

# Trends

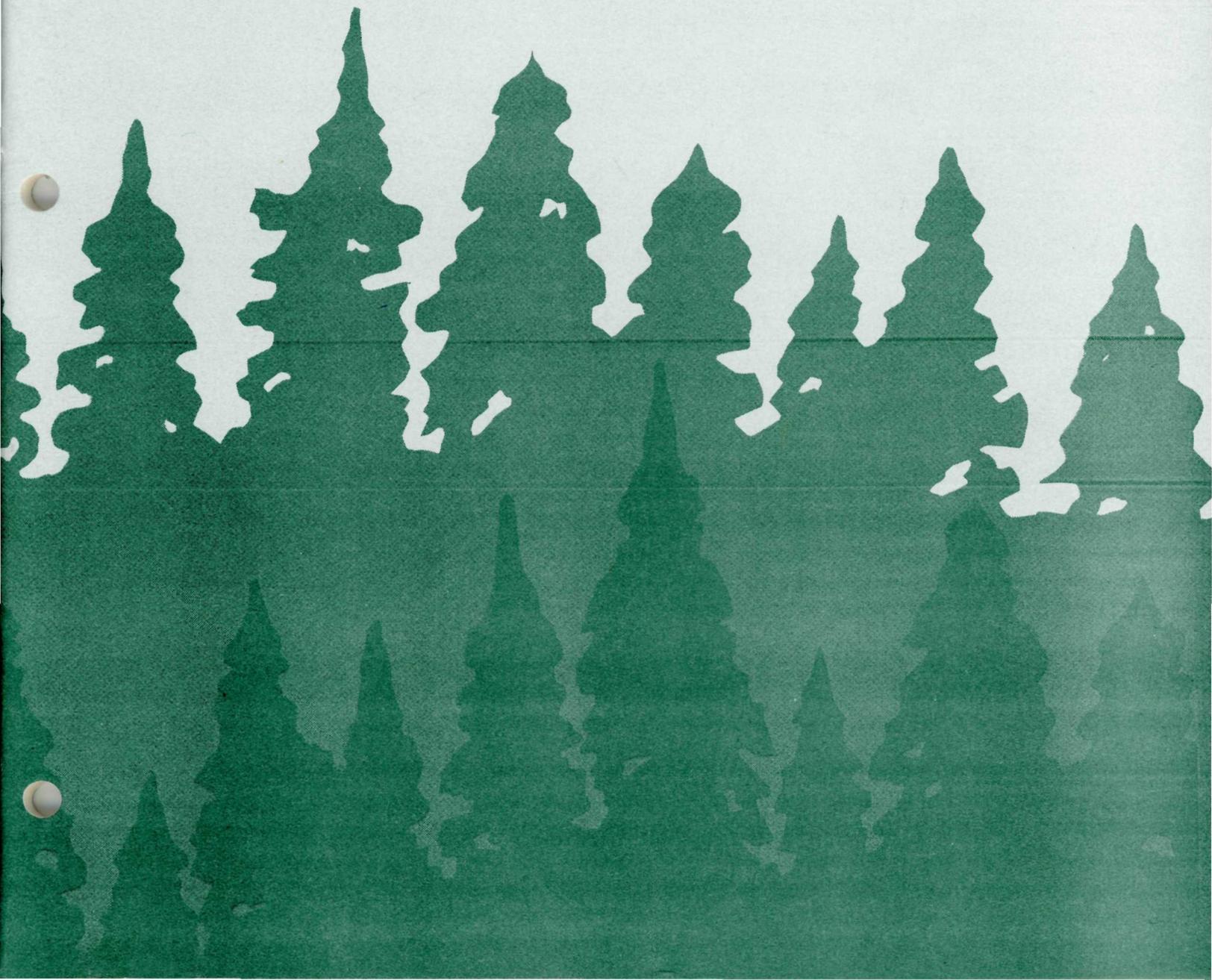
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## Trends

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# Introduction: Federal Land Resource Planning — Interagency Comparisons

by Robert L. Vertrees

Land resource planning for thirty percent of the nation's total area — it's an *immense* task. Land resource planning for numerous types of landforms, ecosystems and resource combinations that are called upon to support a wide variety of agency missions and competing uses — it's a *complex* task. Land resource planning of federally owned areas that provide habitat for most of the continent's distinctive wildlife, that protect wild and spacious qualities many people value highly, that contain the headwaters or drainage areas of many of the nation's major river systems, that contribute to ranching as a way of life, and that produce substantial shares of the nation's supplies of timber, mineral and energy resources — it's an *important* task.

Who directly performs these immense, complex and important tasks day in and day out? The men and women do who work in planning units of agencies whose primary responsibilities are to manage federally owned land and natural resources (Table 1).

This issue of *Trends* focuses on the land resource planning approaches used by four of these agencies: the Bureau of Land Management (BLM), the National Park Service (NPS) and the Fish and Wildlife Service (FWS) of the Department of the Interior and the Department of Agriculture's Forest Service (FS).

In the next four articles, these agencies' current planning approaches are described and placed into historical context by members

**Table 1. Federal land acreage administered by different agencies, 1984.**

Agencies	Millions of Acres	Percent of Total Federal Lands	Percent of Total Area of U.S.
<b>Four Major Land Management Agencies</b>			
Bureau of Land Management	342.2	47.10%	15.07%
Forest Service	189.4	26.07%	8.34%
Fish and Wildlife Service	80.5	11.08%	3.54%
National Park Service	68.2	9.39%	3.00%
Sub-Total	680.3	93.64%	29.95%
<b>Other Natural Resource Mgt. Agencies</b>			
Army Corps of Engineers	8.4	1.16%	0.37%
Bureau of Reclamation	6.6	0.91%	0.29%
Energy Research and Development Administration	2.0	0.28%	0.09%
Tennessee Valley Authority	1.0	0.14%	0.04%
Sub-Total	18.0	2.49%	0.79%
<b>Military, Indian, and Other Lands</b>			
Dept. of the Air Force	8.3	1.14%	0.37%
Dept. of the Army	12.0	1.65%	0.53%
Dept. of the Navy	3.9	0.54%	0.17%
Bureau of Indian Affairs	2.9	0.40%	0.13%
Other Agencies	1.2	0.17%	0.05%
Sub-Total	28.3	3.90%	1.26%
TOTAL FEDERAL LAND AREA	726.6	100.03%	31.99%
TOTAL AREA OF THE U.S.	2,271.3	—	—

Source: See "Sources of Information for Tables 1, 2, 3 in "Who Can You Turn To?" section.  
Note: Percentages and Percent of Total Federal Lands column do not add up to subtotals due to rounding.

of each agency's planning staff. In the concluding article, preliminary comparisons and contrasts are made by John Randolph, Associate Professor of Urban and Regional Planning at Virginia Polytechnic Institute and State University.

This is the first time that the planning approaches of all four of the major federal land management agencies have been described by agency planners and then compared and contrasted in a separate but associated analysis.

This introduction sets the stage for the comparative analysis by presenting selected background information about the lands and resources managed by the agencies, basic influences upon federal land resource planning since the 1950s, the range and scope of planning activities discussed in this series and its intended audiences.

## Lands and Resources Managed

Nearly one-third of the total

area of the United States is in federal ownership.

Among the states, the largest landholdings of each of the four agencies are in Alaska (Tables 2 and 3), although the 23.3 million acres the FS manages in Alaska is only slightly larger than the 21.2 and 20.4 million acres the FS manages in California and Idaho, respectively. Over one-half of the landholdings of each agency outside of Alaska are located in the eleven western-most mainland states. The agencies range in this respect from the BLM, with 99.8 percent of its lands outside of Alaska being located in these eleven states to the FS, NPS and FWS which have 83.2 percent, 68.2 percent and 57.0 percent, respectively, of their non-Alaskan lands being located in these states.

With the exception of the BLM, the lands, resources or facilities managed by the agencies are located in most or all of the fifty states (Table 3). Two basic

categories of lands are managed by these agencies. Multiple-use resource lands include the BLM lands and the National Forest System, and specially protected lands include the National Wildlife Refuge System and the National Park System.

Besides the three federal land systems referred to in Table 3, three other systems of specially protected lands are managed by the four agencies:

1. the National Wilderness Preservation System, which in 1985 included 468 areas totaling 88.55 million acres,
2. the Wild and Scenic Rivers System, which in 1986 included 66 rivers totaling 7,225 miles, and
3. the National Trails System, which in 1986 included 772 trails totaling 31,760 miles.

These designations often overlap with other public land and protective designations. The Na-

tional Wilderness Preservation System is comprised of federal land including BLM land and land in the National Forest, National Wildlife Refuge and National Park Systems. The Wild and Scenic Rivers and National Trails Systems have a more diverse make-up of land. Included within their overall boundaries are BLM land, land within the National Forest, Wildlife Refuge and Park Systems, as well as other public and privately-owned land.

### Major Influences Since the 1950s

Beginning in the 1950s, once remote expanses of federal lands have been made more accessible through the Interstate Highway network and other improvements in transportation. Combined with factors such as generally rising per capita discretionary incomes, this increased accessibility has led to substantial increases in the many

Table 2. Agency lands in different parts of the United States, 1984.

Agencies	In Alaska		In Eleven Mainland Western States <sup>a</sup>		In Alaska and Eleven Western States		In Remainder of the United States	
	Acres <sup>b</sup>	Percent <sup>c</sup>	Acres <sup>b</sup>	Percent <sup>c</sup>	Acres <sup>b</sup>	Percent <sup>c</sup>	Acres <sup>b</sup>	Percent <sup>c</sup>
Bureau of Land Management	166.7	48.71%	175.1	51.17%	341.8	99.88%	0.4	0.12%
Forest Service	23.3	12.32%	138.2	72.97%	161.5	85.29%	27.9	14.71%
Fish and Wildlife Service	71.2	88.39%	5.3	6.59%	76.5	94.99%	4.0	5.01%
National Park Service	48.1	70.51%	13.7	20.16%	61.8	90.67%	6.4	9.33%
FOUR AGENCIES TOTAL	309.3	—	332.3	—	641.6	—	38.7	—

Source: See "Sources of Information for Tables 1, 2 and 3" in "Who Can You Turn To?" section.

<sup>a</sup>These states include Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

<sup>b</sup>Millions of Acres.

<sup>c</sup>Percent of total land managed by each respective agency in the U.S.

**Table 3. Selected characteristics of the four major land management agencies and of the lands and resources managed by each agency**

Type of Lands Managed and Agency	Title of Lands or Systems Managed	Characteristics of Resources and Systems Managed				
<u>Multiple Use Resource Lands</u>		<u>Characteristics of Some of the Resources on the Bureau of Land Management Lands</u>				
Bureau of Land Management (BLM)	BLM Lands	Managed for multiple use and sustained yield in a manner to protect their scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources and archeological values. Rangelands cover 170 million acres of BLM land in 16 western states, exclusive of Alaska. BLM lands include 90 million acres of forest land, of which 64 million acres are in Alaska. Ninety-one percent of the board feet of timber harvested annually from BLM lands, however, comes from the 2.4 million acres in western Oregon on former railroad grant lands. Areas of Critical Environmental Concern requiring special management protection have been designated on 1.3 million acres of BLM land, of which .6 million acres are in the California Desert Conservation Area. The BLM administers mineral leasing and supervises mineral operations on BLM land and on 370 million acres of subsurface mineral estate underlying other federally administered, state or private ownerships and on Indian lands.				
		<u>Characteristics of Systems Managed by the Other Three Agencies</u>				
		Information about Units in Systems		States Systems Are In		
		No.	Types of Units or Purposes Provided	Range in Acreage		
		No.		Smallest	Largest	
Forest Service (FS)	National Forest System (NFS)	191	Includes 156 National Forests, 19 National Grasslands, and 16 Land Utilization Projects. Purposes managed or protected include fish and wildlife habitat, outdoor recreation, wilderness, water resources, forage and timber. Eastern National Forests acquired under the Weeks Act of 1911 include 50 units in 23 states and comprise 24 million acres.	45	Connecticut and Hawaii	Alaska
<u>Specially Protected Lands</u>						
Fish and Wildlife Service (FWS)	National Wildlife Refuge System (NWRS)	427	Habitat provided for migratory waterfowl and mammals. The FWS also manages 343 areas or facilities such as waterfowl production areas, fish hatcheries and wildlife research stations, for a total of 770 areas in the NWRS and related areas.	50	Connecticut	Alaska
National Park Service (NPS)	National Park System (NPS)	337	System includes resource-based areas (such as National Parks, Preserves, Recreation Areas, Seashores, Rivers, Lakeshores, Parkways and Trails) and cultural areas (such as National Historical Parks, Military Parks and Battlefield Parks). National Monuments include both resource-based and cultural areas.	47	Kansas	Alaska

Sources: See "Sources of Information for Tables 1, 2 and 3" in "Who Can You Turn To?" section.

types of outdoor recreational uses of the federal lands.

In addition, during the environmental movement from the early 1960s through the mid-1970s, concerns grew about environmental quality and the preservation or protection of federal lands and resources for their wilderness, scientific, ecological, habitat and

other basically non-market values. These concerns led to federal policies to consider the environmental impacts of proposed federal actions, to control non-point and other sources of pollution on the federal lands, and to preserve or protect certain lands or resources by placing them into specially protected systems or by expanding these systems through

new acquisitions.

As these policies were being initiated, pressure also was mounting for increased production of market-valued commodities from the federal lands, particularly for timber, minerals, energy resources and livestock products. Therefore, we have seen substantially increased competition for the federal lands as

the nation has sought to arrive at a balance among economic, energy and environmental goals, values and interests.

In this political environment, federal land resource planning came to be recognized as an important means of attempting to arrive at land and resource management alternatives that hopefully could result in acceptable balances among the competing interests. Consequently, during the 1970s, the mandates for planning applicable to each of the four major federal resource management agencies were changed and increased in significance via acts of Congress, court decisions, Executive Orders, agency directives and other means.

Along with the increasingly recognized importance of federal land resource planning came several journal articles, sections of books and other writings that provided descriptions, comparisons and contrasts among the plans, studies and/or planning processes of two or more of the four major federal resource management agencies.

### **Aspects of Planning Focused Upon**

In the field of land resource planning, there is no generally accepted, commonly used set of definitions for different aspects or dimensions of planning. Therefore, it is useful to review the set of interrelated concepts about these aspects that provided general guidance to the authors of

this series of articles. These concepts have been arranged from the broadest and most encompassing aspects to the most specific ones.

An agency's overall land resource planning approach is considered as the broad "umbrella concept" that encompasses the more specific aspects of planning which include plans and related studies, planning processes, planning methods and planning techniques. Within an agency's overall approach, various types of plans and related studies are prepared and implemented for the purpose of improving decisions that pertain to land resource use and management. Plans are made and carried out through the use of planning processes. These processes include and coordinate different types of planning methods which, in turn, require the conduct of detailed planning techniques.

Seen in the light of this set of concepts, this series of articles is focused on selected aspects and components of the agencies' overall land resource planning approaches. Reference is made to the primary types of plans, studies and planning processes engaged in by the agencies. Some mention also is made of the basic planning methods employed within specific planning processes, but detailed planning techniques are beyond the scope of this work.

Two other basic aspects of an agency's overall land resource planning approach need to be pointed out at this time because

they are also mentioned in this series. These are the coordination and citizen participation aspects of planning that are often incorporated into processes used to formulate and implement particular types of plans or studies.

What has been said about an agency's overall land resource planning approach is summarized in the following outline. This outline provides a general perspective of the various components of an agency's planning approach even though, as mentioned above, all of the components are not discussed in this series. Furthermore, this outline affords the opportunity to refer to some specific examples of each component or aspect.

