United States General Accounting Office

GAO

Report to Congressional Requesters

April 1997

FOREST SERVICE DECISION-MAKING

A Framework for Improving Performance

GAO/RCED-97-71

GAO

United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-276170

April 29, 1997

Congressional Requesters

As agreed with your offices, this report discusses the underlying causes of inefficiency and ineffectiveness in the decision-making process used by the Department of Agriculture's Forest Service in carrying out its mission. The report contains a matter for congressional consideration and recommendations to the Chair of the Council on Environmental Quality and to the Secretary of Agriculture designed to reduce the costs and time of the decision-making process and/or improve the agency's ability to deliver what is expected or promised.

We are sending copies of this report to the appropriate congressional committees, the Chair of the Council on Environmental Quality, the Secretary of Agriculture, and the Chief of the Forest Service. We will also make copies available to others upon request.

Please call me on (202) 512-3841 if you or your staff have any questions about this report. Major contributors to this report are listed in appendix VI.

Victor S. Rezendes
Director, Energy, Resources,
and Science Issues

List of Requesters

The Honorable Frank H. Murkowski
Chairman, Committee on Energy
and Natural Resources
United States Senate

The Honorable Larry Craig
Chairman, Subcommittee on Forests
and Public Land Management
Committee on Energy and
Natural Resources
United States Senate

The Honorable James V. Hansen
Chairman, Subcommittee on National Parks
and Public Lands
Committee on Resources
House of Representatives

The Honorable Ralph Regula
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives

The Honorable Conrad Burns
United States Senate

Executive Summary

Purpose

The decision-making process used by the Department of Agriculture's Forest Service in carrying out its mission is costly and time-consuming, and the agency often fails to achieve its planned objectives. The agency has spent over 20 years and over $250 million developing multiyear plans for managing national forests. It also spends about $250 million a year for environmental studies to support individual projects. However, according to an internal Forest Service report, inefficiencies within this process cost up to $100 million a year at the project level alone. In addition, by the time the agency has completed its decision-making, it often finds that it is unable to achieve the plans' objectives or implement planned projects because of new information and events, as well as changes in funding and natural conditions.

In response to congressional requests, GAO examined the Forest Service's decision-making process. In this report, GAO discusses the internal and external causes of inefficiency and ineffectiveness in the process: (1) the inadequate attention that the Forest Service has given to improving the process; (2) the lack of agreement, both inside and outside the agency, on how it is to resolve conflicts among competing uses on its lands; (3) unresolved interagency issues that transcend its administrative boundaries and jurisdiction; and (4) differences in the requirements of laws that help frame its decision-making.

Background

The Forest Service manages about 192 million acres of land—nearly 9 percent of the nation's total surface area and about 30 percent of all federal lands. Laws guiding the management of the nation's 155 national forests require the agency to manage its lands under the principles of multiple use and sustained yield to meet the diverse needs of the American people.

Under the multiple-use principle, the Forest Service is required to plan for six renewable surface uses—outdoor recreation, rangeland, timber, watersheds and water flows, wilderness, and wildlife and fish. Under the sustained-yield principle, the agency is to manage its lands to provide high levels of all of these uses to current users while sustaining undiminished the lands' ability to produce these uses for future generations.

To carry out its mission, the Forest Service follows a decision-making process that includes (1) preparing a long-term strategic plan that maps the agency's course for the next decade and beyond, (2) developing regional guides that direct the management of its national forests,

(3) developing plans for managing each forest, and (4) reaching project-level decisions for implementing these plans. In developing plans and reaching project-level decisions, the Forest Service must comply with the requirements of environmental statutes, including the National Environmental Policy Act, the Endangered Species Act, the Clean Water Act, and the Clean Air Act. The Council on Environmental Quality in the Executive Office of the President is responsible for issuing governmentwide regulations to implement the provisions of the National Environmental Policy Act. The responsibility for implementing and enforcing environmental laws and regulations is dispersed among several federal regulatory agencies, as well as state and local agencies.

Results in Brief

Some of the inefficiency in developing forest plans and reaching project-level decisions, as well as the ineffectiveness in achieving the plans' objectives, has occurred because the Forest Service has not given adequate attention to improving its decision-making process, including improving accountability for its performance. As a result, the Forest Service (1) must request more funds to accomplish fewer objectives during the yearly budget and appropriation process and (2) has not corrected long-standing deficiencies within its decision-making process that have contributed to increased costs and time and/or the inability to achieve planned objectives.

Strengthening accountability for performance within the Forest Service and improving the efficiency and effectiveness of its decision-making is contingent on establishing long-term strategic goals that are based on clearly defined mission priorities. However, agreement does not exist on the agency's long-term strategic goals. This lack of agreement is the result of a more fundamental disagreement, both inside and outside the Forest Service, over which uses the agency is to emphasize under its broad multiple-use and sustained-yield mandate and how best to ensure the long-term sustainability of these uses.

