National Park Service will need to extinguish the pertinent right through purchase, exchange, or donation.)

Mining Activity within National Park Service Areas, P.L. 94-429, 90 Stat. 1342 16 U.S.C. §1901 et seq.

Requires all mining claims within national park system boundaries to be recorded with the secretary of the interior; any claim not recorded is presumed abandoned and void. Gives the National Park Service specific authority to regulate mining activities associated with valid existing mining claims in order to protect park resources.

National Trails System Act, P.L. 90-543, 82 Stat. 919, 16 U.S.C. §§1241-1251

Establishes a national system of recreational, scenic, and historic trails and prescribes the methods and standards for adding components to the system.

National Wildlife Refuge System Administration Act, P.L. 93-509, 88 Stat. 1603, 16 U.S.C. §668dd-ee

Establishes the national wildlife refuge system and preserves fish and wildlife species and their habitat, particularly those species threatened with extinction. (Precursor to the Endangered Species Act.)

Noise Control Act of 1972, as amended, P.L. 92-574, 42 U.S.C. §4901 et seq.

Sets standards and procedures for limiting noise that jeopardizes Americans' health and welfare. Requires publication of information on limits of noise required to protect public health and welfare, Authorizes the Office of Noise Abatement within the Environmental Protection Agency to specify noise limits for products distributed in commerce.

Outdoor Recreation Coordination Act of 1963, P.L. 88-29, 77 Stat. 49

Promotes the coordination and development of effective outdoor recreation programs. Authorizes the secretary of the interior to inventory, classify, and develop a nationwide plan for outdoor recreation needs and resources. Also provides for technical assistance, regional, and interdepartmental cooperation, research and education, and acceptance of donations.

Outer Continental Shelf Lands Act, P.L. Chapter 345, 67 Stat. 462, 43 U.S.C. §1331 et seq. and §1801 et seq.

Sets policies and procedures for managing oil and gas resources of the Outer Continental Shelf, including the issuance of mineral leases. Requires the lessee, prior to development, to submit a development and production plan to the secretary for approval. Authorizes a license or permit to both be granted without concurrence by the affected state if the plan is consistent with its approved coastal zone management program. Amendments in 1987: created the Offshore Oil Pollution Compensation fund to pay for the removal of oil spilled or discharged as a result of activities on the Outer Continental Shelf. Under these provisions allows public entities, such as the National Park Service, to file claims against the fund to recover cleanup costs.

Payment in Lieu of Taxes Act, P.L. 94-565, 90 Stat. 2662, 31 U.S.C. §6901 et seq.

Provides for payments to local governments based on the acreage and population within the boundaries of the locality.

Policies on Construction of Family Housing for Government Personnel, OMB A-18

Allows housing to be provided only where service cannot be rendered without onsite employees and at remote areas (reasonable 2-hour commuting distance). Specifies that insufficiency or inadequacy of housing can be shown by establishing unavailability, substandard design, construction or location, or high cost.

Procedures for Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the Nationwide Inventory, E.S. 80-2, 08/15/80, 45 FR 59191

Establishes required procedures and consultation in order to avoid adverse effects on potential wild and scenic rivers.

Revised Statute 2477, Right-of-Way across Public Lands, Act of July 26, 1866, 43 U.S.C. §932 (1976), repealed by FLPMA §706(a) October 21, 1976

Granted a right-of-way across public lands for all lands not otherwise withdrawn by the federal government. Based on state laws, applies mainly to Alaska and Utah. (NPS is developing guidelines to guide in processing RS2477 right-of-way assertions.)

Surface Mining Control and Reclamation Act, P.L. 95-87, 91 Stat. 445, 30 U.S.C. §1201 et seq.

Establishes a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations. Requires the Department of the Interior to issue regulations covering performance standards for protection of the environment and public health and safety, permit application, and bonding requirements for surface coal mining and reclamation operations; procedures for preparation, submission, and approval of state programs to control mining and reclamation; and development and implementation of a federal program for any state that does not develop an acceptable program.

Surface Resources Use Act of 1955, 30 U.S.C. §601 et seq.