Federal land resource planning includes the following components:

1. Comprehensive land and resource management plans, such as plans to allocate limited land area and resource supplies among competing uses and plans to determine the physical and biological suitability of lands and resources to support alternative uses on a sustained basis,
2. Functional and implementation plans, such as those which pertain to visitor management or facility development and maintenance, that are less directly associated with the land or resource base but nonetheless affect land and resource management and use,

3. Studies associated with the aforementioned types of plans, such as studies of the environmental impacts of alternatives being considered,

4. Planning processes, frequently referred to from the standpoint of the extent to which they are rational and comprehensive, used to formulate and implement the aforementioned plans and studies, such processes being associated with or inclusive of means used to involve citizens in planning and to achieve intra-agency, interagency or inter-governmental coordination of plans and studies,

5. Planning methods used in the conduct of planning processes such as linear programming, capability or suitability analysis, benefit-cost analysis and habitat analysis, and

6. Planning techniques used in the conduct of planning methods such as data collection procedures, resource inventory and evaluation procedures and procedures used to discount future time streams of monetarily measurable beneficial and adverse effects of alternatives when determining present values.

At the outset, the adjectives immense, complex and important were chosen to describe the land resource planning tasks or functions of the four agencies. From

what has been said in this section, it is now evident that a fourth adjective should be used to describe these tasks — *diverse*. This diversity stems from the wide range of lands, resources and facilities the agencies manage, from the numerous legal or administrative sources (laws, court decisions, Executive Orders, agency directives, etc.) that mandate specific approaches to planning or types of plans, studies or planning processes, and from the multi-dimensional aspects of agency planning.

### Intended Audiences

The benefits of learning that result from the presentation of comparative analyses and analogies is becoming more widely recognized. This method requires that the topics or subjects to be compared and contrasted or presented through the making of analogies first be described in a fairly uniform manner prior to the making of comparisons and contrasts or the drawing of analogies. As noted in previous sections, this method has been used in this series of articles.

We hope that the following audiences will benefit from this method:

- federal land resource planners and administrators of federal land resource planning offices
- university professors who teach courses in natural resources policy, planning

and/or management by making comparative analyses and analogies among different planning approaches

- university students who, along with their faculty advisors, are planning programs of study designed to lead to land resource planning or management careers
- elected or appointed federal officials involved in policy making or decision making processes affecting federal lands and resources
- members of interest groups concerned with the federal lands and resources and their use and management.

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# Forest Service Planning for the National Forests

by Dennis L. Schweitzer

This century has been one of fundamental change for the United States. Therefore, it has been one of fundamental change for the Forest Service, which was created in 1905 primarily to look after the nation's interests in the National Forests. The agency's original task now seems straightforward: it was, essentially, to protect the land while providing grass and timber to local users. To summarize the task today requires more words, and it requires more abstract words that represent complex ideas. It is, essentially, to protect and manage extremely complex natural systems and their use to satisfy a wide variety of local and national desires and needs. This must be done for a total area larger than Texas.

As the task has changed, so has the kind of planning that is done. In the early years, separate plans were prepared for fire and watershed protection and grazing and timber production. As uses of other forest resources increased, their intended treatments were also recorded in agency plans. At least to the 1940s, these plans were self-imposed technical expressions of the forester's ideal. Generally, demands on the forests were small enough that they neither tested the limits of plans nor led to much more than local public interest.

Through the 1960s, resource-specific plans were prepared by specialists in the relevant disciplines. The agency decided when and how the plans would be put



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together. It was the job of the forest supervisor to decide how to follow these plans and how they should "fit" when it came time to apply them on the ground. But then things changed radically.

The 1970s began with the National Environmental Policy Act (NEPA), the most far-reaching environmental planning legislation ever passed. A few years later, in a complicated attempt simultaneously to change certain practices of the agency and to limit the discretion of the Presidency and to force national planning, Congress directed the Forest Service to prepare national plans every five years. By the end of the decade, the National Forest Management Act (NFMA) and detailed implementing regulations (later twice revised) that guide planning on individual forests were also in place. In total, these rules provided the most detailed legal direc-



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Grazing fees and areas have become issues in some forest plans. Grazing often comes in conflict with recreationists' desires.

tion for planning and management in the agency's history.

The Forest Service then had to figure out how to respond to all the specifics and general statements of intent in these (and other) legal rules as plans of management for each of the National Forests were created. It turned out that a very complex process of planning is necessary.

During the 1970s the Forest Service responded to NEPA by establishing interdisciplinary teams to analyze and plan for the management of portions or "units" of forests, by developing formal procedures of public involvement and by issuing disclosure statements of environmental effects. Each of these activities has been strengthened and incorporated into the development of plans under NFMA. Important characteristics of these plans and of the current process of planning include the following:

- The forest plans are legal documents the agency must follow in managing the National Forests.
- A rational-comprehensive planning model is followed in developing plans.
- Analysis is done by an interdisciplinary team.
- The process of planning is open and responsive to public participation.

## Forest Plan is a Legal Document

Historically, professional foresters decided if some sort of plan were required, decided what topics should be discussed and the background analysis appropriate to each, and decided how the plan should be translated into activities on the ground. This is no longer the case. Legal rules have now made or tightly circumscribed most of these decisions. In addition to serving the technical needs of managers, plans now also must clearly spell out for policy-makers and the general public the analytical basis and rationales for decisions. Once a plan is chosen, it is legally binding: management activities must be consistent with that plan or the plan must be revised following legally prescribed procedures.

A forest plan defines the direction of management for a National Forest for the next 10 to 15 years. Important specifications of the plan include:

- Purposes of management and intended future physical condition of the forest. This information provides a compass for the manager and for the public to use in dealing with new questions in the future.
- The kinds of management activities and the ways they will be carried out on each portion of the forest. For example, the plan states whether, when and how particular areas will be developed for timber pro-

duction or managed for primitive recreation.

— How the basic resources of the natural system — the soil, water, animals and fish — will be protected on areas that are developed.

— The monitoring or checking of management activities that will be done to ensure the standards and intentions of the plan are met.

The number of campgrounds to be built and the numbers of board feet of timber to be offered for sale are also spelled out as targets for day-to-day management. However, experience shows that any targets can only be approximate guides. One reason is that broad planning data and projections about the future are imperfect and will require adjustments. A second reason is the ability to reach particular targets depends upon the annual budgets provided by Congress.

Forest plans must "live" or evolve if they are to be followed in the woods rather than gather cobwebs on a back shelf. If monitoring indicates a failure to adequately protect the environment or if new ways of doing things are developed or if outside circumstances change significantly, particular planned activities no longer will make sense and the plan will be changed. In any event, each plan will be completely redone within 15 years.

## Forest Planning Follows A Rational-Comprehensive Model

To fully examine the wide range of alternatives required by NEPA case law, to satisfy the detailed requirements for analysis and plan definition required by the implementing regulations of NFMA, and to address all of the concerns raised in public debates, forest planning analysis follows the logic of a rational-comprehensive planning model. This means alternative goals for managing each forest are explicitly defined, the widest possible ranges of management options and plan alternatives are explored, and the advantages and disadvantages of each possibility are defined in detail.

Major analytical procedures define:

— The limits of physical possibilities of the forest; how much of each forest product and service could be provided if nothing else were important.

— The limits of legal possibilities of the forest, or the "decision space" where the agency actually can choose a plan; how much of each good and service could be provided while soil, water, animals and fish are protected at the minimum levels specified by law.

— Tradeoffs or opportunity costs of providing this protection; this information is fed back to the legal rule-makers in case they decide the costs of

environmental protection are too high.

— Alternative forest plans spread across the entire decision space and the goods and services each would provide.

— The potential environmental, economic and social consequences of each plan alternative.

— Sequences of management activities and the taxpayer-dollars necessary to support each plan alternative on the forest.

The last definition says "if we want the forest to be used in this way then here is what we must do." When all the goods and bads of the alternatives have been weighed and a single plan has been chosen, this information provides the legal guidance that must be followed on the forest.

The only way such detailed information can be generated and evaluated is through computer-assisted manipulations of abstract mathematical models representing the complex ecosystems that are the National Forests. This becomes more obvious when it is recognized that the average forest contains more than 1.5 million acres; it is larger than the state of Delaware.

However, it would be an error to imagine that computer solutions "make us" do anything. Black-box manipulations of numbers are not equivalent to decisions. We simply do not know enough about the ecosystems we must manage or

about their responses to management to rely with confidence on abstract mathematical models. Every analytical result must be ground-truthed and interpreted. In practice, machines can be used to manipulate numbers but humans still must exercise their professional judgment. Early computer runs lead to model adjustments and more computer runs until an "acceptable" or "realistic" solution for the forest is obtained. The choice of a particular plan is a choice among things that cannot be expressed or measured on one or a few scales; it is a subjective choice.

A forest plan can be thought of as a working theory. Like a scientific theory, it can never be shown to be "true" or best; it can only be shown to be "false" or not best. That is why a program of monitoring is included in each forest plan. If, in fact, the results of the plan do not meet expectations, the plan will be changed.

## Analysis Is Done By An Interdisciplinary Team

The intent of developing a single, integrated plan of management for each forest is to ensure that the basis for choice and on-the-ground management activities are sensitive to all the values of the National Forests. In the 1970s, lawmakers felt the agency sometimes overemphasized timber production at the expense of other forest values. As a consequence, current planning must be carried out in an interdisciplinary manner. Separate plans that focus on differ-

ent forest resources are no longer acceptable.

In order to define what might be done in total, the expertise of specialists in each of the physical resources is needed. Then sociologists determine how people would be affected, economists define what is economically reasonable and feasible and others try to find out what the general public, the states, the Indian tribes, the counties and others would regard as good ideas. These people must be supported by clerks, computer specialists, writers and analysts. It is not unusual for 25 or 30 different people from a wide variety of disciplines to be substantially involved in planning for a forest.

All the resulting data and ideas have to be organized to sort out what is critical, what is important and what is only interesting. This is done through a core group or "interdisciplinary planning team" of about six staff specialists. That is enough people so nothing will be forgotten and few enough to be a workable number. Typically, this team is responsible for "doing" the planning and for summarizing the implications of many options for the "management team," made up of the District Rangers and Forest Supervisor.

The fundamental requirement for a successful interdisciplinary team is that each member be technically competent; each must be master of his or her discipline. The individuals must then be able to work productively in a coopera-



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*Each member of an interdisciplinary planning team must be technically competent and a master of his or her discipline.*

tive relationship as a team. Finally, each team member must recognize it is the manager's role, rather than the team's prerogative, to make the critical decisions. The team defines what can be done and the implications; the managers decide what will be done.

To some extent, working within the context of a Forest Service interdisciplinary team requires setting aside disciplinary perspec-

tives or tenets of what is "right" that are highly prized elsewhere. The legal rules and responsibilities of the National Forests are different from those of other institutions. For example, the Fish and Wildlife Service and the National Park Service have priorities that focus on particular aspects of natural systems.

In contrast, the Forest Service is

a “multiple-use agency.” That means the agency must somehow strike an acceptable balance between developing some forest resources for immediate and future use while protecting and preserving other forest values. There is no magic formula to define how this is to be done. But to do “it” properly clearly requires that those who are experts in the various disciplines work as partners in an interdisciplinary manner.

## Plan is Open to Public Participation

A fundamental need at all levels of government is to provide an effective means for each citizen to make his or her wishes known. Ideally, government helps people understand what is going on and demonstrates that the ideas offered have been taken seriously. The process of developing forest plans is as open and responsive to public participation as possible. There are numerous avenues the public can use to provide their counsel.

*Statutory and Administrative Law* — As a result of public participation in the nation’s broadest political processes, Congress sets the basic rules in statutory law and the Administration provides more specific direction in the form of regulations that the agency must follow. The rules and direction can be changed if the public is not pleased with the results.

### *Public Meetings and Other Con-*

*tacts* — These provide a wide range of viewpoints on what the plan should look like and the particular issues that should be addressed. On many forests, this has included working with interest groups to develop plan alternatives they prefer and analyzing those alternatives as possible choices.

*Analysis* — Once alternative types of plans have been defined, the agency calculates the goods and services that could be produced, what the forest would look

like as a result and the implications to those dependent upon the forest. To the extent possible, analysis is done “in the sunshine.” This means we try to keep interested persons informed about what we are doing and why. It also means we try to be receptive to new ideas about how analysis ought to be done.

*Draft Plan and EIS* — Tentative plans and environmental impact statements are issued widely to disclose what has been found and what the agency proposes to do



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Public meetings such as this one in Rome, Ga., provide a wide range of viewpoints on what the forest plan should look like and the particular issues that should be addressed.

on the basis of this information and to provide everyone a formal opportunity to raise questions or objections. Many comments are extremely valuable: they lead to rethinking the treatment of a host of questions and re-examining basic technical assumptions and analytical procedures. They also lead to changes in the tentative choices displayed in the draft documents. Indeed, many final decisions differ substantially.

*Final Plan and EIS and Record of Decision* — These documents include a formal response to every comment received on the draft materials and show the results of changes in assumptions and approaches since the earlier documents. The Record of Decision states in some detail why the decision was made. For example, it explains why environmentally or economically superior alternatives were not chosen.

*Appeals Process* — The appeals process was created to provide those who disagree with an agency decision an inexpensive way to have their complaints heard by someone other than the person who made the original decision. Anyone has the right to appeal a "final" forest plan to the Chief of the Forest Service.

*Federal Courts* — Members of the public can seek legal redress if they feel their interests have not been dealt with fairly because the agency did not meet legal requirements or follow legally defined procedures.

Because the Forest Service operates within the broad political context of the nation, members of the public are not limited to formal processes of expressing displeasure, nor are they limited to dealing directly with the agency. As the process of planning translates the general intentions of law into the details of precisely what will be done and where and when it will be done, specific controversies come to the surface. Although agency analysis focuses on technical tasks, technical assumptions and "little" decisions can determine likely winners and losers. As a consequence, those who see themselves as potential losers often attempt to influence the agency directly or indirectly through members of Congress or the Administration. For the agency, the difficult and inescapable task of forest planning is to achieve a workable balance among competing interests — that is, to come up with a forest plan that is legally permissible, technically feasible and publicly and politically acceptable.

## Conclusion

In passing the current planning legislation, the members of Congress chose not to devise mechanical formulas that would determine how each National Forest is to be managed. Instead, they defined specific limits on what can be done, established general guidelines for decisions and mandated a rigorous and open process of planning. Then they told the agency to follow these rules in

developing acceptable multiple-use forest plans.

In a sense, forest planning is an experiment to determine whether comprehensive, rational and objective analysis with public participation can be done by the Forest Service well enough to provide a workable basis to manage each of the National Forests. Internally, we believe the current forest planning process has led to improved decisions. But the public's judgment on the success of the experiment is still an open question.

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Dennis L. Schweitzer is Assistant Director, Land Management Planning Staff of the USDA Forest Service.

# National Park Service Planning

by Cynthia deFranceaux

Park planning is nothing new for the National Park Service (NPS). In fact, the service has been planning our parks for the past 60 years. Of course, during this time, the type of plan produced and the process used has evolved in response to changing conditions and needs. If you look at today's general management plan, you will find a very different animal from the park development plan that was prepared during the early days of planning for the National Park System. Nevertheless, a number of recurring concepts are key to NPS planning.

That we have a tradition of planning is not surprising — our enabling legislation put us into the planning business. The Park Service has a dual mandate to “promote and regulate the use of [National Park System areas] . . . to conserve the scenery and the natural and historic objects and the wildlife 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.”

Conserve park resources and provide for public enjoyment of them. Allow for present use but don't let this use impact the resources and thus interfere with future use.

This often-conflicting mission has forced the Service to continually evaluate its proposed actions. If we are to satisfy our responsibilities, decisions must be considered from a dual perspective — the changing nature of public use



Glacier Point Road was completed in 1936 and provides visitors with a spectacular view of the High Sierra and Yosemite Valley.