Issues that transcend the agency's administrative boundaries and jurisdiction also affect the efficiency and effectiveness of the agency's decision-making. In particular, the Forest Service has had difficulty reconciling the administrative boundaries of the national forests with the boundaries of natural systems, such as watersheds and vegetative and animal communities, both in planning and in assessing the effects of federal and nonfederal activities on the environment.

Finally, the requirements of planning and environmental laws, enacted primarily during the 1960s and 1970s, have not been harmonized. Differences among the requirements of various laws and their differing judicial interpretations require some issues to be analyzed or reanalyzed at different stages in the Forest Service's decision-making process without any clear sequence leading to their timely resolution. Additional differences among the statutorily required approaches for protecting various resources—such as endangered and threatened species, water, air, diverse plant and animal communities, and wilderness—have also sometimes been difficult to reconcile. However, GAO believes that statutory changes to improve the efficiency and effectiveness of the Forest Service's decision-making process cannot be identified until agreement is first reached on the agency's mission priorities.

Principal Findings

The Forest Service Has Not Given Adequate Attention to Improving Its Decision-Making Process

The Forest Service has not given adequate attention to reducing the costs and time of its decision-making and improving its ability to deliver what is expected or promised. As a result, the Forest Service must request more annual appropriations to achieve fewer planning objectives, and deficiencies within the decision-making process that have been known to the agency for a decade or more have not been corrected.

The Forest Service has made little progress in holding its managers accountable for their performance. For example, in response to congressional concerns about the Forest Service's inability to deliver what is expected or promised, the Chief, in the fall of 1991, formed a task force of employees from throughout the agency to review the issue of accountability. The task force's February 1994 report set forth a seven-step process to strengthen accountability. Steps in the process included (1) establishing work agreements that include measures and standards with customers' involvement, (2) assessing performance, and (3) communicating results to customers. However, the task force's recommendations were never implemented. Rather, they were identified as actions that the agency planned to implement over the next decade.

Because the Forest Service has made little progress in holding managers accountable for their performance, it must request more funds to accomplish fewer objectives in forest plans during the yearly budget and

appropriation process. For example, in fiscal year 1991, the Congress asked the Forest Service to develop a multiyear program to reduce the costs of its timber program by not less than 5 percent per year. The Forest Service responded to these and other concerns by undertaking two major examinations of its timber program and is now preparing to undertake a third. However, with no incentive to act, the agency has not implemented any of the recommended improvements agencywide. In the interim, the costs associated with preparing and administering timber sales have continued to rise. As a result, for fiscal year 1998, the agency is requesting $12 million (6 percent) more for timber sale management than was appropriated for fiscal year 1997 while proposing to offer 0.4 billion board feet (10 percent) less timber for sale.

Another result of the lack of accountability within the Forest Service has been that long-standing deficiencies within the agency's decision-making process, which have driven up costs and time and/or driven down the ability to achieve planned objectives, have not been corrected. These deficiencies include (1) not adequately monitoring the effects of past management decisions to more accurately estimate the effects of similar future decisions and to modify decisions when new information is uncovered or when preexisting monitoring thresholds are crossed, (2) not maintaining comparable environmental and socioeconomic data that are useful and easily accessible to forest managers, and (3) not adequately involving the public at the beginning of the decision-making process when problems are identified, data are gathered, and relationships are established and maintaining their involvement throughout the process.

For example, adequate monitoring of the effects of past management decisions is critical to accurately estimate the environmental effects of similar future decisions. Moreover, monitoring can be used as an effective tool when the effects of a decision may be difficult to determine in advance because of uncertainty or costs. However, the Forest Service (1) has historically given low priority to monitoring during the annual competition for scarce resources, (2) continues to approve projects without an adequate monitoring component, and (3) generally does not monitor the implementation of its plans as its regulations require. The Forest Service's past failure to monitor represents a lost opportunity to reduce the costs and time of future decision-making.

Agreement Needs to Be Reached on How the Forest Service Should Resolve Conflicts Among Competing Uses

The Government Performance and Results Act of 1993 is designed to hold federal agencies more accountable for their performance by requiring them to establish performance goals, measures, and reports that provide a system of accountability for results. It requires each federal agency to develop, no later than September 30, 1997, a strategic plan that covers a period of at least 5 years. The Forest Service is planning to prepare two long-term strategic plans—one to comply with the requirements of the Government Performance and Results Act and another that maps the agency's course for the next decade and beyond, as required by another statute.