Prohibits persons from using the surface of unpatented mining claims for anything but mining. Provides that claimants of patented mining claims may use the surface of the claim only for purposes related to mining activity. Claimants may occupy and use resources on the claim only for prospecting and mining. Claimants also may not sell the surface resources (timber, sand, gravel, etc.) for an unpatented claim.

Surface Transportation Assistance Act of 1982, 96 Stat. 2097, 23 U.S.C. §§101 and many others

Establishes a Federal Lands Highway Program, placing upon the secretary of transportation the oversight and coordinating responsibility for federal lands highways to ensure that such highways are treated under similar uniform policies, including conformity to highway design, construction, maintenance, and safety standards adopted for park roads and parkways.

Toxic Substances Control Act, P.L. 94-469, 90 Stat. 2003, 15 U.S.C. §2601

Governs the manufacture, transport, and distribution of chemical substances that may be potentially harmful. Directs the Environmental Protection Agency to inventory all chemical substances in commerce, to require premanufacture notice of all new chemical substances, to gather available information about the toxicities of particular chemical and exposures, to require industry testing under certain circumstances where data are insufficient, and to assess whether unreasonable risks to human health or the environment are involved.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, 84 Stat. 1894, 42 U.S.C. §4601 et seq.

Establishes policies for the treatment of persons displaced as a result of federal and federally assisted programs, especially those concerning land acquisition. Requires the responsible agency to reimburse displaced persons for moving and other expenses, as well as providing additional funds for other related expenses and establishes a policy on the acquisition of real property by federal government.

Urban Park and Recreation Recovery Act of 1978, P.L. 95-625, 92 Stat. 3467, 16 U.S.C. §2501 et seq.

Wild and Scenic Rivers Act, P.L. 90-542, 82 Stat. 906, 16 U.S.C. §§1271-1287

Establishes a system of areas distinct from the traditional park concept to ensure the protection of the river's environment. Preserves certain selected rivers that possess outstanding scenic, recreational, geological, cultural, or historic values, and maintains their free-flowing condition for future generations.

Wilderness Act, P.L. 88-577, 78 Stat. 890, 16 U.S.C. §§1131-1136

Establishes a policy for the enduring protection of wilderness resources for public use and enjoyment. Establishes a national wilderness preservation system to be composed of federally owned areas designated as wilderness areas. Directs secretaries of the interior and agriculture to study all roadless areas of 5,000 or more acres and every roadless island (regardless of size) as to suitability for inclusion in the wilderness system.

Wildfire Disaster Recovery Act, P.L. 101-286

Establishes a National Commission on Wildfire Disasters; requires the study of wildfire effects; requires recommendation for smooth/timely transition; requires recommendations for future NPS, BLM, FS redevelopment activities/programs. Requires a report on rehabilitation needs from fire damage; requires the Departments of the Interior and Agriculture to offer annual forest fire suppression training programs to volunteers if needed; requires mobilization plans and presuppression needs information; amends Volunteers in Forest, Volunteers in Park, and Federal Land Management Policy Acts (BLM) to protect volunteers from damage claims.

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUDGET JUSTIFICATIONS AND ANNUAL PERFORMANCE PLAN FY 1999

NATIONAL PARK SERVICE

NOTICE: These budget justifications are prepared for the Interior and Related Agencies Appropriations Subcommittees. Approval or release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained through the Office of Budget of the Department of the Interior.

NATIONAL PARK SERVICE
Analysis of Budgetary Resources by Activity (Dollars in thousands)

Construction (14-1039-0-1-303)