Fred Mang, Jr.

and the potential effects on resources. How to strike the appropriate balance between conservation and use is the underlying issue in all our planning efforts.

## Historical Perspective

The history of NPS planning can be characterized as an evolution from development planning to management planning — from

a single goal of providing facilities that would encourage use to a broader focus on strategies for resource and visitor use management. During the early years, with the management emphasis on stimulating use, park planning was development planning. To allow public use, the parks needed infrastructure — roads, trails, accommodations, water and sewage systems, etc. From the very beginning, planning was seen as the way to minimize the effects of these physical developments on the park environment. It was also a way to provide information and cost estimates for budget requests to fund the proposed improvements.

The year 1926 marked the beginning of the Service's park planning program. At that time, through preparation of a park development outline for each park, NPS launched a five-year construction program to provide needed facilities. In 1931, the first formal instructions were issued on how to plan and what should be included in park development plans. In 1932, the Service began calling the park development plan a “Master Plan,” a term that endured until the mid-1970s.

The park master plan served the same function as did a city or a regional plan. It provided a conceptual vision of what the park should look like, a general guide for how land within the park was to be used. The master plan also was an umbrella document from which more detailed construction plans were formulated.

Even at the earliest stages in the evolution of Park Service planning, integral to the park plan was a system of classifying lands for different uses: circulation areas to be used for road and trail systems; wilderness areas to be protected from development; and developed areas to accommodate facilities. The outline of these land use classifications was formulated in the general plan. More detailed plans were prepared for the developed areas to identify the specific location of circulation systems, public utilities, administrative buildings, visitor facilities, etc.

The development focus of master plans continued through the 1960s. The planning process was guided by a handbook, the Master Plan Manual of Standard Practice, that was revised periodically. In 1956, park development planning was thrown into the limelight with the Mission 66 program. Mission 66 sought to complete the development and rehabilitation of parks in a 10-year period. Park plans for the Mission 66 program were essentially complete line drawings of the proposed development; other plan components were included as an afterthought in text notations on the margins of the drawings.

Adoption of a multidisciplinary team approach to planning in the late 1960s marked a new phase in Park Service planning — and a branching from development planning into comprehensive planning. An area's physical development plan was no longer the primary "raison d'être" for the park master plan. The planning

process now was called upon also to provide concepts for park administration, resource management and visitor use. At the same time, the Service began the practice of public involvement in the park planning process. In 1975, the term general management plan was adopted for what were now comprehensive park plans.

## NPS Planning System

Park planning is no longer only a tradition, it is a legislative requirement. The National Parks and Recreation Act of 1978 directed the NPS to prepare and revise in a timely manner "general management plans (GMP) for the preservation and use of each unit of the National Park System." In recent years, comprehensive plans also have been specifically required in the enabling legislation for many park areas.

Although the GMP is the backbone of NPS planning, over the years NPS has developed a multifaceted system of planning. From the broader perspective, the Service conducts planning activities to achieve the purposes of the park — the overall purpose of each NPS area is broadly defined in its enabling law, presidential proclamation or Executive Order. Through the planning process, documents are produced to provide specific guidance for preservation, use and development to accomplish these purposes.

The first planning document prepared is a park's Statement for Management (SFM). This docu-

ment is put together by the superintendent, and then evaluated every two years, and revised as necessary. The SFM provides an assessment of existing conditions — this assessment forms the basis for establishing park management objectives, identifying major issues and problems that need to be addressed, and determining information needs. It is the first step in the park planning process.

Park management objectives developed in the SFM describe the conditions that need to be achieved to realize the park's purpose. However, this document does not contain decisions or prescribe solutions for how to reach these conditions — the means to the end is left for the rest of the planning process. At this early stage in the planning process, the goal simply is to bring together information about the park's purpose, the significance of its resources, the existing use of its lands and waters, the legislative and administrative constraints on its management, the influences on park resources and the experience of park visitors. The primary point of this information gathering is to identify major issues that need to be resolved. This definition of issues is critical to all future planning and management efforts.

The SFM document also plays an important role in the park planning process because it helps the superintendent determine what studies, plans and designs will be needed. Preparation of the SFM leads directly to an analysis of the plans and tasks that must be done

to resolve issues, gather information and achieve objectives. This "Outline of Planning Requirements" is a priority listing of the studies and surveys needed to provide the information base for planning and compliance, and the plans and designs needed for the park. It also serves a budgetary function in that funding documents are developed to request programming and funding to accomplish necessary projects during the next five years. Each park superintendent is responsible for keeping the outline current on a yearly basis.

## General Management Plans

The major planning document for all parks is the combination general management plan/environmental document. Like the earlier generations of park plans, a GMP provides a general concept for what the park should look like and how its lands should be used and managed. It produces an image of how we want the area to be perceived by the public.

A GMP sets forth a basic philosophy for the park and formulates strategies for resolving issues and achieving identified management objectives, usually within a 10-year time frame. Facility development is only one aspect of the management plans. Strategies presented in the GMP are those required for resource management and visitor use. Based on these strategies, any necessary physical development for efficient park operation, protection and use is identified. The

assessment of environmental impacts and other required compliance documentation are included in the document.

Guidance on how to conduct the planning process and what should be included in different planning documents is provided through NPS-2, the Planning Process Guideline. Every general management plan contains:

- Purpose and need for the plan: a discussion of planning issues, park purpose, legislative mandates, management objectives.

- Management zoning: prescribed land classifications to designate where various strategies for management and use will best fulfill management objectives and achieve park purposes.

- Proposal: interrelated proposals for preservation of resources, land protection, interpretation, visitor use, carrying capacities, park operations and a general indication of location, size, capacity and function of physical developments.

- Alternatives to the proposal: different management approaches for dealing with the issues, including no action and minimum requirements.

- Plan implementation schedule and cost estimates.

- Description of the affected environment: background information needed to understand the issues and problems.

- Discussion of the environ-



*Cultural resource strategies typical of a GMP are those required to identify, study, interpret, use and preserve historic, architectural, sociocultural and archeological resources.*

W.S. Keller, NPS

mental consequences of the proposals and alternatives.

Other elements that may be added to a plan as needed include:

- a land suitability analysis and visitor carrying capacity analysis to determine factors limiting types and amounts of acceptable uses;
- a land protection plan component;
- a discussion of legislation needed for boundary adjustments and other purposes in order to meet management objectives;
- a transportation/access/circulation component;
- detailed strategies for interpretation;
- detailed resources management strategies prepared to specify research and provide comprehensive direction for resources management activities;
- wilderness reviews prepared to determine the suitability of lands within the park for designation as legislative wilderness under provisions of the Wilderness Act.

## Implementing Plans

Depending on the size of a park unit, the planning issues to be addressed, and the information, time and funding available, a GMP may be fairly conceptual or very specific. In most cases, more detailed plans are prepared for

subjects that are only generally addressed in the GMP. Examples of some commonly developed implementation plans include:

- **Development Concept Plans** for the details of visitor facilities or other developments in a specific area of a park.
- **Wilderness Plans** where specifically required or where such plans are consistent with general guidance for wilderness studies contained in the Wilderness Act of 1964.
- **Land Protection Plans** for parks that contain land not owned or directly administered by the Service identifying methods by which these lands will be protected.
- **Resource Management Plans** describing a comprehensive resource management, monitoring and research program for a unit's natural and cultural resources.

Other examples include: Minerals Management Plans, Concessions Management Plans, Backcountry Management Plans, Interpretive Prospectus.

## Key Concepts

In looking at the park planning process as it has evolved over the years, a number of concepts can be identified as key to the effectiveness of a park planning effort:

1. **Information Base** – Sufficient information must be available prior to the preparation of a general management plan. To adequately plan for, protect, man-

age and interpret a park area, an inventory of and body of knowledge about park resources is needed. Natural, cultural, social, economic and demographic data provide the information base for *formulating proposals, evaluating alternatives and making decisions in park planning.*

2. **Planning Professionals** – Plans are prepared by planning professionals who work with park and regional office managers. Key to the Park Service concept of planning is the use of an interdisciplinary team of specialists with expertise to address different planning issues. General management planning is conducted by an interdisciplinary team, normally consisting of technical experts from the park, region, Washington Office and the Denver Service Center. (The Denver Service Center is a technical center housing a variety of people in specialized disciplines that NPS could not efficiently or economically replicate in our regional offices. The Center includes park planning teams, design specialists, contracting/construction administration and printing archival services. The plan/design/construction groups are essentially in-house consultants whose time is contracted for and reimbursed by NPS regional directors and park superintendents.)

3. **Issue Identification** – A clear definition of issues to be addressed in the plan is one of the most important steps in the planning process. Without a clear understanding of the issues at hand, the



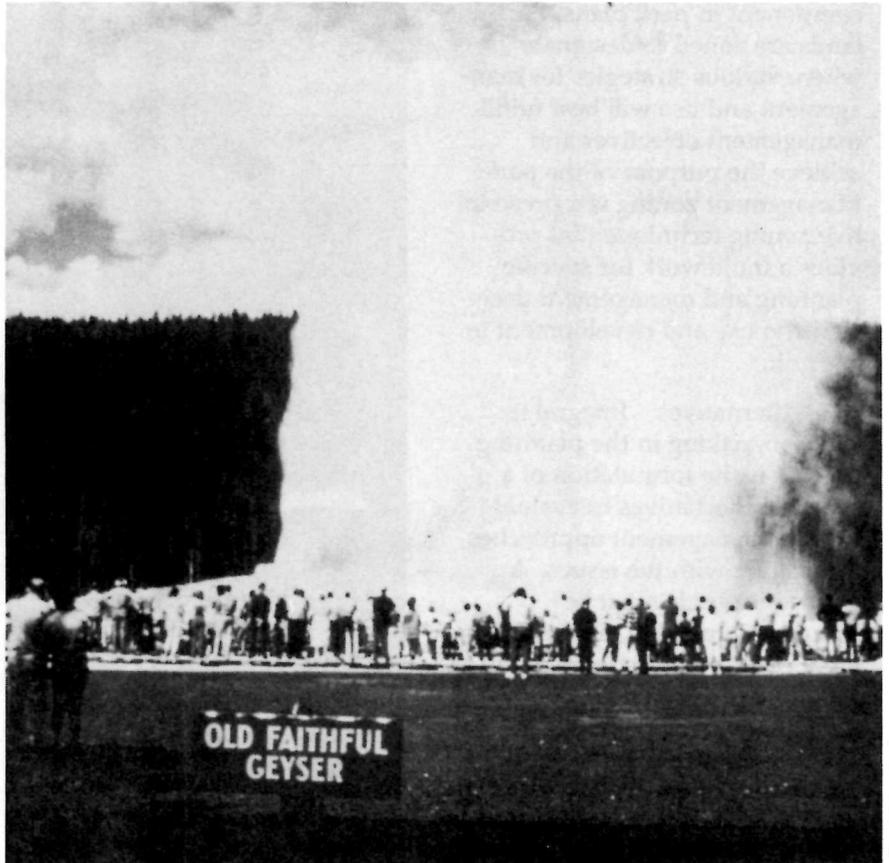
Richard Frear, NPS



Richard Frear, NPS



M. Woodbridge Williams



Fred Mang, Jr.

The visitor use element in a GMP focuses on the desired visitor experience and the activities and levels of use that will be accommodated.

plan's proposals cannot be sufficiently justified and the alternatives cannot be adequately evaluated. In addition, the identification of issues focuses the planning effort on the specific decisions that will need to be made. It is important to realize that not all management concerns can be addressed in a GMP. The planning issues are concisely described at the beginning of the plan — the details surrounding an issue are more fully explained in the affected environment discussion.

4. Management Zoning – Land classification remains an important component in park plans. Park lands are zoned to designate where various strategies for management and use will best fulfill management objectives and achieve the purpose of the park. Management zoning is a prescriptive zoning technique that provides a framework for specific planning and management decisions on use and development in the unit.

5. Alternatives – Integral to decision making in the planning process is the formulation of a range of alternatives to evaluate distinct management approaches for dealing with the issues. A plan's proposals must be adequately justified. The assessment of alternatives is prepared to provide an objective basis for selecting the plan's proposals. It also serves as the Service's NEPA record of the consequences of alternative actions considered during development of the GMP or implementing plans. All plans



*Resource management strategies formulated in a GMP include actions needed to protect, preserve and perpetuate park natural resources.*

Fred Mang, Jr.

consider a no-action alternative, minimum requirements alternative and other reasonable alternatives.

6. Regional Context – Throughout the planning process, the park needs to be considered within the broader context of the surrounding region. Because resource protection issues frequently are not confined by park boundaries, cooperative planning is needed to integrate the park into its regional environment and to address adjacent lands issues. Early coordination of planning activities with other federal agencies, state and local governments, and other neighboring landowners and concerned parties can be critical to protecting resources and resolving conflicts. In recent years there has been an increased emphasis on the importance of ongoing inter-agency and intergovernmental coordination.

7. Public Involvement – Since the 1960s, public participation has been a vital force in the park planning process. The level of public involvement depends on the level of interest or controversy surrounding the plan. Public participation occurs throughout the planning process and may include public workshops and meetings as well as informal work sessions on particular issues. In addition, all draft GMP's undergo a formal period for public review and comment.

## Conclusion

About 290 National Park Sys-

tem units now have approved general management plans — the majority of plans that need to be done have been done. Although it is true that many of these plans are older plans in need of revision, the days of full scale, comprehensive GMP efforts are likely to be short lived.

The NPS park planning process is a dynamic one that is continuing to evolve in response to the System's changing needs. Future planning is likely to be more detailed and focused on particular issues. Existing plans will be evaluated to determine whether their proposals are still relevant or whether new problems have arisen that need to be resolved. In many instances, a complete GMP revision will not be needed, and an amendment or an implementing plan/amendment will suffice. If the underlying philosophy of the existing GMP is still valid, there is no need to reevaluate every issue that was considered earlier.

Future planning activities also will be used to formulate short-term solutions to park problems as well as the longer-term outlook. Other planning efforts will be focused on implementing plans. If consistency with a park's GMP strategies is to be maintained, a great deal more coordination will be needed throughout the development of implementing plans. In addition, it is likely that an increased emphasis will be placed on the value of the resource management plan.

If planning is to maintain its

function as an effective problem solving tool for NPS managers, a new role is needed. The planning professionals of NPS are presently evaluating planning activities throughout the Service. Our goal is to make the planning program more effectively serve the needs of the National Park System. As it has been a number of times since we began planning for the parks, the Park Service once again finds itself at a crossroads in planning.

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*Cynthia deFranceaux is a program analyst with the National Park Service's Division of Park Planning and Special Studies.*

# Planning in the U.S. Fish and Wildlife Service

by Edwin A. Verburg and  
Richard A. Coon

The Department of the Interior is the nation's principal manager of national resources. The U.S. Fish and Wildlife Service and the National Park Service are the Department's principal conservation bureaus.

Because of the many rapidly changing forces affecting the world's fish and wildlife resources, the success of the U.S. Fish and Wildlife Service in meeting its responsibilities has become increasingly dependent upon two things: how well these changes are anticipated, and how effectively the new strategies are developed and implemented by the Service. To be effective, the Service must be prepared to meet new challenges.

## Mission and Historic Perspective

The Service is responsible for conserving, enhancing and protecting fish and wildlife and their habitats for the continuing benefit of all the people. These responsibilities are carried out through federal programs relating to wild birds, endangered species, certain marine mammals, inland and estuarine sport fisheries, and specific fishery and wildlife research activities. The Service was formed on July 4, 1940, by a merger of the Bureau of Fisheries and the Bureau of Biological Survey. The two bureaus had been transferred to the Interior Department in 1939 from the Departments of Commerce and Agriculture, respectively.