Successful implementation of the requirements of the Government Performance and Results Act is contingent on establishing long-term strategic goals that are based on clearly defined mission priorities. However, agreement does not exist on the Forest Service's long-term strategic goals. This lack of agreement is the result of a more fundamental disagreement, both inside and outside the Forest Service, over which uses to emphasize under the agency's broad multiple-use and sustained-yield mandate and how best to ensure the long-term sustainability of these uses.

During the last 10 years, the Forest Service has increasingly shifted the emphasis under its broad multiple-use and sustained-yield mandate from consumption (primarily producing timber) to conservation (primarily sustaining wildlife and fish). This shift is taking place in reaction to requirements in planning and environmental laws and their judicial interpretations—reflecting changing public values and concerns—together with social, ecological, and other factors. In particular, section 7 of the Endangered Species Act represents a congressional design to give greater priority to the protection of endangered species than to the current primary missions of the Forest Service and other federal agencies. When proposing a project, the Forest Service bears the burden of demonstrating that its actions will not likely jeopardize listed species.

The increasing emphasis on sustaining wildlife and fish conflicts with the older emphasis on producing timber and underlies the Forest Service's inability to achieve the goals and objectives for timber production set forth in many of the first forest plans. In addition, this attention to sustaining wildlife and fish will likely constrain future uses of the national forests, such as recreation. The demand for recreation is expected to grow and may increasingly conflict with both sustaining wildlife and fish and producing timber on Forest Service lands.

While the agency continues to reduce its emphasis on consumption and increase its emphasis on conservation, the Congress has never explicitly accepted this shift in emphasis or acknowledged its effects on the availability of other uses on national forests. If the Forest Service is to be held accountable for its performance, the agency will need to consult with the Congress on its strategic long-term goals, as the Government Performance and Results Act requires. This process may entail identifying legislative changes that are needed to clarify or modify the Congress's intent and expectations.

Such a consultation would create an opportunity for the Forest Service to gain a clearer understanding of which uses to emphasize under its broad multiple-use and sustained-yield mandate and how to resolve conflicts or make choices among competing uses on its lands. This understanding would, in turn, provide the agency with a basis for establishing long-term strategic goals, as well as performance goals and measures that are linked to them.

Interagency Issues Affect the Forest Service's Decision-Making

Issues that transcend the agency's administrative boundaries and jurisdiction also adversely affect the efficiency and effectiveness of the Forest Service's decision-making process. These issues include differences in the geographic areas that must be considered in reaching decisions under different planning and environmental laws.

The Forest Service and other federal land management agencies are authorized to plan primarily along administrative boundaries, such as those defining national forests and parks. Conversely, environmental statutes and regulations require the agencies to analyze environmental issues and concerns along the boundaries of natural systems, such as watersheds and vegetative and animal communities. For example, regulations implementing the National Environmental Policy Act require the agencies to assess the effects of their actions on natural systems.

Because the boundaries of administrative units and natural systems are frequently different, federal land management plans have often considered effects only on portions of natural systems or portions of the habitats of wide-ranging species, such as migratory birds, bears, and anadromous fish (including salmon). For example, the Interior Columbia River Basin, a recognized ecological system, contains 74 separate federal land units, including 35 national forests, each with its own management plan and information database. Not analyzing effects on natural systems and their

components at the appropriate ecological scale can result in duplicative environmental analyses for individual plans and projects, increasing the costs and time required for analysis and reducing the effectiveness of federal land management decision-making.

Over the past few years, several major studies have examined the need to reconcile differences in the geographic areas that federal agencies must consider when reaching decisions. Among the options for reconciliation that have been suggested are changes to the Council on Environmental Quality's regulations and guidance for implementing the National Environmental Policy Act. Such changes include amending the Council's regulations to require that the environmental analysis accompanying a plan or project be "tiered," or linked, to a broader-scoped environmental study and that the analysis itself focus on the environmental issues specific to the plan or project. While tiering is currently allowed, it is not required.

According to Council officials, changes to the act's regulations and guidance are not being considered at this time. Instead, the Council plans to rely primarily on interagency agreements. However, interagency agreements (1) have not been lived up to by agencies in the past, (2) are generally not enforceable by outside parties, and (3) do not provide a basis for common approaches among all agencies. Also, federal land management and regulatory agencies sometimes do not work efficiently and effectively together to address issues that transcend their boundaries and jurisdictions. In addition, the environmental and socioeconomic data gathered by federal agencies are often not comparable, large gaps in the information exist, and federal agencies lack awareness of who has what information. Therefore, although strong leadership by the Council would help to ensure that interagency agreements accomplish their intended objectives, the Council may also need to consider changes to its regulations and guidance for implementing the National Environmental Policy Act.