	1997 Actual	1998 Enacted	1999 Estimate	Incr./Decr. from 1998
1. Line Item Construction				
Available for obligation:				
Regular appropriation	108,681	156,761	111,110	-45,651
Emergency anti-terrorism requirements	6,300	0	0	0
Emergency hurricane damage repairs	3,000	0	0	0
Supplemental appropriation--emergency	187,321	0	0	0
Contingency emergency funds not available	-30,000	0	0	0
Supplemental appropriation--non-emergency	10,000	0	0	0
Transfer of BA from GSA Building Fund	100	0	0	0
Subtotal, Budget Authority	285,402	156,761	111,110	-45,651
Recovery of prior year obligations	12,518	0	0	0
Unobligated balance, start of year	79,196	197,185	148,446	-48,739
Total available for obligation	377,116	353,946	259,556	-94,390
Less: obligations	-179,931	-205,500	-152,000	-53,500
Unobligated balance, end of year	197,185	148,446	107,556	-40,890
FTE	*705*	*705*	*705*	*0*
2. Emergency, Unscheduled and Housing Projects				
Available for obligation:				
Appropriation	14,673	15,000	15,000	0
Unobligated balance, start of year	11,083	12,314	11,014	-1,300
Total available for obligation	25,756	27,314	26,014	-1,300
Less: obligations	-13,442	-16,300	-15,000	-1,300
Unobligated balance, end of year	12,314	11,014	11,014	0
FTE	*0*	*0*	*0*	*0*
3. Planning				
Available for obligation:				
Appropriation	18,000	17,500	21,300	3,800
Unobligated balance, start of year	9,141	7,061	7,061	0
Total available for obligation	27,141	24,561	28,361	3,800
Less: obligations	-20,080	-17,500	-21,300	3,800
Unobligated balance, end of year	7,061	7,061	7,061	0
FTE	*0*	*0*	*0*	*0*

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Analysis of Budgetary Resources by Activity (Dollars in thousands) (continued)

Construction (14-1039-0-1-303)

	1997 Actual	1998 Enacted	1999 Estimate	Incr./Decr. from 1998
4. General Management Plans				
Available for obligation:				
Appropriation	7,725	7,775	7,725	-50
Unobligated balance, start of year	707	563	538	-25
Total available for obligation	8,432	8,338	8,263	-75
Less: obligations	-7,869	-7,800	-7,800	0
Unobligated balance, end of year	563	538	463	-75
FTE	*54*	*54*	*54*	*0*
5. Equipment Replacement				
Available for obligation:				
Appropriation	14,365	17,865	19,865	2,000
Unobligated balance, start of year	1,938	1,111	1,076	-35
Total available for obligation	16,303	18,976	20,941	1,965
Less: obligations	-15,192	-17,900	-19,900	2,000
Unobligated balance, end of year	1,111	1,076	1,041	-35
FTE	*0*	*0*	*0*	*0*
Account Total				
Available for obligation:				
Regular appropriation	163,444	214,901	175,000	-39,901
Emergency anti-terrorism requirements	6,300	0	0	0
Emergency hurricane damage repairs	3,000	0	0	0
Supplemental appropriation–emergency	187,321	0	0	0
Contingency emergency funds not available	-30,000	0	0	0
Supplemental appropriation–non-emergency	10,000	0	0	0
Transfer of BA from GSA Building Fund	100	0	0	0
Subtotal, Budget Authority	340,165	214,901	175,000	-39,901
Recovery of prior year obligations	12,518	0	0	0
Unobligated balance, start of year	102,065	218,234	168,135	-50,099
Total available for obligation	454,748	433,135	343,135	-90,000
Less: obligations	-236,514	-265,000	-216,000	-49,000
Unobligated balance, end of year	218,234	168,135	127,135	-41,000
FTE	*759*	*759*	*759*	*0*

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JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: General Management Plans

	1998 Enacted To Date	1999 Budget Request	Change From 1998 (+/-)
General Management Planing	7,775	7,725	-50
Total Requirements $(000)	**7,775**	**7,725**	**-50**

AUTHORIZATION

16 U.S.C. 1, and 1a-5
42 U.S.C. 4321
Public Law 102-154

OVERVIEW

Prepare and maintain up-to-date plans to guide National Park Service actions for the protection, use, development, and management of each park unit; prepare strategic plans to guide the future of the System; and conduct studies of alternatives for the protection of areas that may have potential for addition to the National Park System.

APPLICABLE NATIONAL PARK SERVICE MISSION GOALS

Ia Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.

Ib The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

IIa Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.

IIb Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

Activity Description

The General Management Plans activity is divided into two distinct functions:

1. General Management and Strategic Planning.....$6,900,000

The National Parks and Recreation Act of 1978 directed the NPS to prepare and revise in a timely manner "General management plans for the preservation and use of each unit of the National Park System." General management plans (GMP) establish specific goals and objectives, a basic philosophy for management, and strategies for resolving major issues related to park purposes as defined by Congress. GMPs are required to include: (1) measures for preservation of the area's resources, (2) indications of the type and general intensity of development including visitor circulation and transportation patterns along with locations, timing, and anticipated costs, (3) information on visitor carrying capacities, and (4) indications of potential modifications to the external boundaries of the unit.