Planning has evolved in a series of steps over the years.

On July 1, 1974, the Bureau of Sport Fisheries and Wildlife was renamed the United States Fish and Wildlife Service. The Service presently employs approximately 6,500 people. The broadest embodiment of Service authority is found in the Fish and Wildlife Act of 1956. Under this authority the Secretary of the Interior shall take such steps as may be required for the development, management, advancement, conservation and protection of wildlife and fisheries resources.

## Evolution of Planning in the U.S. Fish and Wildlife Service

Planning activities in the Service evolved in a series of steps over the years. Prior to 1970, there was minimal coordination across

the bureau and the time for change was approaching. From the mid-1960s to 1972, a series of decisions evolved into a matrix management form of operation called the Program Management System. In May 1986, the matrix system was abandoned in favor of a direct line/staff structure.

### *Prior to 1970*

Before 1970, the Service had a Washington Office and five Regional Office staffs organized along functional lines (Fish, Wildlife, Research, Endangered Species and Habitat divisions). The divisions had a strong relationship from the division chiefs in Washington through the regional division supervisor to the project leader in the field. All of the functions (planning, budgeting, organization, staffing, con-

trolling and evaluating) were conducted by the separate divisions.

*1970 to 1985*

In the 1970s, there was a period of great change for the Service in terms of increased responsibilities, increased funding and organizational changes. New or expanded responsibilities came with the passage of such laws and amendments as the National Environmental Policy Act and the Endangered Species Act. Funding of resource management activities expanded from approximately \$50 million in 1968 to over \$250 million in 1981. In 1971, the Service initiated a Program Management System form of management. It was a departure from the traditional Service's geographic and functional management orientation.

*1985 and beyond*

An in-depth evaluation of our planning system was completed in July 1985. The evaluation led to a series of recommendations for the previous Director's consideration and approval. Most recommendations were accepted, however one recommendation (review of the Program Management System) was held in abeyance. Management direction was recently provided in the form of line/staff organizational structure by the present Director, Frank Dunkle, in May 1986.

Changes are now being implemented based on a revised structure that will emphasize planning within each region with less

oversight and control in the Washington Office. We feel this will lead to more efficient decision making at all levels.

**Essential Elements of a Plan**

The Service is like many other organizations in terms of moving through various phases of planning until they reach the level of capability that will enable them to undertake more systematic efforts. Initially, the main focus is on financial plans that encompass annual budget requirements and the functional needs required to operate smoothly. The next phase is more forecast-oriented and deals with multi-year budgets and the allocation of resources. Gener-

ally, this phase is followed by a realization that plans should address internal and external requirements related to presenting alternatives for various courses of action. The final phase in the more mature organizations is the definition of strategic and management framework for planning activities, and this involves the evaluation of progress toward the objectives outlined. The Service has evolved through these various phases of planning.

These evolutionary steps in the planning process act as building blocks for acceptance and use of plans. While not all of these phases have occurred in the Service in the sequence outlined

Phases of Development Toward		
	<u>Strategic Planning</u>	<u>Types of Plans</u>
Phase I	— Annual budgets and functional focus	Financial and annual work plans
Phase II	— Multi-year budgets and the strategic allocation of resources across the organization	Out-year oriented with forecasting as a segment of the plan
Phase III	— Competitive assessments, strategic alternatives and the trade off of resource priorities through periodic examination of allocations	Internally and externally blended plans that recognize a range of factors influencing an organization
Phase IV	— Defined planning/strategic framework, reinforcement of the management process, a review of incentives and progress made toward objectives (evaluation) and a supportive management structure	Strategic resource management plans that integrate the strengths of the various components of an organization

above, they are representatives of some of the events that have had impact. The Service has attempted to insure that the various plans that are developed — national, regional and field — include the major components of a successful plan. These components include:

- *Historical Overview* — The origins of an organization, and the legal foundation for its activities, should be understood.

- *Mission Statement* — Guidelines are often available in Congressional and administrative documents that help establish the mission of a federal bureau. In the case of the Service, our directorate (or board of directors, made up of key managers) created the mission statement. In essence, it is our statement of the purpose toward which all effort is ultimately directed.

- *Policies* — The policies of the bureau provide guiding principles that reflect the official position of the Administration, Department or Service. Policies guide particular aspects of programs, as authorized by law. They are used to make decisions or sets of decisions. Thus, policies serve as the fabric for future courses of action.

- *Goals and Objectives* — Goals provide statements of the condition that a plan is designed to achieve. A goal is usually not quantifiable and may not have a specific date of accomplishment. Comparatively, objectives focus on measurable results that need to be achieved.

- *Strategies* — Simply stated,



Michael Vanderford, USF&WS

*Based on changing to a line/staff organizational structure in 1986, there will be more emphasis on plan development within the regions.*

strategies outline the approach and/or methods through which problems are solved or minimized and objectives are achieved. Problems that need to be overcome should be identified after objectives are established, i.e., as a premise for the development of sound strategies.

- *Action Plans* — Once the Service has determined where it wants to go, and the methods for arriving at that point, the action plans spell out projects needed year-by-year so that budgetary resources can be directed to selected actions given limited resources.

Not every plan in the Service includes these six elements. However, the national, regional and field plans in total cover all of the ingredients identified above. For example, mission, policies and

strategies are covered at the national level, while objectives, problems and action plans are more comprehensively addressed at the regional and field levels.

## Service Planning System

### Structural Components

Each component of the planning activities in the Service builds upon the other. Clear, common sense linkages are vital to smooth, productive and effective Service operations that will lead us toward meeting our legislative and administrative mandates and to the achievement of on-the-ground resource results. To underline the linkage relationships, we should review the elements of the planning system and how the various plans relate. There are three levels of planning: national, regional and field.



Luther C. Goldman, USF&WS

Hatchery development plans are prepared for National Fish Hatcheries such as the Craig Brook National Hatchery in Maine.

### National Plans

- National planning includes planning activity undertaken by the Washington Office that encompasses more than one region and which provides data and information for budget development. Plans prepared at the national level include:

- National Waterfowl Management Plan
- National Disease Contingency Plan
- National Energy Plans

- National planning is influenced by Presidential, OMB, Departmental and Congressional guidance and by feedback and results of regional and field planning, budgeting and evaluation activities.

### Regional Plans

- Regional plans set forth

objectives, problems, strategies and operational actions.

- Endangered species recovery plans provide, as a general rule, species-specific planning necessary for addressing the needs of threatened and endangered species.

- Regional plans are implemented through annual work plans, regional budget allocations and field plans.

- Examples of regional plans include:

- Endangered Species Recovery Plans such as the Masked Bobwhite Quail Recovery Plan
- Merrimack River Fish Passage Action Plan
- Columbia River Basin Management Plan
- White-winged Dove Management Plan

### Field Plans

- Field plans guide operational activities on individual field stations.

- They step down higher level guidance contained in national and regional plans.

- Examples of field station planning include:

- Refuge Master Plans
- Alaska Refuge Comprehensive Conservation Plans
- Refuge Management Plans
- Hatchery Development Plans
- Bristol Bay Cooperative Management Plan .

### Wildlife Refuge Planning

The Service manages the National Wildlife Refuge System. There are 437 units comprising 88 million acres; 77 million acres are in Alaska.

Individual refuges are involved in three field station planning processes — master plans, refuge management plans and annual work plans. These generally have a 10 or 20-year horizon and set long-term objectives for land-use management of certain refuges. They are developed as needed. Currently about 100 master plans are in effect, with 15 more in various stages of preparation. The decision as to whether a refuge should have a master plan or revise an existing one is up to the regional director, who weighs such factors as the role of the refuge in meeting regional and

national objectives, the adequacy of existing data and documentation supporting the current refuge program and the extent of public interest and controversy associated with the current program.

Whether or not it has a master plan, each unit of the refuge system operates in accordance with one or more management plans covering such activities as public use, habitat management and fire management. These plans provide the broad framework for planning and budgeting. They also serve to identify long-term refuge needs and objectives for refuges that lack master plans.

Annual work plans are the basic documents that outline the jobs to be done at each refuge in a given year and budget the necessary money and personnel. These plans are essential components of the Service's budget process.

The 77 million acres of refuge land in Alaska are administered under the same rules and regulations that govern other refuges. However, owing to long-standing tradition, the state's entirely different physical scale and climate, and legislative compromises that preceded the law's enactment, many provisions governing management of Alaska refuges are unique. Section 1002 of the Alaska National Interest Lands Conservation Act (ANILCA), for example, directs the Secretary of the Interior to analyze the impacts of oil and gas production on the coastal plain of the Arctic National Wildlife Refuge and to authorize related mineral exploration on



*There are 437 National Wildlife Refuges comprising 88 million acres. Each is guided by one or more refuge management plans and some also have in-depth master plans.*

that plain. Also, wildlife population studies are required to assess potential impacts from further exploration, development or production. This approach to development contrasts with the typical situation — establishment of refuges for wildlife protection and uses that are deemed compatible with purposes for which they were established.

ANILCA also preserves the subsistence rights of rural Alaskans. Alaskans will be able to continue their cultural traditions of gathering food from refuge lands insofar as this is consistent with "the conservation of healthy populations of fish and wildlife." Other subsistence items are bartering and handicrafts.

Finally, ANILCA directs the Service to submit to Congress by 1987 comprehensive management

plans for all Alaska refuges. Again, this directive is tailor-made for Alaska. The pace and degree of planning for the remainder of the system are largely within the discretion of the Service.

### **Service Planning Issues**

As the Service has matured over the years in the planning area, a wide range of issues have surfaced that have demanded attention. The nature of these issues, and the response to each one, is outlined in this section.

### **Management-by-Objectives**

Peter Drucker presented the concept of management-by-objectives (MBO's) over 30 years ago. The Department of the Interior



*The Alaska National Interest Lands Conservation Act preserves the subsistence rights of rural Alaskans.*

has applied this framework to high priority management actions that are identified for accomplishment within a specified period of time.

Several of the MBO's delineated by the Service relate to the completion of plans. For example, fishery objectives and strategies are being developed in the regional offices to implement the newly defined Responsibilities and Role Statement for the Fishery Resources Program. These objectives and strategies are being drafted for restoration or mitigation of certain fish species or ecosystems. National resource plans for waterfowl and other migratory bird species are covered under the MBO umbrella, along with the North American Waterfowl Management Plan that is being administered in cooperation with the states and the Canadian Wildlife Service.

MBO's provide for oversight of the progress toward target dates. The positive aspect of this oversight is that assistance is available from other offices and bureaus in the Department in a timely manner. It also facilitates movement toward the resolution of planning issues.

Comparatively, experience has shown that managers and their staff generally are too optimistic as they outline the deadlines for completion of tasks listed in an MBO. In addition, there often has been a propensity to shorten the steps followed. This results in the need to extend deadlines or revise the MBO tasks to accommodate previously unforeseen events.

David B. Marshall, USF&WS

Experience with this management system, overall, has been constructive and has assisted managers in facilitating the completion of important planning objectives.

### State Comprehensive Plans – Federal Aid Process and Fish and Wildlife Service Coordination

The Pittman-Robertson (PR) and Dingell-Johnson (DJ) programs were established in 1937 and 1950, respectively, to provide cooperative assistance to states for wildlife and fish restoration. Collectively, the Acts are known as the Federal Aid in Sport Fish and Wildlife Restoration Acts. Funds for the programs are derived from excise taxes on certain types of sporting equipment. These revenues are apportioned to the states according to statutory formulas based primarily on the state's land area and the number of paid hunting and fishing licenses. The Service is authorized to retain a portion of these revenues for administration of the PR-DJ programs and for support of the Migratory Bird Conservation Act.

Congress amended the Federal Aid in Sport Fish and Wildlife Restoration Acts in October 1970 to authorize comprehensive fish and wildlife management planning as an alternative to the traditional project-by-project basis for planning and funding. This option enables the states to exercise greater self-reliance and to sharpen their management focus by devoting primary attention to

program results rather than to processes and projects.

While the states have been able to participate in the Federal Aid program through the completion of modular or comprehensive plans since 1970, only five have selected this technique to date. Numerous training courses and technical assistance opportunities have been provided to encourage the completion of these plans. While it is not anticipated that conversion to this approach will be embraced by all states, the experience to date with this endeavor has provided a useful point of reference for the Service.

The Service uses planning as one of the ways to improve its conduct of business, now and in the future. Although the Service may never have resources adequate to do a complete job, our continuing challenge will be to develop more systematic ways to identify the most important problems and issues to effectively allocate our resources, and to improve methods to measure our success.

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# Planning Approaches in the Bureau of Land Management

by David C. Williams

The course of land use planning in the Bureau of Land Management (BLM) has not been a smooth one, of knowing always where it was headed and that it was making progress. Rather, the Bureau started planning because of specific needs, stumbled and sometimes failed, and often changed course. The present approach is thus an incremental response to the perceived problems of the previous system. As it turns out, it is a largely successful, and unheralded, response.

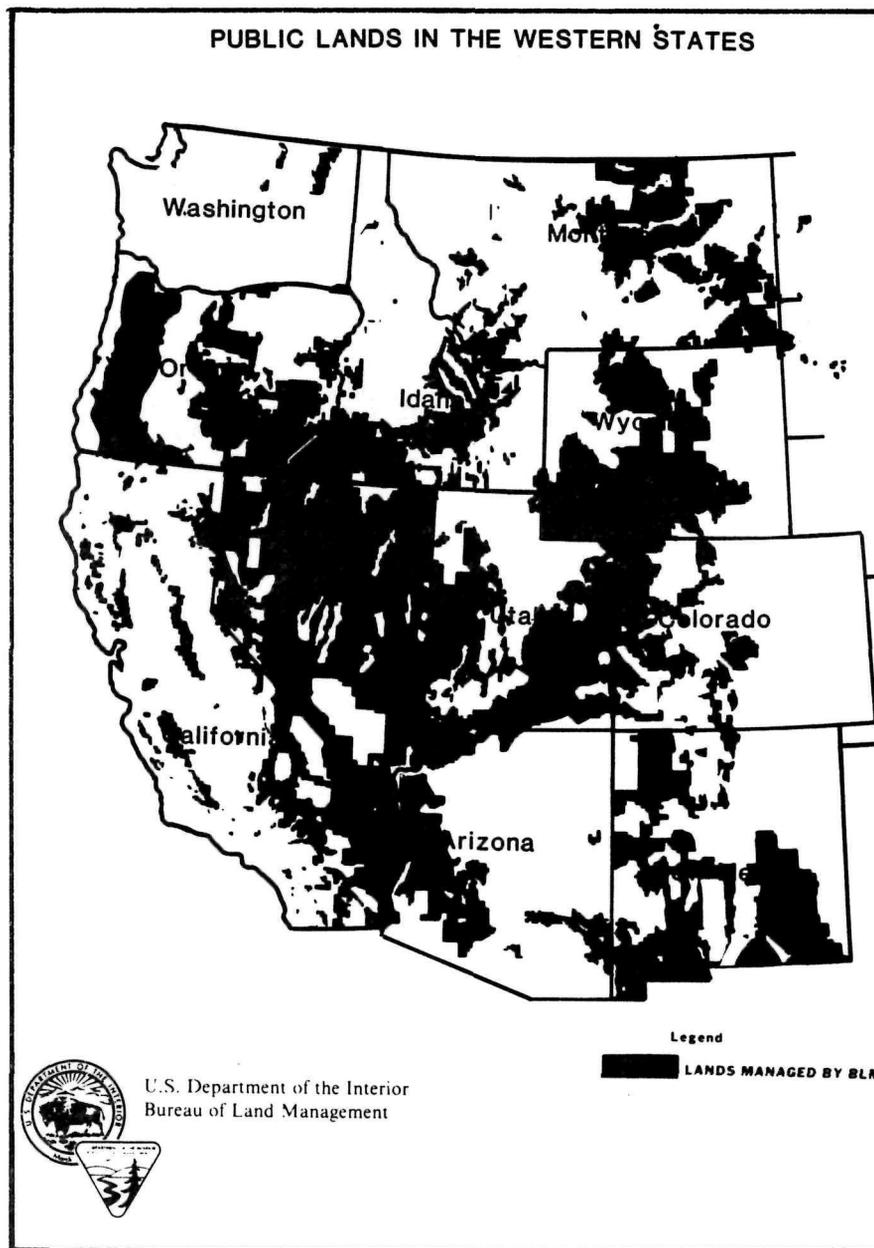
There is a great deal of truth to: "Your weaknesses are your strengths, and your strength is your weakness." BLM weaknesses, especially contrasted to the other agencies being considered here, are often seen to include:

- late creation as an agency: 1946
- a late charter (or organic act): 1976
- an unfocused multiple use mandate
- poverty
- the resulting poor public image.