Differences in the Requirements of Laws Affect the Forest Service's Decision-Making

Finally, differences in the requirements of numerous planning and environmental laws, enacted primarily during the 1960s and 1970s, produce inefficiency and ineffectiveness in the Forest Service's decision-making. Requirements to consider new information and events and differing judicial interpretations of the same statutory requirements have made it difficult for the Forest Service and other federal agencies to predict when any given decision can be considered final and can be

implemented, increasing the costs and time of decision-making and reducing the agencies' ability to achieve the objectives in their plans.

For instance, the listing of a species as endangered or threatened under the Endangered Species Act after a forest plan has been approved can require the Forest Service to reinitiate formal consultations with federal regulatory agencies to amend or revise the plan. The listing may also prohibit the Forest Service from implementing projects under the plans that may affect the species until the new round of consultations has been completed. Recent federal court decisions have required the Forest Service to reinitiate consultations on several approved forest plans. For example, after a species of salmon in the Pacific Northwest and a species of owl in the Southwest were listed as threatened under the Endangered Species Act, the courts ruled that the agency could not implement projects under the plans that might affect the species until the new rounds of consultations had been completed.

Differing judicial interpretations of the same statutory requirements have also established conflicting requirements. For instance, three federal circuit courts of appeals have held that the approval of a forest plan represents a decision that can be judicially challenged and prohibited from being implemented. Conversely, two other federal circuit courts of appeals have held that a forest plan does not represent a decision and that only a project can be judicially challenged, at which time the adequacy of the plan's treatment of larger-scale environmental issues arising in the project can be reconsidered.

In addition, differences between environmental laws and agencies' planning statutes can be difficult to reconcile. Whereas environmental laws typically address individual resources—such as endangered and threatened species, water, and air—the Forest Service's and other federal land management agencies' planning statutes generally establish objectives for multiple resources—such as sustaining diverse plant and animal communities, securing favorable water flow conditions, and preserving wilderness. These different approaches to achieving similar environmental objectives have sometimes been difficult for the Forest Service and other federal agencies to reconcile, at least in the short term. For example, prescribed burning to restore the forests' health and to sustain diverse plant and animal communities may be appropriate under the Forest Service's planning statutes but may be difficult to reconcile in the short term with air and water quality standards under the Clean Air and Clean Water acts.

Adequately addressing the differences in the requirements of laws affecting the Forest Service's decision-making would require a systematic and comprehensive analysis of the laws to avoid making changes that would entail unintended consequences for the future. GAO has observed that the Forest Service's decision-making process is clearly broken and in need of repair. Moreover, to improve the efficiency and effectiveness of the process, a consensus for statutory changes appears to be growing. However, any legislation that may be needed to clarify or modify the Congress's intent and expectations requires that the Forest Service and the Congress reach agreement on the agency's long-term strategic goals, on the uses that the agency should emphasize under its broad multiple-use and sustained-yield mandate, and on the steps that the agency should take to resolve conflicts or make choices among competing uses on its lands.

Without agreement on the Forest Service's mission priorities, GAO sees distrust and gridlock prevailing in any effort to streamline the agency's statutory framework. For instance, during his Senate confirmation hearing in April 1995, the Secretary of Agriculture pledged to work with the Congress to identify statutory changes to improve the processes for implementing the Forest Service's mission. However, the Secretary has not sent to the Congress either his analysis or the options for changing the current statutory framework suggested by the Forest Service in 1995. Administration officials have said that they are hesitant to suggest changes to the procedural requirements of planning and environmental laws because they believe that the Congress may also make substantive changes to the laws with which they would disagree.

Matter for Congressional Consideration

The Congress may wish to consider how the requirements of the Government Performance and Results Act can be integrated most efficiently into the Forest Service's current decision-making process. Specifically, the Congress may wish to consider eliminating the requirement in the Forest Service's statutory framework that the agency develop a strategic plan for the next decade or more when it is also required to develop a similar strategic plan under the Government Performance and Results Act.

Recommendation to the Secretary of Agriculture

GAO recommends that the Secretary of Agriculture direct the Chief of the Forest Service to identify how the agency will link a long-term strategic goal with annual performance goals and measures.

Recommendations to the Chair of the Council on Environmental Quality

GAO recommends that the Chair of the Council on Environmental Quality change the Council's regulations for implementing the National Environmental Policy Act to require, rather than merely allow, federal agencies to tier plans and projects to broader-scoped studies. In addition, GAO recommends that the Chair revise the Council's regulations and guidance for implementing the act to improve interagency coordination; identify a baseline of comparable environmental data needed for agencies to implement the act; and assume or assign responsibility for collecting, managing, and making the data available to other users. GAO is not recommending precise changes to the Council's regulations or guidance because GAO believes that such changes are better left for the Council to determine on the basis of its own internal study and its evaluation of the outside views solicited during its effort to reinvent federal agencies' implementation of the National Environmental Policy Act.