Construction/General Management Plans

General management plans provide the basic guidance for how the park will carry out responsibilities for protection of park resources unimpaired for future generations while providing for appropriate visitor use and enjoyment. The GMP also provides a framework for coordinating interpretive programs, maintenance, facility development, and resource management to promote efficient operations. Priorities for funding general management planning projects are determined by an evaluation of issues confronting the parks and statutory requirements for recently authorized additions to the National Park System. In FY 1999, a system based on the choosing by advantages methodology will be used to update priorities for GMP starts and maintain accountability for completion of projects within estimated budgets.

Plans are prepared by interdisciplinary teams including the park superintendent and staff, landscape architects, community planners, and specialists in natural and cultural resources, environmental design, concessions management, interpretation, public involvement and other fields as needed. The planning process includes extensive consultation with the public to clearly define park purpose and significance, goals and objectives, identify desired future conditions, and evaluate alternatives.

A final, approved planning document is only one obvious result of the planning process. Even more important in most cases is the success in building community support for park objectives, coordination with State and local officials and other agencies, cooperation with adjacent land managers and property owners, analysis of environmental consequences and socioeconomic impacts, guidance on appropriate treatments for cultural resources, estimates of costs, and agreement on priorities for implementation. General management plans provide a key tool in determining needs and priorities for repair and rehabilitation of existing facilities as well as for new development or interim measures to address transportation systems, employee housing, and other essential visitor services. They also help assure that potentially adverse impacts of NPS actions on park resources are mitigated, and that the park is considered in the context of its natural or historic setting, giving special attention to how the plan will affect park neighbors as well as how plans for adjacent lands will affect the park. In FY 1999, emphasis will continue to be placed on planning projects that produce desired results for park management through partnerships and other measures that do not necessarily depend on construction of new facilities.

Planning for national park units is a continuous process. Plans do not remain static because issues, opportunities and conditions are continually changing. NPS guidelines suggest that GMPs should be designed for a ten to fifteen year timeframe. However, changes in resource conditions, public use patterns, external influences, and legislated boundaries often come more frequently than expected. The rapid rate of change in many areas requires that plans be revised to address current conditions, so while plans for some units are viable for more than fifteen years, many others become obsolete in less than five years. As of December 31, 1997, more than 200 parks will be lacking a GMP or have one that is more than fifteen years old overdue to be replaced or substantially amended.

The National Park Service is continuing efforts to streamline its planning function and improve services to parks and the public. To support goals that include leadership in broad systems planning, promotion of partnerships, and achieving sustainability, park planning is becoming: (1) more flexible to streamline and experiment in providing needed services, (2) more integrated with management and operations and linked with other conservation initiatives, (3) partnership centered to network with others and develop alternative strategies for resource management, (4) more focused on resource conservation and accomplishment of mission, (5) technology driven to increase efficiency and improve techniques, and (6) more diverse in the workforce so that staff understands and responds appropriately to changing demographics and cultural values. In 1999, a portion of the GMP program will continue to provide a variety of planning services to meet needs defined by parks and their partners without necessarily completing all of the steps in a traditional general management plan.

During FY 1999, work will continue to improve the linkages between general management planning and other strategic and operational planning in the National Park Service. A revised planning process guideline completed in 1998 will be used to improve program productivity in FY 1999. Planning at various levels of detail will help support the performance management system developed to meet requirements of the Government Performance and Results Act.

Construction/General Management Plans

For the planning program itself, performance measures have been developed that focus on how park managers are using the results of their planning processes and products. Surveys of park managers in previous years found that partnerships, a better informed public, facilities to serve visitors, and broad direction for management were the most important results of management planning. These surveys also found that most park managers with projects underway felt that plans were making progress in achieving desired results, and that at least 80 percent were satisfied with the services being provided by planning teams. Updated information on expected results and satisfaction of park managers and other interested parties will provide guidance for changes in program focus and direction in 1999. This will include information on how completed plans and interim products are being used by park managers and park neighbors.