For BLM, these weaknesses have — in a clearly unexpected way — contributed to the creation of a focused, effective and useful planning process which now has the potential to become a major factor in BLM management.

## How and Why Did We Get Wherever It Is We Are?

The new "USA" held its first public land sale in Ohio in 1796, following extensive debates be-



tween Thomas Jefferson and Alexander Hamilton over the proper course of development for the western lands, acquired from the original states as a result of compromises in approving the Con-

stitution. BLM traces its history from the creation of the Cadastral Survey in 1785 and of the General Land Office (GLO) in 1812. We are by far the "oldest" of the federal land agencies.

The GLO goal was to dispose of as much land as possible as fast as possible: through homesteading, granting incentives to railroads, rewarding soldiers and giving land to new states. Public lands were the largest source of land for the Forest Service, National Park Service and Fish and Wildlife Service.

In 1934 the Taylor Grazing Act started a process for managing grazing rights and use, and first recognized the reality that land was no longer being sought for private use. Operating on the same lands, with totally divergent purposes, the GLO and Grazing Service were merged by Executive Order of President Truman in 1946 with the "beautiful" (and presumptuous) name of the Bureau of Land Management. Actually, both groups were groping toward the reality that the public lands of the West are not the vast, arid nuisances [The Lands Nobody Wanted] of ancient myth. The GLO started to provide recreation uses; the Grazing Service started to concern itself with wildlife and wild horses.

The critical turning point for BLM was 1964: Congress took a look at the over 3000 laws under which BLM operated and established a Public Land Law Review Commission (PLLRC) to bring order to the chaos. It also passed the Classification and Multiple Use Act which provided for dividing public lands into those to be retained, to be disposed of and those requiring further study. Planning was encouraged for the



Bureau of Land Management

*The evidence of earlier visitors is protected by Areas of Critical Environmental Concern (ACEC) designated in the plan.*

vast majority of lands which would be retained.

### A Short History of Planning in BLM

Systematic land use planning in BLM evolved out of a short-lived effort begun in 1964 to establish a bureau-wide programming-planning-budgeting system. That effort lasted one year in BLM, heavily resisted by staffs whose programs were difficult to quantify and thus likely to lose out in the budget wars. "The system died ignominiously in 1965," but fragmentary support continued for a bureau-wide planning initiative.

One part of PPBS, a systematic effort to collect and analyze inventory data, was renamed the Unit Resource Analysis (URA), becom-

ing the basis in 1969 for a new planning system focusing on land use rather than budgeting. Management Framework Plans (MFP's) were to be prepared for all lands within each "planning unit," starting with the URA which focused on management opportunities for seven primary resources: lands, energy and minerals, timber, livestock forage, watershed, wildlife habitat, recreation. At the same time, the Planning Area Analysis examined supply and demand through a Regional Analysis and a Social-Economic Profile; then followed 3 steps:

Step 1: Efforts by specialists to argue unrestrained for their perspective "without considering other activity programs or values."



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BLM manages the "Lost Coast" of California through the King Range Conservation Area.

Step 2: Planners compare individual tunnel vision recommendations, and identify impacts. Managers analyze multiple use prospects, conflicts between uses and ways to resolve these conflicts.

Step 3: The area and district managers make decisions about the use of the land, intensity of use and proposed management actions.

MFP's covering about 80 percent of the public lands in the lower 48 were approved by District Managers, rarely reviewed at a higher level and never comprehensively inventoried by the Washington Office. Most had no environmental analysis on the MFP, but might have it on individual parts, e.g., livestock graz-

ing, timber, oil and gas leasing. Often the "plan" was a series of maps and overlays on BLM office walls, and reports and data in office files.

### Problems with Management Framework Plans

Well, where do we start? For the first five years the BLM land use planning system was subjected to little evaluation. By the mid-'70s, however, criticism of MFP's came from all sides: within BLM (and Interior), the General Accounting Office and National Academy of Sciences, user and environmental groups, state and local governments and, of most concern, court decisions against the Bureau. Was the URA/MFP

process as responsive to FLPMA? Criticisms centered on:

— Tunnel vision — Step One was widely interpreted as needlessly raising conflicts between uses, and causing unrealistic recommendations.

— Skewed toward economic uses — technical guidance encourages production.

— Little guidance on making trade offs — to guide choices between resources, or between local interests and national priorities.

— Inadequate (obsolete) or excessive data, or greatly varied levels of data for different resources. District managers are deferring critical decisions needed now, in hopes of obtaining more dependable data at a later date. BLM accumulated voluminous inventory prior to analysis.

— Too general or too specific — many so-called decisions are merely broad policy statements, standard operating procedures or "motherhood" declarations of continued cooperation and coordination, too broad to be useful in resolving conflicts or allocating land uses. Some MFP's had the opposite problem: excessive detail, such as identifying individual tracts for disposal when only targets and guidelines were needed.

— Poor incorporation of the requirements of NEPA — no EIS's were prepared on MFP's. There was little consistency in when and how to prepare environmental analysis, except in grazing EIS's (because of court guidance). Plans rarely provided a base for multiple

use in these EIS's, and the EIS staffs often had to do "planning" in order to complete their work.

— So BLM had dual planning systems, one for MFP's and one for grazing EIS's — keeping the central land use decision — the allocation of public range forage among livestock, wildlife and watershed uses — out of the EIS.

— Highly variable public participation — many found the process complex and difficult to get involved. The Forest Service process was seen as far more understandable and accessible. Public participation came too late to be meaningful, or even more often it was simply ignored.

— Fixation on the plan as the final product of planning, often a one-shot and soon obsolescent final plan. BLM has not yet mastered the dilemma of keeping the public informed without producing some product.

— Rigidity — too firm a plan, hard to amend, may preclude or delay subsequent actions even when they are clearly appropriate.

— Planning for Planning's Sake — the initial target was to include all lands, meaning that sometimes plans needing amendment or revision were neglected while resources were devoted to areas not requiring attention.

— Finally, concerns that the plans really did not change the decisions that BLM was making — Johanna Wald of NRDC concluded that "plans did not control future

uses . . . In short, the pre-FLPMA planning system was a planning system in name only."

The argument has been made strongly that the problem was due to BLM: its lack of management commitment and adequate funding, too few properly trained planners and the resistance to (or capture of) planning by field managers. Chris Leman of Resources For the Future (RFF) refutes this type of argument: "A different system probably would have coped better with the less-than-ideal conditions usually prevalent." Still, a different system may not have really changed tradition and engendered solid manager commitment.

### NEPA as a Critical Force in BLM Planning

At the end of the year that BLM started Management Framework Planning (1969), Congress created the most significant force for change in BLM planning and decision making: The National Environmental Policy Act. BLM, however, was slow to grasp the implications of NEPA. On the bulk of its land the prime activity is livestock (and wildlife) grazing. BLM took until 1972 to develop a NEPA strategy on grazing: to prepare a single programmatic EIS for grazing nationwide. BLM did prepare the EIS, but this strategy was challenged by the Natural Resources Defense Council (NRDC).

In 1974, a Federal District Judge ruled that BLM must prepare site-specific grazing EIS's. BLM

and NRDC reached agreement to prepare 145 covering all the BLM grazing lands; a schedule provided for specific EIS's to be completed each year through 1988. Thus, the settlement itself became the driving force in setting the Planning Schedule.

### **What Were the Responses to These Criticisms and Events?**

The study and deliberations of the PLLRC took 6 years but produced a landmark report — a key recommendation was that the public land agencies be required to plan land uses to obtain the greatest net public benefit. Another 6 years resulted in BLM getting its long-awaited charter: the Federal Land Policy and Management Act (FLPMA). By an overwhelming bipartisan vote, heavily supported by Western delegations, Congress set out the nation's policy to be: retention of the public lands, commitment to multiple use and the basic authority to protect areas where exploitation is inappropriate, even while encouraging the development of natural resources. "Flip-ma" has made an incredible difference in planning in BLM; Congress declared it to be national policy that:

*[Section 102(a)(2)] The public interest will be best realized if the public lands and their resources are periodically and systematically inventoried and their present and future use is projected through a land use planning process coordinated*

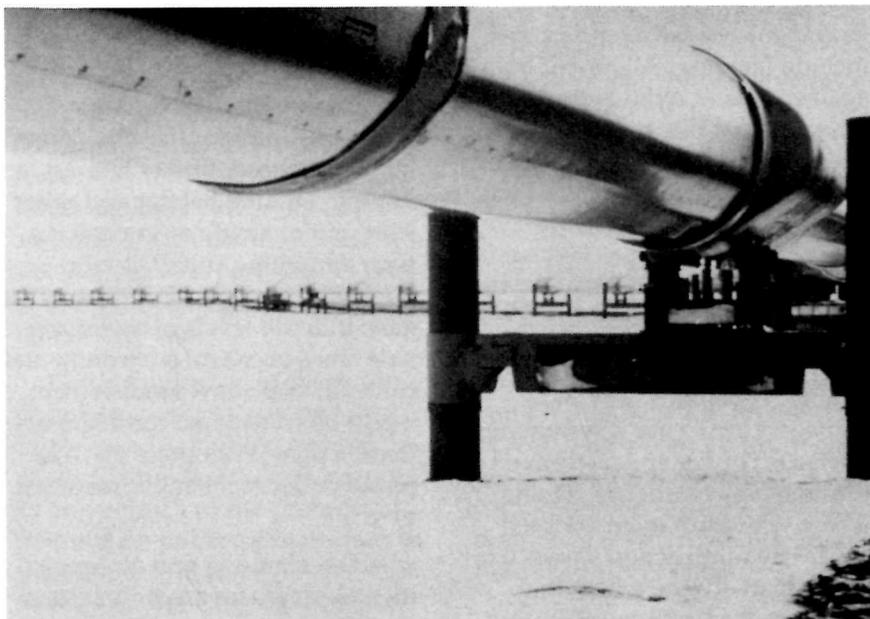
*with other federal and state planning efforts.*

The first substantive section of FLPMA [202] is devoted to land use planning. The heart of our new mandate requires the Secretary to [concisely]:

- (1) observe the principles of multiple use and sustained yield
- (2) use a systematic interdisciplinary approach
- (3) give priority to areas of critical environmental concern
- (4) rely on the inventory of public lands, resources, values
- (5) consider present and potential uses of the public lands
- (6) consider the relative scarcity of the values involved
- (7) weigh long-term against short-term benefits to the public
- (8) comply with applicable pollution control laws
- (9) be consistent with state and local plans.

FLPMA resolved many questions, but did not mandate the type or name of the new planning process. So RMP (Resource Management Planning) is a BLM invention. Between 1976 and 1979, BLM wrote the regulations to create the new system. Two basic decisions set the framework for developing these regulations:

- 1) The writing team would



*The Trans Alaska (Oil) Pipeline is the biggest project yet built on public lands. BLM is working on a Corridor Plan for other uses.*

Bureau of Land Management

work with FLPMA in one hand, NEPA in the other, i.e., RMP would fully integrate planning and environmental processes.

2) The nine planning actions required would be the same for BLM and the Forest Service, which was preparing its regulations for the National Forest Management Act (NFMA) on the same schedule. This would promote common public understanding and joint planning (never realized).

The results became effective in September, 1979, almost three years after the passage of FLPMA. The proposed regulations (43 CFR 1600) had generated a great deal of comment for both agencies, which took a long time for resolution.

Planning in BLM is conceived

of as a three-tier system:

— RMP's get direction from National Policies

— The Resource Management Plans are the major element

— RMP's act as the framework for Third Tier Activity Plans.

The greatest difference between BLM planning and that of the Forest Service and Fish and Wildlife Service especially is that we have no formal, organized national policy. There is no national plan or regional plan (for BLM, this would be a state plan). In a few programs, such as coal, there is a bureauwide EIS and program because of the high interest of the Secretary of the Interior. Activity plans are generally similar to those of the other federal

land management agencies, and include [grazing] Allotment Management Plans, Wild Horse Area Management Plans, Habitat Management Plans, Recreation Management Plans and Coal Leasing EIS's.

The middle tier of Resource Management Planning, as conceptualized by BLM, is as patently rational as it is possible to get in federal regulations. The BLM managers are to use a systematic, interdisciplinary approach to go through eight planning actions which will result in an adopted plan. The ninth action covers use of the plan. To the extent that Resource Management Planning is working in BLM, it is because the extreme rationality — largely derived from NEPA — has been "bounded" or tempered by the approach BLM has taken to implement it.

### **BLM's Approach to Resource Management Planning — in 1979 Regulations**

- RMP's are issue driven, i.e., they are initiated only when decisions need to be made, when issues or unresolved questions are not taken care of by an existing plan. Most common issues in RMP's through 1984 were grazing, wilderness, coal leasing; now they are lands, oil and gas, timber.

- The RMP is a comprehensive plan covering all the resources in the area. The plan includes a narrative and maps showing allocations of the kinds and locations of

allowable uses, levels of use and management actions to be taken.

For example, the RMP may designate areas for livestock grazing, wilderness, timber harvest, mining, wildlife habitat and other uses, either singly or in combination; determine suitability for leasing (e.g., for coal or oil and gas); indicate levels of use; designate areas of critical environmental concern, and show lands which might be considered for disposal. Once a plan is adopted, all BLM resource decisions must conform to it.

- The planning and environmental processes are fully integrated:

- It was a policy call of the Bureau that every RMP is a "significant federal action" requiring an EIS; the nine action steps meet all the scoping, alternative formulation, impact analysis and public participation requirements of NEPA and the Council on Environmental Quality.

- The plan meets the EIS requirements for the grazing EIS court settlement, the EIS requirements for Wilderness Review and the comprehensive land use plan requirement of the Federal Coal Leasing Act.

- The products of the RMP process are a Draft Plan/Draft EIS, a Proposed Plan/Final EIS and the Adopted Plan/Record of Decision.

- NEPA analysis is tiered so that specific actions (e.g., permits) may require only an environmental assessment or categorical exclusion.

- BLM planning is totally decentralized. RMP's are done for individual resource areas (though not every one will ever need one) except in a few unusual situations: the California Desert Plan mandated in FLPMA, and the five proposed district-wide RMP's in timber-rich Western Oregon to be done simultaneously. Planning teams are created for each plan, reporting to the line manager on the spot — the Area Manager — and each has to be trained for its effort. There are no floating teams, service center planning group or consultants. The objective is to build ownership of the plan by those who will carry it out.

This approach has been modified based on the experience of implementing it over the past few years, but the basic direction has proved effective and been largely accepted by BLM managers and the public.

### **What are the Difficulties in Implementing Resource Management Planning?**

The criticisms of the planning process evolve. As BLM addressed those discussed earlier for Management Framework Plans, new ones arose such as:

- RMP's take too long and cost too much — as the RMP process was being developed, plans were expected to take seven years: three for pre-planning, two for inventory and two for actual plan preparation. During that time, issues may change, priorities shift and manager and staff may change.