Agency Comments and GAO'S Evaluation

GAO requested and received written comments on a draft of this report from the Forest Service and the Council on Environmental Quality. The Forest Service said that it agreed with many of the report's goals and identified actions that it is taking to clarify its long-term strategic goals, improve its accountability, and streamline its administrative processes and decision-making. Similarly, the Council agreed with the goals for implementing the National Environmental Policy Act articulated in the report but said it was using different mechanisms to achieve these goals.

The Forest Service said that it intends to establish strategic goals and related performance measures for managers, as well as work in partnership with other agencies more closely and issue revised regulations for implementing the National Forest Management Act. GAO believes that implementing these actions would improve the efficiency and effectiveness of the agency's decision-making process. However, as the report notes, while the Forest Service can and does identify problems, according to the agency's own analysis, without external attention it often fails to take corrective action. In its comments, the agency did not discuss either a schedule to implement the improvements or a plan to closely monitor its progress and periodically report on its performance, both of which GAO believes are needed to break the cycle of studying and restudying issues without any accountability or clear sequence for resolving them. The Forest Service did not comment on GAO's recommendation to the Secretary of Agriculture.

The Council on Environmental Quality identified actions that it is taking to reinvent the implementation of the National Environmental Policy Act on an agency-by-agency as well as on a more generic basis. These actions include streamlining procedures at individual agencies and examining issues on a sector-by-sector basis (e.g., timber, grazing, and oil and gas). GAO agrees with the Council that (1) differences among the cultures, organizations, and institutional goals of various federal agencies, as well as the substantive nature of their underlying missions, require the Council's regulations implementing the act to be generic in nature and (2) regulatory changes often need to be tailored specifically to individual agencies' processes. However, as this report indicates, some decision-making issues transcend federal agencies' administrative boundaries and jurisdictions, and for some of these issues, changes in the Council's regulations and guidance need to be considered. The Council did not agree with GAO's recommendation that it should change its guidance and regulations. However, GAO's recommendation to the Council's Chair is intended to ensure that the Council's planned multiyear reinvention effort does not prematurely or arbitrarily close off options for implementing the act more efficiently and effectively. GAO also clarified this recommendation to indicate that it is not recommending precise changes to the Council's regulations or guidance because, in its view, such changes can be best determined by the Council. On the basis of the agencies' comments, GAO revised the draft report where appropriate. The agencies' comments, together with GAO's responses to them, are presented fully in appendixes IV and V.

Contents

Table

Figures

Abbreviations

CEQ	Council on Environmental Quality
EA	environmental assessment
EIS	environmental impact statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FACA	Federal Advisory Committee Act
FWS	Fish and Wildlife Service
GAO	General Accounting Office
GIS	geographic information system
GPRA	Government Performance and Results Act
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NMFS	National Marine Fisheries Service
OTA	Office of Technology Assessment
RPA	Forest and Rangeland Renewable Resources Planning Act

Introduction

In carrying out its mission, the Department of Agriculture's Forest Service follows a decision-making process that is largely based on planning laws enacted during the 1970s. This process includes (1) preparing a long-term strategic plan that maps the agency's course for the next decade and beyond, (2) developing regional guides that direct the management of its 155 national forests, (3) developing plans for managing each forest, and (4) reaching project-level decisions for implementing these plans.[1] Environmental laws, enacted primarily during the 1960s and 1970s, hold the Forest Service accountable for the ecological consequences of its decisions by requiring the agency to protect natural resources such as threatened and endangered species, wetlands, air, water, and wilderness.

The Forest Service's Management Is Decentralized

The Forest Service, created in 1905, is a hierarchical organization whose management is highly decentralized. The Chief of the Forest Service heads the agency and, through Agriculture's Under Secretary for Natural Resources and Environment, reports to the Secretary of Agriculture. Under the Chief, there are an associate chief and six deputy chiefs, including one responsible for the National Forest System. In fiscal year 1995, the Forest Service received $3.4 billion in appropriated funds, of which about $1.3 billion, or about 38 percent, was allocated to the National Forest System. The National Forest System received another $1.2 billion in fiscal year 1995 from other sources—including moneys from trust funds and for fighting forest fires and fire protection, as well as credits for roads built by purchasers of timber sales, according to the Forest Service. As a result, funding for the National Forest System totaled over $2.5 billion. The system employs about 70 percent of the agency's approximately 36,000 personnel.