No new major GMP projects were initiated in FY 1998 so that available funds and staff could be focused on completing ongoing projects and respond to Congressional directives. At least 20 plans are scheduled for completion in FY 1998, and several new starts are expected in FY 1999. The Omnibus Parks and Public Lands Management Act of 1996 (Public Law 104-333) includes requirements for seven new general management plans with legislatively mandated due dates. These plans will require that work be deferred on plans for other units of the National Park System. Initial Field Office proposals for GMP projects and special resource studies have been reduced in number and in scope to stay within available funds.

Following is a list of general management planning projects proposed for FY 1999. This list is tentative at this time because some listed projects could be completed ahead of schedule in FY 1998 while others might be delayed to coordinate with schedules of other agencies, partners, or the public.

GENERAL MANAGEMENT PLANS SCHEDULED FOR COMPLETION IN FY 1998

California-Pony Express Trail, Multi-States
Cane River National Historic Park, Louisiana
Cape Cod National Seashore, Massachusetts
Gettysburg National Military Park, Pennsylvania
Glacier National Park, Montana
Isle Royale National Park, Michigan
Keweenaw National Historical Park, Michigan
Lower Saint Croix National Scenic Riverway, Wisconsin
Manhattan Sites, New York
Marsh Billings National Historical Park, Vermont
Missouri National Recreation River, South Dakota and Nebraska
National Park of American Samoa, American Samoa
Nicodemus National Historic Site, Kansas
Oregon Caves National Monument, Oregon
Organ Pipe Cactus National Monument, Arizona
Palo Alto Battlefield National Historic Site, Texas
Petersburg National Battlefield, Virginia
Prince William Forest Park, Virginia
Scotts Bluff National Monument, Nebraska
Sitka National Historic Park, Alaska
Stones River National Battlefield, Tennessee
Whiskeytown National Recreation Area, California
Whitman Mission National Historic Site, Washington

Construction/General Management Plans

TENTATIVE FY 1999 GENERAL MANAGEMENT PLANNING WORK

ONGOING PROJECTS

Anacostia Park, District of Columbia
Booker T. Washington National Monument, Virginia
Big South Fork National River and Recreation Area, Tennessee and Kentucky
Cane River Creole National Historical Park and Heritage Area, Louisiana
Lake Roosevelt National Recreation Area, Washington
Death Valley/California Desert
Everglades National Park, Florida
Fort Circle Parks, District of Columbia-Virginia-Maryland
Fort Stanwix National Monument, New York
Flagstaff Areas, Arizona
Lyndon Baines Johnson National Historical Park, Texas
Manassas National Battlefield Park, Virginia
Morristown National Historical Park, New Jersey
Mount Rainier National Park, Washington
National Park of American Samoa, American Samoa
New Orleans Jazz National Historical Park, Louisiana
Redwood National Park, California
Rock Creek Park, District of Columbia
Salt River Bay National Historical Park and Ecological Preserve, U.S. Virgin Islands
Santa Monica Mountains National Recreation Area, California
Sequoia-Kings Canyon National Park, California
Valley Forge National Historical Park, Pennsylvania
Zion National Park, Utah

RECENTLY AUTHORIZED PLANS

Boston Harbor Islands National Recreation Area, Massachusetts
New Bedford Whaling National Historical Park, Massachusetts
Nicodemus National Historic Site, Kansas
Oklahoma City National Memorial, Oklahoma
Tallgrass Prairie National Preserve, Kansas
Selma-to-Montgomery National Historic Trail, Alabama
Vancouver National Historic Reserve, Washington
Washita Battlefield National Historic Site, Oklahoma

Another major component of the Service's multi-year planning function is the strategic planning program which ensures that the NPS and its leadership has a focused systematic approach to developing long-term strategies and the continuous organizational development needed to address changing social, political, economic, and demographic realities. The Service is well into implementation of the Government Performance and Results Act of 1993 (GPRA). In FY 1997, the *National Park Service Strategic Plan* was published which provides extensive organizational support to GPRA implementation through developing a field-oriented process through the National Park Service Field Guide to GPRA; and the first annual performance plan has been produced in conjuction with the FY 1999 budget request.. Work will continue in fiscal year 1999 for Servicewide GPRA implementation through: (1) coordination of the *National Park Service Strategic Plan* implementation and refinement of goals and performance measures, (2) preparation of the second Servicewide Annual Performance Plan including data analysis and performance measurement verification, (3) continuation of support to parks and programs in their implementation of GPRA, (4) design of the first Servicewide

Annual Performance Report, and (5) the continuation of development of linkages with operations, information systems, budget reporting, planning, and personnel.