- Decisions are delayed until plans are completed — a perception that especially energy/mineral projects were delayed by the lack of a plan.

- Poor guidance on the national and state level — actually, there was enough guidance, it just overlapped or contradicted other guidance, or was so poorly written that BLM planning teams could not understand it. Some written guidance was contrary to unwritten national policy.

- Difficulty integrating FLPMA and NEPA requirements — planning teams were not sure how to prepare an EIS while they were developing the proposed action; and much of the public didn't like the NEPA work BLM was already doing. Some Departmental NEPA experts thought the EIS should consider only impacts and not be a part of the decision making process.

- Rigid sequence of steps/hard to amend — to prepare the plan, or even amend it, the team had to go through each step in absolute order.

- The products are unreadable — the first RMP's were hard to compare; in some cases, it was difficult to find the proposed action.

### Actions Taken to Streamline the Planning Process

Before even the drafts of the pilot round of RMP's appeared, changes were made in the planning regulations. In 1981 the Sec-

retary of the Interior gave direction for all bureaus to look at "burdensome and counter-productive" regulations and either eliminate or streamline them. BLM Director Robert Burford established a task force, carefully excluding anyone associated with planning, and asked them to report back in nine working days with shorter regulations. They did.

Getting approval of these proposed regulations took two years. Three hundred fifteen comments protested the task force's proposal to move much of the procedural material on public participation to the Planning Manual, and to rely heavily on the CEQ regulations. Public comments overwhelmingly accused then Secretary Watt of trying to keep the public out of planning; a major worry was that BLM would just adopt the CEQ regulations, and then Watt would change them to somehow exclude the public. In response to the comments, BLM Director Burford insisted that all the provisions on public participation be retained in the regulations.

Despite all this controversy, the task force was able to propose several significant changes, starting with the givens that: (1) we continue the RMP process, (2) the nine action steps remain the same, (3) public participation cannot be reduced, and (4) the amount of money available will be greatly reduced. The actual changes were fine-tuning of a system we thought was going to work.

The most important changes, however, were done internally, through policy guidance and deci-

sions of the career managers and planners of BLM. We set out, emphasize and live by several key themes:

- Most important is that plans are action oriented — the purpose of planning is to Aid Managers in Making Decisions. [RMP's are prepared only when the issues/decisions demand it — this means (1) reliance for a long time on existing adequate MFP's, and (2) that BLM has no intention of requiring a plan on every acre; we dropped the requirement for revision every 10 years, feeling an automatic revision would actually breed neglect of plans.]

- The manager, then, is the key planner. [The area manager, our closest-to-the-ground multiple use manager, is given responsibility in the regulations for the first time.]

- Planning [and inventory] is focused on the decisions to be made.

- Quality must be built in from the beginning.

- We start at the end by considering how we will use the plan.

- There is no division between planning and environmental processes.

- All issues are ultimately social and economic in origin and resolution.

- All plans must be consistent with state and local plans.

- Planning must be linked to other decision processes: program

planning, budget, organizational research, evaluation.

One of the most successful aspects of this approach is that planning is a learning, sharing experience. We have to have regulations, a manual and a supplement to the manual, but we have made them flexible to account for BLM's variety of situations and issues and to support the Bureau's philosophy of decentralization. A major emphasis of our approach is to try different techniques and methods, and share the successful ones with resource areas which are just starting their plans.

Reorganization of the Washington Office shifted emphasis from the functions of planning, inventory and environmental coordination to the client to be served. While program coordination focused on the regulations, etc., field support could concentrate on sharing.

This also addressed the two significant problems of lack of WO coordination and poor image in the field (note the supportive terms in the titles). At the same time, the Office directed the time to be spent on RMP's be scheduled at 24 to 30 months, a reduction from the 4-to-5 years the pilot RMP's took. Grazing Management EIS's and Wilderness Studies were fully integrated into RMP's, and plans incorporated coal unsuitability determinations.

In contradiction to these improvements, two decisions seriously hampered planning in BLM:

1) The Bureau's budget for

planning was cut 45 percent from 1981 to 1982.

2) The State Office Planning and Environmental Coordination chiefs were demoted from reporting to the State Director to reporting to the Chief of Resources, their grade was reduced from GS-14 to GS-13, the two GS-13 branch chief positions for Planning and for Environment were eliminated; and the size of each state P&EC staff was limited to eight (from 16 to 30).

These decisions called into question the commitment of the Bureau to planning. Several states decided not to ask for funds for new start RMP's because of lack of assurance they could complete them. The cutbacks, however, did much to make the Bureau — from the Washington Office to the planning teams — figure out how to make planning work in the face of declining resources. This may affirm the 1981 prediction that "perhaps precisely because of BLM's relative poverty, its new planning system is being implemented with far more flexibility than in the case of the Forest Service."

### **How Well is All This Working?**

The usefulness of planning to BLM managers is best stated by the conclusions of the 1984 BLM Planning Evaluation:

*The RMP process is widely accepted by those responsible for developing and utilizing the process. They feel that the RMP process is*

*more streamlined, that the planning steps allow for efficient data assembly and analysis, and that the plan document is in more useable form. In addition, plans that are up to date are now being used by managers. As a result, the team does not see the need for any major system changes to a process that is now accepted and in place.*

### **Where Are We Now? — Critical Issue Facing BLM Planning**

The most critical issue in our approach to planning concerns inconsistencies we found in the way plans defined the decisions to be made and treated resource program requirements. To address this, the keystone of our current efforts is the development and adoption of Supplemental Program Guidance (SPG) to the Planning Manual. This effort demonstrates important points made in this article:

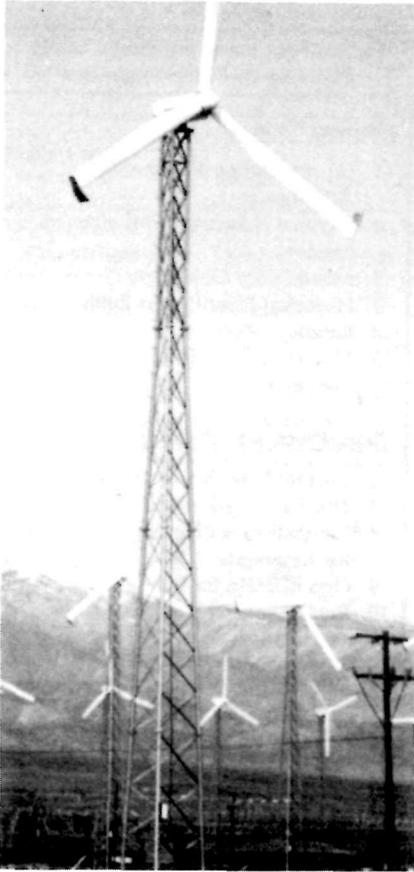
— The key is to clarify the nature of the decisions to be made in RMP's.

— The guidance for each program is written by the responsible WO staff.

— Guidance is approved by planning — to assure multiple use perspective.

— Review by all BLM field offices is a must for acceptance and use.

— We broke precedent by sending review copies to all Western Governors and involved groups



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All 10,000 of these wind machines have been built since 1980 - requiring amendments to the Desert Plan.

and announced it in the Federal Register.

This unusual step of asking the public what they think of our manual raises one of the critical issues facing planning in the Bureau today: what do we mean by public participation? We are very good at involving the public at the local plan level. Hundreds of people help us identify issues and comment on the draft plan/EIS. They can — and do — protest the final decisions. But R.W. Behan (see Who Can You Turn

To?) would argue that that's just consultative public participation. What we need is for managers to "adopt a style of interactive decision-making with their affected and participating parties." That would allow them to bargain, give-and-take, compromise and thus participate in the fashioning of an outcome everyone can tolerate (his definition of sound multiple use management). Behan concludes: "Until your various publics are satisfied, you are not practicing good and legitimate multiple use management."

The question of public participation is not just at the local level where plans are prepared. There is an increasing concern about the role of the public in developing BLM national policies. FLPMA Section 309(e) says:

*The Secretary [of the Interior] shall establish procedures . . . to give . . . governments and the public adequate notice and the opportunity to comment on the formulation of standards and criteria for, and participate in, the preparation and execution of plans and programs for, and the management of, the public lands.*

To some degree, the success of planning reviewing guidance will lead to calls for public involvement in making decisions about BLM policy for many resources.

The Bureau of Land Management did not arrive at its Bias for Action — the #1 attribute praised in Peters and Waterman's classic — through deliberation. It is a product of the Bureau's culture — and its poverty, of its status as the

manager of the "Lands That Nobody Wanted."

Our bias, then, is for "getting on with it," for trying out something and then correcting our mistakes. That is the essence of our approach to planning. We tried the management framework approach, and then adjusted it. Its problems, however, required a whole new law: the Federal Land Policy and Management Act. Resource Management Planning is our current approach to multiple use land use planning. We tried it out in six pilot plans, and then used the experience to: 1) revise the regulations and fine-tune the guidance, and 2) share the success with new planning efforts. As we learn more, we are able to build it in.

Our plans are getting better, and we have an easy method for improving plans we have already done. We will continue to experiment, to adjust, to amend, to improve. I have often said the BLM motto is: "No Decision is Final." That is certainly the case with planning — and we intend to keep it that way.

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*David C. Williams is Chief of Planning for the Interior Department's Bureau of Land Management.*

*This article is a condensation of a paper given to the Western Social Science Association's 28th Annual Conference, April 24, 1986. Much of the descriptive text has been incorporated in the John Randolph article on "Comparison of Approaches to Public Lands Planning," and therefore is omitted from this condensation.*

# Comparison of Approaches to Public Lands Planning: U.S. Forest Service, National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management

by John Randolph

In recent years, the planning for use and management of the federal public lands by the four principal administrative agencies (Forest Service [FS], Bureau of Land Management [BLM], National Park Service [NPS], and the Fish and Wildlife Service [FWS]) has grown in application and sophistication. The general purpose of such plans is to provide a clear management direction and prescription for specific land units that is consistent with agency goals, national and regional needs, ecological objectives and the public interest, and that reflects budgetary constraints. These institutional, economic, scientific and political parameters combine to require planning procedures that must meld traditional rational planning with the political resolution and allocation of values into a complex and comprehensive process.

While the four agencies have conducted planning for their administered lands in some form for many years, they have had 5-8 years of experience implementing recent Congressional and agency planning directives. These directives responded in part to a range of public and scholarly criticisms of the manner in which the use of the public lands had been planned and managed in the past.

Combined, the recent experience of these agencies may serve as the grandest test of public lands planning in history. Decisions made in the course of this surge of planning activity will likely determine the future development and protection of the nation's vast

public land resource, 30 percent of the total U.S. land area. As a result, it is critical and timely to examine the planning experience of these agencies, to compare the processes and methods used as well as the factors influencing those procedures. It is hoped such a comparison will help set the groundwork for research assessing the effect and effectiveness of this immense planning effort on the management and use of the public lands.

For this comparison, it is necessary to establish a set of criteria or factors through which the planning experience of the four agencies can be examined. Table 1 gives the factors used in this article. The first five variables deal with essential overview information to establish the planning context in which the agencies find themselves. The agencies are responding to a range of land types and conditions; policies, objectives and directives; and planning and management traditions. The remaining factors describe the specific plans, processes, procedures and methods used by the agencies. Using the framework provided by this set of variables, this article provides a preliminary comparison of the land management planning of the four federal public lands agencies.

## The Context for Public Land Management Planning

Through the years, these agencies have administered quite different lands in quite different

TABLE 1

Factors For Comparing Public Lands Planning By Federal Agencies
<u>Planning Context</u>
1. Current Range of Planning Activities
2. Physical Nature of Administered Lands
3. Broad Policy Objectives
4. Historical Planning for Public Lands
5. Mandates and Directives for Planning
<u>Plans, Processes, Methods</u>
6. Current Land Management Plans
7. The Planning Process
8. Integration of Planning Requirements
9. Organization for Planning
10. Public Participation
11. Planning Methods
<u>Implementation</u>
12. Implementation Status and Effectiveness

ways. To understand the current public land planning of the agencies, it is helpful to look at the full range of their planning activities, the nature of the lands they manage, the statutes governing their activities, their broad policy directives and their planning tradition or lack of it.

Table 2 shows the range of land planning activities of the agencies, and in many cases the activities go well beyond the boundaries of the lands they administer. The FWS particularly has several statutory responsibilities that involve planning for public and private lands; these deal with endangered species, wetlands, waterfowl, fishery resources and ecological

**TABLE 2**  
**Range of Current Land Planning Activities: Public and Other Lands**

	Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
<u>Public Lands</u> Natl Level	RPA Assessment / EIS	Agency Policies	Agency Policies	Agency Policies
Field Level Comprehensive	LRMP/EIS by Forest	RMP/EIS by Resource Area	GMP/EIS (EA) by Park Unit	RFMP/EIS (EA) by Refuge Alaska (CCP/EIS) by Refuge
Area Specific	Allotment Plans Timber Sale Schedule	Activity Plans	Resource Mngmt Plans. Development Concept Plans Land Projection Plans	
<u>Quasi-Pub. Land</u>	Wild & Scenic River Plans National Trail Plans		Wild & Scenic River Plans National Trail Plans	
<u>Natl Programs</u>	RDA Assessment for all forest & range lands Research Program		State Outdoor Recr. Plans (approval) State Historic Preservation Plans (approval)	Endangered Species Natl Fisheries Res Program Migratory Bird Management National Wetland Invent. Ecol. Character. Studies State Wetland Inventory State WL Habitat Studies
<u>Adjacent Lands</u>	Cooperative Agreements	Cooperative Agreements	Cooperative Agreements	Cooperative Agreements

LRMP – Land Resource Management Plan  
RMP – Resource Management Plan  
GMP – General Management Plan  
RFMP – Refuge Master Plan  
EIS – Environmental Impact Statement  
EA – Environmental Assessment

studies. The NPS and the FS prepare plans for designated wild and scenic rivers and national trails which often include privately owned lands. All four agencies develop agreements with non-federal property holders adjacent to and within public land boundaries. The Park Service develops specific plans (so called Land Protection Plans) for private holdings within authorized park boundaries.

However, the focus of the land planning activities of these agencies is on the lands they administer: the National Forest System, public lands managed by BLM, the National Park System and the

National Wildlife Refuge System. The major land use plans are developed for individual units (e.g., each National Forest) and are comprehensive in nature. Summarized in the top portion of Table 2, the plans for these land units and how they are developed is the focus of the discussion which follows.

Described in Table 3, these public land systems amount to nearly 700 million acres, about 30 percent of the nation's land area. While concentrated in the west and in particular Alaska (with 250 million acres), there are National Wildlife Refuges in 49 of the 50 states, units of the National Park

System in 49 states, and National Forests in 44 states. These federal lands are extremely diverse. The national parks contain the most striking scenic, natural and cultural wonders of the country; the wildlife refuges protect important habitats of migratory birds and endangered species, and represent all the major ecological regions of the country; and the national forests contain productive forests which serve as a renewable reservoir of forest products, woodland wildlife habitat and a major resource for dispersed and developed outdoor recreation.

The BLM lands are often regarded as the "leftovers" of the

public domain — i.e., those federal lands not claimed by the many private recipients of public land "disposal" (e.g., homesteaders, railroads, states) or not converted to national parks, forests or wildlife refuges. While the BLM lands are still used extensively for livestock grazing, they amount to more than half of the public lands, contain valuable energy and non-energy minerals, and provide important wildlife habitat and increasing recreation use.