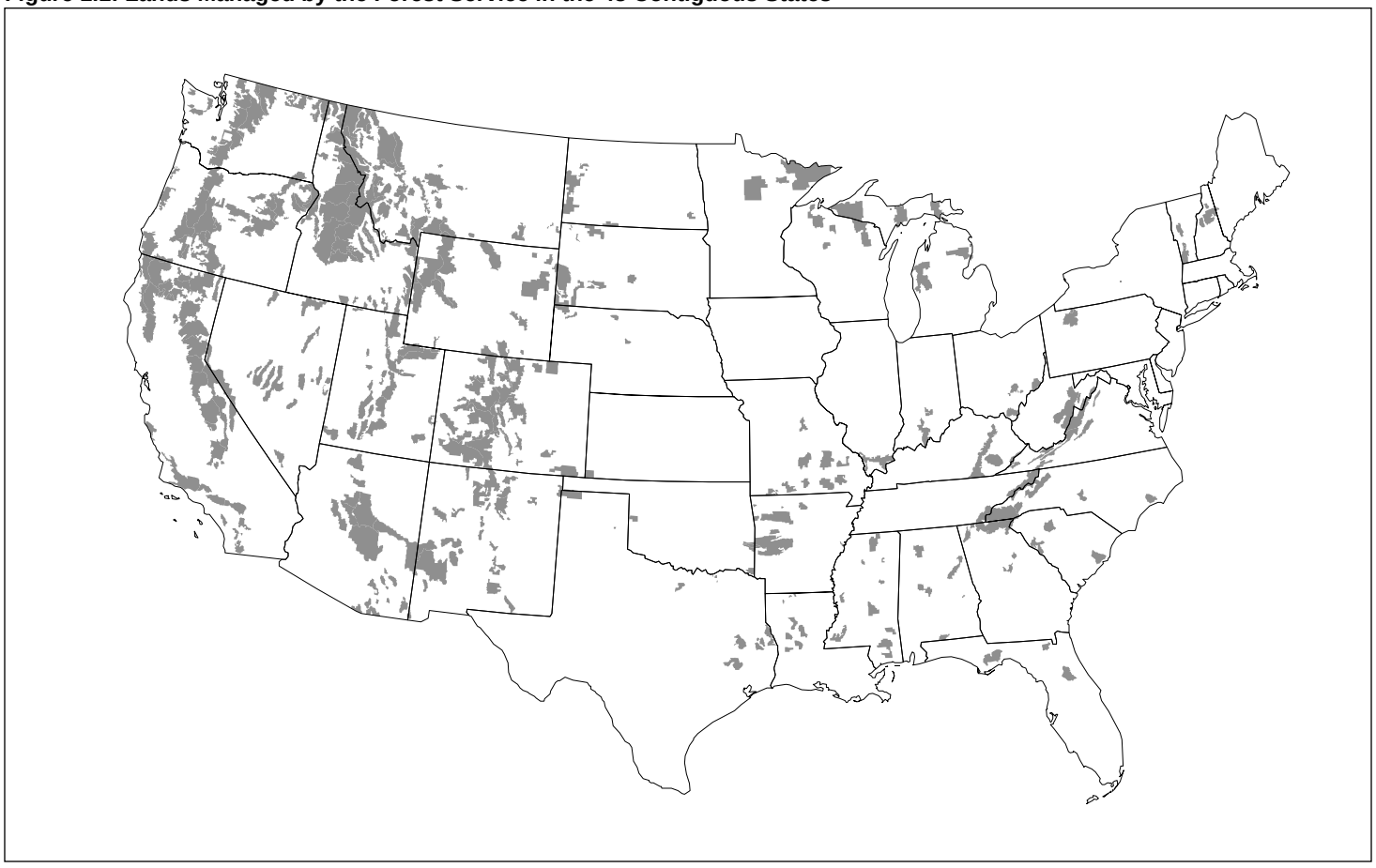
Forest Service headquarters (Washington Office) primarily establishes policy and provides technical direction to the agency's three levels of field management—9 regional offices, 123 forest offices, and about 600 district offices. At the Washington Office, the National Forest System has separate program directors for six different resources: heritage and wilderness, range, recreation, timber, watershed and air, and wildlife and fisheries. There is also a program director for planning. Similar lines of resource management exist at the regional, forest, and district office levels. However, because of budgetary constraints, the management of some resources may be combined.

[1]The Forest Service's decision-making process is explained in detail in app. I.

The nine regional offices, each managed by a regional forester, interpret policy and provide additional direction to the 123 forest offices that manage the 155 national forests. Together, the Chief, the associate chief, the six deputy chiefs, the seven program directors, and the nine regional foresters make up the Forest Service's leadership team.

The forests, together with 20 national grasslands and 17 national recreation areas, make up the National Forest System. The forest offices, each managed by a forest supervisor, in turn, oversee the about 600 district offices, most of which are managed by a district ranger. The forest supervisors are primarily responsible for developing and implementing management plans for their respective forest(s) which are approved by the appropriate regional forester. The district rangers are primarily responsible for implementing project-level decisions within their respective district. At each level, managers have considerable autonomy and discretion for interpreting and applying the agency's policies and directions, guided by a system of manuals and handbooks keyed to statutes and regulations.