2. Special Resource Studies.....$825,000

As directed by Congress (16 U.S.C. 1a-5), the National Park Service monitors resources that exhibit qualities of national significance and conducts studies to determine if areas have potential for inclusion in the National Park System. Special resource studies collect information about candidate areas to determine if they meet established criteria for significance, suitability, and feasibility as potential additions to the National Park System. These studies also evaluate alternative concepts for protection by others outside of the National Park System. The primary purposes of the study program are to provide information for Congress in evaluating the quality of potential new park units, and to encourage the protection of important resources in ways that will not impose undue pressure on the limited fiscal resources available for existing NPS units.

During the past eight years, the NPS has worked on an average of ten studies each year. Most of these have been in response to directions from Congress in specific authorizations or committee reports. Over the past 20 years only about one in every four or five studies finds that an area is eligible for inclusion in the National Park System. The study program has included many projects directed by Congress where the NPS and the community have agreed that existing programs of technical or financial assistance are preferable to the establishment of a new park with long-term management responsibilities and major funding commitments for the NPS. Experience to date has indicated that adequately funded studies help defend the integrity of the park system against expansions into areas that fail to meet established standards, while allowing for a few carefully selected new units that are of outstanding importance to the national heritage.

The study program in 1999 will focus primarily on completing projects directed by Congress to evaluate important resources and find ways to protect them that do not involve Federal land acquisition or long-term commitments for management and operations by the NPS. The funds requested will support continued work on studies already authorized by Congress and begin work on a few high priorities determined by a ranking system applied by the National Park Service. Results of the special resource study program will be measured by the number of studies completed and the extent to which they are found to be useful in guiding the NPS legislative program with respect to potential new units or meeting other goals established by Congress.

Candidates for study are brought to the attention of the National Park Service throughout the year. Field Offices screen these nominations and prepare information sheets on strong candidates for study. These nominations are reviewed by an interdisciplinary panel of NPS professionals to identify high priorities. The NPS ranking system considers significance, rarity, public use potential, educational potential, resource integrity/risks, public support, costs, availability of data, suitability, feasibility, and special initiatives.

In FY 1998, ten special resource study projects were funded: One of these studies was initiated as a priority identified by the NPS, nine responded to directions from Congress. Funds requested in FY 1999 will allow for completion of ongoing projects, a few new starts for studies that have been deferred for several years, updates to theme studies, and continued review of existing criteria for parklands.

Following is a tentative list of special resource study projects for FY 1999. This list may change during the year as additional directions are provided by Congress, NPS priorities are updated, projects are completed by the end of the fiscal year, or the study may be deferred due to changes in resource characteristics, requests by property owners, or other local conditions.

Construction/General Management Plans

SPECIAL RESOURCE STUDIES SCHEDULED FOR COMPLETION IN FY 1998

Atchafalaya River Basin, Louisiana
Blood Run, Iowa and South Dakota
Calumet Lake, Illinois
Central High School, Arkansas
Charleston School District, Arkansas
Labor History Sites, Multi-State
Lower Mississippi Delta, Multi-States
New York State Canals, New York
Robert Moton High School, Virginia
Susan B. Anthony Home, New York

TENTATIVE FY 1999 SPECIAL RESOURCE STUDY WORK

NEW STUDIES

African American Heritage Themes, Multi-State
Chesapeake Bay Sites, Maryland and Virginia
Ice Age Floods, Washington and Oregon
Japanese American Theme Study, Multi-State
Shenandoah Valley Battlefields, Virginia

ONGOING STUDIES

Champlain Valley, New York and Vermont
Northern Frontier, New York
Moccasin Bend, Tennessee

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