The condition of the public lands also affects the need for and direction of planning. The condition of national forests and wildlife refuges is generally good. The western national forests were largely virgin when dedicated to

the system; the young, second and third growth eastern national forests were already cut over when acquired. The national parks have seen a dramatic increase in visitor use over the past 20 years, and as a result some park facilities have deteriorated, natural and cultural resources have been impacted and congestion has diminished the park experience. Last year, the National Park Service completed a 4-year, \$1 billion program to rehabilitate park facilities.

Some BLM and FS facilities are also deteriorating. Historically, the BLM lands have been subject to extensive overgrazing, damaging off-road vehicle use and the general abuse typical of a public "commons." Conditions have

improved with better management of off-road vehicles (particularly in the California Desert Conservation Area) and better range management. In 1984, 18 percent of BLM range lands were classified in poor condition compared to 33 percent in 1975.

The fundamental difference in land management by the four agencies is their guiding policy objectives and the specific laws they operate under. Described in Table 4, the objective of the FS and BLM is for multiple use and sustained yield management. The NPS and FWS have a narrower preservation or protection charge while still providing for recreation which is a primary objective in the

TABLE 3

Physical Nature of Public Lands			
Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
155 National Forests 19 National Grasslands	162 Resource Areas	338 National Park System Units	435 Nat. WL Refuge Units
192 million acres (23 mill.ac.-Alaska)	340 million acres (100 mill.ac.-Alaska)	77 million acres (52 mill.ac.-Alaska)	88 million acres (77 mill.ac.-Alaska)
Nature: productive forests, woodland wildlife habitat, grassland	Nature: rangelands for domestic grazers, wildlife; forestland, deserts	Nature: scenic, natural, cultural wonders	Nature: wildlife habitat, waterfowl, big game
Condition: generally good	Condition: historic over- grazing, but improving: 1966: 19% good & exc. 1984: 36% good & exc.	Condition: some over- crowding, deteriorating facilities	Condition: generally good
Dominating uses: timber, recreation, grazing, wildlife, minerals	Dominating uses: grazing, minerals, recreation	Dominating uses: recreation, preserv.	Dominating uses: F&WL, recreation

TABLE 4

Broad Policy Objectives for Management of Public Lands			
Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
<p><u>Multiple Use Sustained Yield</u></p> <p>managing for a number of resource values including recreation, wilderness, wildlife/fish, timber, forage and minerals in a manner that provides a high level of production in perpetuity "without impairment of the productivity of the land . . . and not necessarily the combination of uses that will give the greatest dollar return of the greatest unit output." (MU-SYA 1960)</p>	<p><u>Multiple Use Sustained Yield</u></p> <p>manage public lands in a manner "that recognizes the Nation's need for minerals, food, timber and fiber from the public lands; that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource and archeological values; that where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use" (FLPMA 1976)</p>	<p><u>Recreation Preservation</u></p> <p>"to conserve the scenery and the natural and historic objects and the wildlife [in National Parks] 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" (NPA 1916)</p>	<p><u>Preservation Recreation</u></p> <p>Secretary of the Interior is authorized to allow a variety of uses on refuges – various forms of recreation, grazing, hunting, fishing, oil exploration, gas leasing, etc. – so long as they are "compatible" with the basic purpose of the refuge. (National Wildlife Refuge System Administration Act 1966)</p>

park units and a secondary objective in the wildlife refuges.

The broad multiple use objective of the FS and BLM requires the agencies to make tradeoffs between commodity production and resource protection; to satisfy a broad range of public interests from timber, grazing and minerals to recreation, wildlife and wilderness; and to weigh national versus local and regional perspectives and values. The balancing act required in such multiple use planning is perhaps the most significant challenge in land use planning today and forces the agencies toward comprehensive planning approaches which blend rational and political decision making. While the NPS and FWS have narrower objectives, they are forced to make difficult choices between visitor use and resource protection, particularly in an age of increasing recreation demand.

While the agencies are currently engaged in the most significant land planning activity in their history, two have had considerable experience in preparing management plans. Table 5 traces this historical experience which is strongly related to the agencies' Congressional and administrative directives outlined in Table 6. With a tradition of professionalism, the FS began preparing certain functional or activity-specific plans for certain forest areas before 1930. These dealt primarily with timber productivity and fire protection.

With the charge of the 1960 Multiple Use Act, the FS initiated a multiple use planning program; with the help of regional guides, multiple use plans were prepared for individual ranger districts. While quite variable and still timber oriented, these plans pro-

vided a transition to the "unit plan" approach initiated in 1969. These focused on designated ecological units (1029 in the 155 forests) and aimed to be interdisciplinary and involve the public. The FS incorporated the Environmental Impact Statement (EIS) requirements of the National Environmental Policy Act (NEPA) into the "unit" planning process, and as a result the FS came to be regarded as having one of the most substantive early responses to this important act. These unit plans were complemented by more use-specific functional plans involving mostly timber management.

However, since the 1930s, the Forest Service had set aside a number of "wild" areas which ultimately provided the base for the National Wilderness System established by the Wilderness Act

TABLE 5

Historical Planning for Public Lands				
	Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
Tradition	Professional Forestry	Land Disposal Stockmen Capture	Stewardship	Sanctuary Game Species Emphasis
1950s	"Functional Plans" eg, fire protection timber management	NONE	"Master Plans" facilities development	First refuge plans produced — first planning initiated in 1950s
1960s	"Multiple-Use Plans" Regional MU Guides Ranger Dist. MU Plans (timber oriented, but incr. recreat.)	Classification of Lands	Master planning shift to resource analysis, interdisciplinary  "Wilderness Review"	Refuge Management Plan  "Wilderness Review"
1970s	A. "Unit Plan/EIS" Ecological Units rational interdisc/public inv.  B. "Functional Plans" eg, timber mngmt, wilderness review "RPA Prog/Assess./EIS"	"Management Framework Plans" Planning Units (1000) No EIS little public inv.  "Grazing EISs"  "Wilderness Review"	"General Management Plan/EIS or EA comprehensive/resource emphasis interdisc/public inv.  Detailed "Res Mngmt Pln" "Dev Concept Plan"	"Refuge System EIS"  "Refuge Master Plan/EIS" management direction
1980s	"Land Mngmt Plan/EIS" integrated/forestwide	"Resource Mngmt Plan/EIS" Resource units (162)  "Activity Plans"	Alaska Lands Plan/EA	"Alaska Comp. Cons. Plan/ EIS"  Refuge System EIS (being prepared)

TABLE 6

Mandates and Directives for Land Management Planning			
Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
Organic Act: 1897	Organic Act: 1976	Organic Act: 1916	Organic Act: 1966
<p>Statutory Direction: 1960 Multiple Use Act 1964 Wilderness Act 1970 NEPA 1974 RPA 1976 NFMA 1980 ANILCA</p> <p>Administration Direction: 1979 NEPA regs 1979 NFMA planning reg (amend 1982, 1983)</p> <p>Manuals &amp; handbooks</p>	<p>Statutory Direction: 1964 Classification and Multiple Use Act 1970 NEPA 1976 FLPMA 1980 ANILCA</p> <p>Administrative Direction: 1979 NEPA regs 1979 FLPMA plan. regs (amend 1983) 1983 Planning Manual</p>	<p>Statutory Direction: 1964 Wilderness Act 1970 NEPA 1978 NP&amp;RA 1980 ANILCA</p> <p>Administrative Direction: 1979 NEPA regs NPS-2 planning Process guideline</p>	<p>Statutory Direction: 1956 F&amp;WL Act 1962 Refuge Recr. Act 1964 Wilderness Act 1966 NWRSA 1970 NEPA 1980 ANILCA</p> <p>Administrative Direction: 1979 NEPA regs Refuge Manual, 4 RM 1</p>

of 1964. A 1970 court ruling forced the Forest Service to conduct a detailed review of its roadless lands for wilderness suitability. While this review dragged on for a decade, it provided the agency considerable experience in non-timber oriented resource planning. The 1974 Resources Planning Act (RPA), the 1976 National Forest Management Act (NFMA), and implementing administrative rules directed the Forest Service to its current planning approach. This involves forest-wide Land Resource Management Plans (LRMP) which are comprehensive and integrate most use-specific management actions in the forest. These plans are guided, but not constrained by, a national RPA Program which establishes targets for forest outputs and is prepared every five years; the RPA Program is supported by RPA Assessments of all forest and rangelands, prepared every 10 years.

The National Park Service also has a long planning tradition with the development of its first Park Master Plans in the late 1920s and 1930s. Through the 1950s these plans provided a conceptual framework for park management, but focused principally on development of roads and facilities. In the 1960s, this master planning was broadened somewhat to consider resource protection, but some plans were still criticized for stressing facilities development and serving the interests of concessionaires which operate park facilities. This master planning was complemented by wilderness suitability studies mandated by

the 1964 Wilderness Act. In 1975, the Park Service initiated a new approach which produced General Management Plans (GMP), parkwide comprehensive plans which placed greater emphasis on resource protection, visitor use management and public involvement. The GMP is augmented by more detailed implementation plans such as the Resource Management Plan and Development Concept Plan. This GMP approach was mandated systemwide by the National Park and Recreation Act (NP&RA) of 1978. In recent years, the Alaska National Interest Lands Conservation Act (ANILCA) of 1980, which identified Alaska lands that would remain in federal ownership, directed an integrated GMP approach for the Alaska National Park System units. Many other recently established park units also require the preparation of comprehensive management plans.

Neither BLM nor FWS have the planning tradition of the Forest and Park Services. As Table 6 shows, BLM did not receive its "organic act" (a statutory basis for the agency's existence and mission) until 1976, compared to 1897 for the Forest Service and 1916 for the Park Service. The FWS does not have a broad organic act, but the 1966 National Wildlife Refuge Administration Act provides a statutory basis for the Refuge System. The agency has had an early and clearly defined objective of preserving wildlife habitats in the Refuge System, and legislation establishing each refuge unit is the baseline guidance for deter-

mining allowable refuge activities. Although plans specific to individual refuges existed much earlier, the first systemwide planning for the Wildlife Refuges came in the wilderness suitability review required by the 1964 Wilderness Act. In the late 1970s, without specific statutory direction, the FWS initiated a process for developing Refuge Master Plans (RFMP) which continues as its basic planning framework. Whether or not it has a Master Plan, each refuge has a Management Plan covering allowable refuge activities. The ANILCA mandated Comprehensive Conservation Plans (CCP) for the National Wildlife Refuges in Alaska.

Of the four agencies, the Bureau of Land Management has the least planning and management experience and tradition. BLM was formed in 1946 from the General Land Office, which for 130 years had been charged with "disposing" the public domain by sale or grant to private parties, and the Grazing Service which provided superficial management of rangelands that operated as an overgrazed "commons." It was not until 1976 that BLM was granted permanent custodial responsibility for the public lands under its administration.

Still, by 1969, it had initiated the development of Multiple Framework Plans (MFP) for its individual planning units which numbered nearly one thousand; by 1984, the last of about 350 MFP's was completed. While a start at planning, these MFP's

were quite variable, utilized little public involvement and were highly criticized. BLM decided not to include an environmental impact statement (EIS) in these generalized MFP's or in the more specific Grazing Allotment Management Plans, but to provide a single programmatic grazing EIS. This decision prompted a 1974 court settlement which required BLM to prepare by 1988, 145 EIS's for its grazing management on 168 million acres of BLM lands.

This shaky initiation to land planning and other perceived management problems in BLM prompted the 1976 Federal Lands Policy and Management Act (FLPMA), which called for Resource Management Plans (RMP) for BLM lands. As the 1964 Wilderness Act had done for FS, NPS and FWS, FLPMA also required BLM to review its administered lands for wilderness suitability. BLM now integrates its grazing EIS, wilderness review and other planning requirements with its RMP process.

### **Processes and Methods for Land Management Plans**

Each of the four agencies is now developing management plans for the land units they administer. The Forest Service Land Resource Management Plans (LRMP) and the Park Service General Management Plans (GMP are required for *all* national forests and park units). The BLM Resource Management Plans (RMP) and the FWS Refuge Master Plans

(RFMP) are prepared and revised as needed for BLM Resource Areas and Wildlife Refuges. All the plans are intended to establish a comprehensive framework and direction for land use management.

The basic structure of the planning processes used by the agencies to develop these plans is nearly identical. The processes reflect the classic rational-comprehensive approach, which involves the following five basic steps:

1. identifying issues, concerns, resource opportunities and objectives
2. gathering and analyzing data
3. formulating alternatives
4. assessing the impacts of alternatives
5. evaluating alternatives and selecting a plan.

The Forest Service and BLM add to this process a monitoring and evaluation step which tracks the implementation of the plan and identifies needs for plan revision. The Forest Service is legally required to revise all plans every 10-15 years; BLM expects to do so as needed. The Park Service GMP's are also evaluated and revised or amended periodically. This evaluation step adds an element of "incrementalism" to an otherwise rational-comprehensive process. Thus prepared plans need not try to prescribe a management direction for all time but for a more constrained and realistic time frame; subsequent revisions can accommodate changing conditions, issues and needs.

### **Integration and Consolidation of Planning Requirements**

To varying degrees these plans integrate and consolidate a range of planning requirements. All of the plans integrate the NEPA process and the development of the EIS. NEPA has had a profound effect on the planning of all four agencies, directly in the planning process and indirectly as it has influenced Congressional and administrative mandates for planning. The Forest and Park Services have been noted for their substantive response to NEPA since 1970.

However, in these early years the general guidance for the EIS and NEPA process provided by the Council on Environmental Quality (CEQ) tended to push the development of the EIS late in the planning process, often after substantive planning decisions were made. The contents of the EIS required by the 1973 CEQ Guidelines for EIS preparation focused almost entirely on the proposed action. Thus, agencies often postponed EIS work until a proposal was in mind, so many EIS's turned out to be little more than an afterthought. The NEPA process outlined by the 1973 guidelines, did little to integrate environmental impact considerations into the early stages of the planning process.

Recognizing these deficiencies, CEQ revised its guidance into NEPA regulations which were

approved in 1978 and became effective in 1979. The contents of the EIS were changed, and it read more like a planning document. Thus agencies could more easily integrate EIS preparation into the planning process. To further facilitate the early consideration of environmental impacts, the NEPA process was revised to include an early "scoping" step to flesh out concerns and issues and identify interested parties. The intent was that this scoping would coincide or be integrated with the early steps of the planning process.

This post-1978 NEPA process has thus become an integral part of the planning processes developed by the public lands agencies. The Forest Service and BLM have a standard policy that the LRMP and RMP are major actions requiring an EIS so the Environmental Assessment (EA) step of the NEPA process is skipped. The Park Service and FWS do not assume that the GMP and RFMP require an EIS and they perform an EA; if they determine from the EA that an EIS is not required, they file a Finding of No Significant Impact (FONSI) and the EA will be the environmental document accompanying the plan. While most Fish and Wildlife Service RFMP's include a full EIS, only about 10-15% of Park Service GMP's started in the last six years have included one.

The planning process and NEPA process run parallel, and the agencies, particularly the Forest Service and FWS, depend on NEPA requirements as their

major mechanism for public participation. The FWS draws special attention to its NEPA scoping meetings, and all of the agencies, especially the Forest Service, rely on draft EA/EIS and plan review and comment by the public as the first public input on specific alternatives.

The Park Service and BLM incorporate the EA/EISP into their management plans, while the FS provides a separate, comparison EIS document. The FWS generally issues a separate EIS, although some recent RFMP's incorporate the environmental document. BLM prepares a final "Record of Decision" (ROD) document that details the adopted Resource Management Plan, while the FWS and NPS issue a short ROD statement at least 30 days after the Final Plan/EIS is released. FS's ROD is a separate document, generally 30 to 40 pages in length.

All four agencies consolidate a number of general planning directives into their comprehensive management plans when possible. These include wilderness suitability reviews, land protection plans, grazing EIS's and others.