Figure 1.1: Lands Managed by the Forest Service in the 48 Contiguous States



Source: Forest Service.

National Forests Are Managed Under the Principles of Multiple Use and Sustained Yield

The Forest Service's motto is "caring for the land and serving people." Laws guiding the management of the National Forest System require the Forest Service to manage its lands under the principles of multiple use and sustained yield to meet the diverse needs of the American people. The agency is required to plan for six renewable surface uses only—outdoor recreation, rangeland, timber, watersheds and water flows, wilderness, and wildlife and fish. In addition, the Forest Service's guidance and regulations require that nonrenewable subsurface resources—such as oil, gas, and hardrock minerals—also be considered in preparing forest plans.[2]

[2]Federal Land Management: Better Oil and Gas Information Needed to Support Land Use Decisions (GAO/RCED-90-71, June 27, 1990).

Under the Organic Administration Act of 1897, the national forests are to be established to improve and protect the forests within their boundaries or to secure favorable water flow conditions and provide a continuous supply of timber to citizens. The Multiple-Use Sustained-Yield Act of 1960 added the uses of outdoor recreation, range, watershed, and fish and wildlife. This act also requires the agency to manage its lands to provide high levels of all of these uses to current users while sustaining undiminished the lands' ability to produce these uses for future generations (the sustained-yield principle). Under the National Forest Management Act of 1976 (NFMA) and its implementing regulations, the Forest Service is to (1) recognize wilderness as a use of the forests and (2) maintain the diversity of plant and animal communities (biological diversity).

The Forest Service Is Part of a Larger Federal Land Management Organizational Structure

The federal government owns about 30 percent (about 650 million acres) of the nation's total surface area. The Forest Service, in turn, manages about 192 million acres of land, or about 30 percent of all federal lands. Forest Service lands include about one-fifth of the nation's forest lands.

The Forest Service is one of four major federal land management agencies. The other three are the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service, all within the Department of the Interior. Together, the four agencies manage about 95 percent of all federal lands.

The Fish and Wildlife Service manages a loosely structured system of about 500 wildlife refuges encompassing about 89 million acres. These refuges are concentrated in Alaska and along four major north-south waterfowl migration flyways. The agency manages its lands primarily to conserve and protect fish and wildlife and their habitat, although other uses—such as recreation (including hunting and fishing), mining and mineral leasing, livestock grazing, and timber harvesting—are allowed when they are compatible with the primary purposes for which the lands are managed.

The National Park Service manages about 77 million acres, divided into 374 national parks and other units in 49 states. The agency manages its lands to conserve, preserve, protect, and interpret the nation's natural, cultural, and historic resources for the enjoyment and recreation of current and future generations.

The Bureau of Land Management manages about 270 million acres, divided into resource areas and located mainly in the West and in Alaska. The Federal Land Policy and Management Act of 1976 requires the Bureau to manage its lands for multiple uses and sustained yield. The act defines multiple uses as recreation; range; timber; minerals; watershed; fish and wildlife; and natural, scenic, scientific, and historic values.

Federal Land Management Agencies Must Comply With Environmental Laws and Regulations

All four of the major federal land management agencies must comply with the requirements of the National Environmental Policy Act of 1969 (NEPA). NEPA and its implementing regulations specify the procedures for integrating environmental considerations through environmental analyses and for incorporating public input into the agencies' decision-making processes. NEPA requires that a federal agency prepare a detailed environmental impact statement (EIS) for every major federal action that may significantly affect the quality of the human environment. The EIS is designed to ensure that important effects on the environment will not be overlooked or understated before the government makes a commitment to a proposed action.

In developing plans and reaching project-level decisions, the four agencies must also comply with the requirements of other environmental statutes, including the Endangered Species Act, the Clean Water Act, the Clean Air Act, the Wilderness Act, and the Migratory Bird Treaty Act, as well as other laws, such as the National Historic Preservation Act. The Forest Service is subject to more than 200 laws affecting its activities and programs.

NEPA established the Council on Environmental Quality (CEQ) within the Executive Office of the President. CEQ issued governmentwide regulations to implement the provisions of NEPA in 1978. CEQ also assists federal departments and agencies in coordinating programs and activities that affect, protect, or improve environmental quality. The responsibility for implementing and enforcing environmental laws and regulations is dispersed among several federal regulatory agencies, as well as state and local agencies. For example, the Fish and Wildlife Service and the Department of Commerce's National Marine Fisheries Service share the responsibility for ensuring the protection and recovery of threatened or endangered plant and animal species under the Endangered Species Act. The Environmental Protection Agency (EPA) has authorities and responsibilities to implement major environmental statutes, including those to protect and enhance air quality (the Clean Air Act) and to restore

and maintain the chemical, physical, and biological integrity of the nation's waters (the Clean Water Act). The U.S. Army Corps of Engineers has authority under the Clean Water Act to regulate activities in wetlands and other waters of the United States.