The Forest Service LRMP's and Fish and Wildlife Service RFMP's aim to be "complete" documents including use-specific management actions where possible. As an extension of its master planning, the FWS also prepares Refuge Management Plans which describe specific management activities to implement the Master Plans. FS development activities (for example, a timber sale) usually

require an environmental document because the forest-level plan is not adequately site specific. The BLM and Park Service plans are complemented by more detailed functional plans.

For example, BLM prepares separate Recreation Management Plans and Allotment Management Plans; the Park Service prepares Resource Management Plans (which detail cultural and natural resource protection strategies) and Development Concept Plans (which detail facilities development), each of which has its own environmental document. These separate plans remove some of the burden from the comprehensive plans which can thus be more general, laying out management directions rather than being buried in detail. As such, they may focus on specific management issues and concepts and consequently be more readable and more easily understood.

### Public Participation, Interdisciplinary Planning, Planning Methods

As discussed above, the planning process used by the agencies is a blending of rational and political approaches. The rational side requires the use of a variety of planning methods and techniques. The political side requires public involvement and a variety of disciplines throughout the planning and decision making process.

#### *Interdisciplinary Approach*

All four agencies now use an

interdisciplinary approach to planning; each employs a "planning team" made up of staff specialists. While the Forest Service and BLM usually draw solely from the staffs of the Forest or Resource Unit, the FWS complement the team with representatives from the Regional Office. In the Park Service, teams are made up of staff from its Denver Service Center, and assisted by park and regional staff. The Regional Director for the FWS plays a substantive role in prioritizing, scheduling, directing and approving Refuge Master Plans. This regional and national input to the planning process adds consistency and an element of planning expertise and experience to the effort. The Forest Service planning team is made up of about six specialists (e.g., wildlife biologist, recreation planner, forest economist, civil engineer, etc.) who conduct the day-to-day planning activities; in addition, a management team made up of the Forest Supervisor and District Rangers makes substantive planning decisions.

#### *Public Participation*

All of the agencies have been subject to some public criticism through their history, and this has affected how they are perceived by the public. The Forest Service and particularly the BLM, with their broad multiple use objectives, have taken the brunt of the criticism as it is hard to make a multiple use decision that will please anybody, much

less everybody.

All of the agencies use a variety of public involvement methods. These range from Federal Register notices to meetings and workshops, to mailed brochures and surveys, to public review and comment on draft plans and EIS's. In practice, the use of these methods is varied. The FWS relies heavily on the NEPA process of scoping and draft review to obtain public input, although it has taken recent steps to train its personnel on other public participation techniques. The Forest Service and BLM also rely heavily on NEPA scoping and draft review and comment. While draft review and comment is important, it often comes too late in the process to affect substantive planning decisions, such as the choice of alternatives to be studied or the choice of the preferred alternative. Often the agency, having already made a preference in the draft, is put on the defensive when unanticipated critical comments are received at this late stage. This has been a particular problem for the Forest Service in several of its LRMP's.

The Park Service appears to be the most successful of the four agencies in public participation. This may not be surprising since the Park Service has a narrower mandate than the Forest Service and BLM and thus a narrower set of interest groups to satisfy. In addition, it has a highly motivated constituency - people care about the park units and want to participate.

Moreover, the Park Service has employed some innovative methods to facilitate participation early in the planning process. Early workshops are often used to gain public perceptions of park issues and concerns. The success of workshops depends on attendance and participation, which are enhanced by the high motivation of the public. Another method, used in about one third of GMP efforts to date, is the "Alternatives Workbook" which has been very successful in obtaining public information at a critical stage of the planning process - the formulation of alternatives. In addition, it provides respondents with a great sense of participation. First used in planning for Yosemite National Park, the workbook is sent to interested parties who are asked to formulate their own preferred alternatives choosing from a long list of alternative elements which are roughly organized in three or four alternative sets.

#### *Planning Methods*

Agency planners use a variety of planning methods. For example the Forest Service uses a linear programming model, FORPLAN, which is used in alternative formulation and impact assessment. For a number of alternatives, it is used to assess and optimize net monetarily-measurable benefits derived from those forest uses that have direct economic effects (timber production, developed recreation, water supply derived from watershed protection, minerals extraction). To evaluate alternatives, the planning team compares

TABLE 7

Status of Plan Development			
Forest Service	Bur. Land Management	Park Service	Fish & Wildlife Service
<u>174 Natl For. &amp; Grasslands</u> 43 Draft LMP 63 Final LMP	<u>162 Resource Areas</u> 33 RMP	<u>338 Natl Park Units</u> 290 GMP approved	<u>435 Natl WL Refuge Units</u> 100 RFMP

these effects with non-monetary effects resulting from other uses such as fish and wildlife protection and dispersed recreation.

All of the agencies use cartographic techniques (maps) to display information on plans and alternatives. The Forest Service provides a comparison of alternatives using a range of matrices: some display how each alternative responds to specified issues; others give quantitative outputs of alternatives on a range of indicators of environmental, social or economic attributes. Other agencies have also used comparative matrices in selected plans.

In terms of other methods, BLM is required to assess rangeland carrying capacity in its RMP and grazing allotment plans. FWS analyzes land suitability when formulating refuge land use alternatives. The Park Service is mandated by the NP&RA of 1978 to analyze visitor carrying capacity in its GMP's; however, it has yet to play a significant role in park planning. In addition, the Park Service has initiated use of computerized geographic information

systems for data analysis and land suitability studies.

### Status of Plan Development and Implementation Effectiveness

How have the four agencies fared in the development and implementation of these planning processes and procedures? By mid-1986, they have produced a number of plans as Table 7 shows. The Park Service is farthest along having produced plans for 290 of the 338 National Park units. The Forest Service has completed 63 final and 43 draft LRMP's of the 123 final plans that will ultimately be produced. BLM has completed RMP's for 33 of its 162 Resource Areas. For the 435-unit Refuge System, there are about 100 Refuge Master Plans in effect, with 15 more in process.

But the number of plans does not help answer the more important question: what is the effect and effectiveness of the planning efforts of these public lands agencies? **Has this planning led to**

**better management decisions for the public lands, more equitable distribution of user benefits, better resolution of conflicts between competing interests, greater long term productivity and sustainability of uses?**

Unfortunately, the answers are not contained in this collection of articles. However, based on this initial examination and comparison, it is hoped that subsequent research will be supported to address these questions of implementation effectiveness. For the agencies, this planning is not a one-time proposition, but a continuing effort calling for plan monitoring, evaluation and revision. Any potential refinements to the processes, procedures and methods that such research can identify may assist agency sharing of experiences and enhance this ongoing effort.

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# Who Can You Turn To?

## Introduction

### Federal Lands Issues, Policies and Agencies

Arrandale, T. The Battle for Natural Resources. Washington: Congressional Quarterly Inc., 1983.

Clarke, J.N., and McCool, D. Staking Out the Terrain: Power Differentials Among Natural Resources Management Agencies. Albany: State University of New York Press, 1985.

Clawson, M. The Federal Lands Revisited. Washington, D.C.: Resources for the Future, Inc., 1983.

U.S. Council on Environmental Quality. Environmental Quality, Annual Reports (sections on the four major federal land management agencies). Washington, D.C.: Govt. Printing Office, 1975-1984.

### Sources of Information for Tables 1, 2 and 3

Forest Service, U.S. Department of Agriculture. Report of the Forest Service, Fiscal Year 1985. Washington, D.C.: Forest Service, 1986. p. 1. (Number and types of units in the National Forest System given in Table 3.)

National Park Service, U.S. Department of the Interior. The National Parks: Index 1985. Washington, D.C.: Govt. Printing Office, 1985. pp. 11-13. (Number, types and locations of units in the National Park System.)

U.S. Council on Environmental Quality. Environmental Quality 1977. Eighth Annual Report. Washington, D.C.: Govt. Printing Office, 1978. p. 77. (Values protected on BLM lands mentioned in Table 3.)

U.S. Council on Environmental Quality. Environmental Quality 1984. Fifteenth Annual Report. Washington, D.C.: Govt. Printing Office, 1985. pp. 250, 253, 257-258, 261-264, and 664-665. (Information for Table 3.)

U.S. General Services Administration, Office of Administration. Summary Report of Real Property Owned by the United States Throughout the World as of September 30, 1984. Washington, D.C.: General Services Administration, 1985. Tables 5-7, pp. 35-39. (Acreage figures given in Table 1.)

U.S. General Services Administration, Office of Administration. Detailed Listing of Real Property Owned by the United States and Used by Civil Agencies Throughout the World as of September 30, 1984. Beltsville, Md.: Micrographic Specialties, Inc., 1985. Table 23,

pp. applicable to Alaska and the eleven western-most mainland states, microfiche copy. (Acreage figures given in Table 2 and some acreage figures given in Table 3.)

### Other Comparative Analyses of Agency Planning

Andrews, R.N.L. "Agency Responses to NEPA: A Comparison and Implications." Natural Resources Journal, 1976. 16(20):301-322.

Clawson, M. The Federal Lands Revisited. Washington, D.C.: Resources for the Future, Inc., 1983. pp. 112-118.

Culhane, P.J. Public Lands Politics: Interest Group Influence on the Forest Service and the Bureau of Land Management. Baltimore, MD: Resources for the Future, Inc., 1981. pp. 274-279.

Culhane, P.J. and H.P. Friesema. "Land Use Planning for the Public Lands." Natural Resources Journal, 1979. 19(1):43-44.

Dana, S.T. and S.K. Fairfax. Forest and Range Policy (2nd Ed.). New York: McGraw-Hill Book Company, 1980. pp. 321-347.

Hirsch, A., W.B. Krohn, D.L. Schweitzer, and C.H. Thomas. "Trends and Needs in Federal Inventories of Wildlife Habitat." Transactions of the 44th North American Wildlife and Natural Resources Conference. Washington, D.C.: Wildlife Management Institute, 1979. pp. 340-359.

Nelson, R.H. "The Public Lands." In Paul R. Portney (Ed.). Current Issues in Natural Resources Policy. Washington, D.C.: Resources for the Future, Inc., 1982. pp. 43-53.

### Teaching and Learning through Comparative Analyses and Analogies

Burns, J.C. and J.R. Okey. "Effects of Teacher Use of Analogies on Achievement of High School Biology Students with Varying Levels of Cognitive Ability and Prior Knowledge." Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, French Lick Springs, IN, April 15-18, 1985.

Dunn, B.A. Forest Policy Instruction in the Forestry Curriculum: Proceedings of the Conference. Clemson, SC: Department of Forestry, Clemson University, 1981. pp. 7-8.

Hunt, M. The Universe Within: A New Science Explores the Human Mind. New York: Simon and Schuster, 1982. (see "Index" under "analogical reasoning".)

## **Forest Service**

Committee of Scientists. 1979. A final report of the Committee of Scientists to the Secretary of Agriculture regarding regulations proposed by the U.S. Forest Service to implement Section 6 of the National Forest Management Act of 1976. Fed. Reg. 44: 26599-26608.

Cortner, H.J. and D.L. Schweitzer, 1981. Institutional limits to national public planning for forest resources: the Resources Planning Act. *Natural Res. Jour.* 21: 203-222.

Cortner, H.J. and D.L. Schweitzer, 1983. Institutional limits and legal implications of quantitative models in forest planning. *Environ. Law* 13(2): 493-516.

Cortner, H.J. and D.L. Schweitzer, 1983. Limits to hierarchical planning and budgeting systems: the case of public forestry. *J. Environ. Manage.* 17: 191-205.

Iverson, David C. and Richard M. Alston. 1986. The Genesis of FORPLAN: A Historical and Analytical Review of Forest Service Planning Models. General Technical Report INT-214. USDA FS. Intermountain Research Station. Ogden, Utah. 31 pages.

McGuire, J.R. 1982. The National Forests: an experiment in land management. *J. Forest History* 26(2): 84-91.

Schweitzer, D.L. 1984. The meaning of "interdisciplinary" in the physical and social worlds of public forestry. *Renewable Res. Jour.* 2(5): 11-14.

Wilkinson, C.F. and H.M. Anderson, 1985. Land and resource planning in the National Forests. *Oregon Law Rev.* 64: 1-373.

## **Fish and Wildlife Service**

American Management Association. Strategic Planning Seminar, 1984.

Drucker, Peter F. The Practice of Management. New York: Harper and Brothers, 1954.

Goodman, William I. and Eric C. Freund, editors. Principles and Practices of Urban Planning. Washington, D.C.: International City Manager's Association, 1968.

## **Bureau of Land Management**

Allison, Graham. Essence of Decision: Explaining the Cuban Missile Crisis, Boston: Little Brown and Company, 1971.

Applegate, Rick. "The Multiple Use Planning Process: Descent into the Maelstrom," Environmental Law, Vol. 8, 1978. pp. 427-460.

American Society of Planning Officials, "Improving the Bureau of Land Management's Planning Process," 26 page report to the Chief, Division of Environmental and Planning Coordination, 1978.

Office of Audit and Investigation, Department of the Interior, "Audit of Bureau of Land Management Multiple Use Planning System," 1985.

The following four papers were prepared for the Workshop on Political and Legal Aspects of

Range Management, National Academy of Sciences/National Research Council Committee on the Development of Strategies for Rangeland Management, held at Jackson, Wyoming, September 13-15, 1981:

Behan, R.W. "Multiple Use Management: Kudos and Caveats."

Fairfax, Sally K. "Coming of Age in the Bureau of Land Management: Range Management in Search of a Gospel."

Jones, Robert A. "Developing a Planning System for Public Domain Lands: An Analysis of Organizational Change in the Bureau of Land Management."

Leman, Christopher K. "Formal Vs. De Facto Systems of Multiple Use Planning in the Bureau of Land Management: Integrating Comprehensive and Focused Approaches" (January 1982 Revision).

Coggins, George. Outline: "How the Statutes Work: The Bureau of Land Management," Workshop on Federal Land Use Planning: Straightjacket or Safeguard?, sponsored by Natural Resources Law Forum, Brigham Young University, February 15, 1985.

See also: George Cameron Coggins, "Of Succotash Syndromes and Vacuous Platitudes: The Meaning of 'Multiple Use, Sustained Yield' for Public Land Management," University of Colorado Law Review, Vol. 53, 1981. pp. 229-280.

Crawford, John E. "Land Use Planning in the Bureau of Land Management," presented at The [51st] North American Wildlife and Natural Resources Conference, Reno, Nevada, March 24, 1986.

Culhane, Paul J. Public Lands Politics: Interest Group Influence on the Forest Service and the Bureau of Land Management. Baltimore: The Johns Hopkins University Press, for Resources for the Future, Inc., 1981.

Peters, Thomas J. and Robert H. Waterman, Jr. In Search of Excellence. New York: Harper & Row, 1982.

"MFP Quality Evaluation: Findings, Analysis and Recommendations of the Evaluation Team," Office of Evaluation, Bureau of Land Management, (December 15) 1976.

"Program Evaluation Report: Bureauwide Planning," Bureau of Land Management (Washington Office), July-September 1984.

Fountain, Jeff, III. "Inventory and Planning Status Review: Bureau of Land Management," prepared for Office of the Budget, Department of the Interior, April 1981 (draft).

General Accounting Office, "Study of Bureau of Land Management's Land Use Planning System," October 6, 1977.

March, J. and Herbert Simon. Organizations. New York, 1958.

Nelson, Robert. "The BLM Planning Process," Department of the Interior Office of Policy Analysis, December 1980, 14 pp.

Cortner, Hanna J. and Dennis L. Schweitzer (U.S. Forest Service), "Institutional Limits and Legal Implications of Quantitative Models in Forest Service Planning," Environmental Law, Vol. 13, 1983. pp 493-516.

Wald, Johanna. Natural Resources Defense Council, Proceedings, BLM Redstone Workshop: "State and Local Involvement in Federal Land Management and Planning," Nov. 1-2, 1983.