The Forest Service Must Involve the Public in Its Decision-Making

Both NEPA and NFMA and their implementing regulations require the Forest Service to involve the public in its decision-making process. In addition, NFMA requires the Secretary of Agriculture to establish and consult with advisory committees under the Federal Advisory Committee Act (FACA), as amended, if they are deemed "necessary to secure full information and advice." Passed in 1972, FACA was enacted to control the advisory committee process and to open to public scrutiny the manner in which government agencies obtain advice from private individuals and groups. FACA applies to formally organized committees or similar groups that the President or an executive department or official directs to provide advice or make recommendations. An advisory committee chartered under FACA must take a number of steps to ensure open public meetings. These steps include publishing timely notice of meetings in the Federal Register, holding meetings in public, making detailed minutes of the meetings available to the public, and allowing interested persons to appear before the committee.

Objectives, Scope, and Methodology

Concerned about the costs, time, and complexity of the Forest Service's decision-making (see ch. 2), the Chairmen of the Senate Committee on Energy and Natural Resources and its Subcommittee on Forests and Public Land Management; the Chairman of the Subcommittee on National Parks, Forests, and Lands, House Committee on Resources;[3] the Chairman of the Subcommittee on Interior, House Committee on Appropriations; and Senator Conrad Burns asked us to identify and examine the decision-making process used by the Forest Service in carrying out its mission. (See app. I.) They have also asked us to testify on issues and options relating to the process.[4]

In this report, we discuss the internal and external causes of inefficiency and ineffectiveness in the Forest Service's decision-making process:

[3]In the 105th Congress, this Subcommittee was split into a Subcommittee on Forests and Forest Health and a Subcommittee on National Parks and Public Lands.

[4]Forest Service: Issues Relating to Its Decisionmaking Process (GAO/T-RCED-96-66, Jan. 25, 1996), Forest Service: Issues Related to Managing National Forests for Multiple Uses (GAO/T-RCED-96-111, Mar. 26, 1996), and Forest Service Decision-Making: Greater Clarity Needed on Mission Priorities (GAO/T-RCED-97-81, Feb. 25, 1997).

(1) the inadequate attention that the Forest Service has given to improving the process; (2) the lack of agreement, both inside and outside the agency, on how it is to resolve conflicts among competing uses on its lands; (3) unresolved interagency issues that transcend the Forest Service's administrative boundaries and jurisdiction; and (4) differences in the requirements of laws that help frame its decision-making. As agreed with the requesters' offices, we focused our work primarily on the relationship between the agency's timber production and other uses on the national forests.

To identify the decision-making process used by the Forest Service in carrying out its mission, we reviewed applicable laws and their legislative histories, regulations implementing the laws, executive orders, agency directives, and court cases. We also met with Forest Service headquarters and field managers and staff, headquarters and regional attorneys from Agriculture's Office of the General Counsel, and staff and counsel from CEQ.

To identify issues relating to the Forest Service's decision-making process and options to address them, we met with and reviewed documents provided by (1) officials in the Office of the Secretary of Agriculture and (2) the Chief of the Forest Service and other Forest Service headquarters and field personnel. During the course of our review, we visited 14 forests and one forest experiment station in 8 regions. We met with managers and staff from these units and from 24 ranger districts located on the forests that we visited. (See app. II for a list of these regions, forests, and ranger districts.) We also met with or contacted, and obtained documents from, headquarters and field managers and staff in EPA; Interior's Bureau of Land Management, National Park Service, and Fish and Wildlife Service; and Commerce's National Marine Fisheries Service.

We met with or contacted, and reviewed documents provided by, national and local officials and staff of professional forestry, timber and livestock industry, environmental, and recreational organizations, as well as academic and other natural resource policy analysts and officials from state and local governments and Native American tribes. (See app. III for the organizations contacted during this review.) In addition, we conducted a literature search and reviewed recent books and professional and scientific journal articles on federal land management.

We reviewed program and budget data for the Forest Service since its creation in 1905. We concentrated on the period since 1960, when the

Multiple-Use Sustained-Yield Act was enacted, and especially on the period since 1976, when the National Forest Management Act was passed.

We also reviewed studies and reports prepared by the Forest Service and others, as well as legislation being considered by the Congress. We identified "best practices" evolving within the Forest Service that could improve efficiency or effectiveness if implemented agencywide. In addition, we attended various forums, conferences, workshops, and interagency meetings at which issues and options relating to the Forest Service's decision-making were discussed.

We performed our work primarily from August 1995 through March 1997 in accordance with generally accepted government auditing standards. In conducting our work, we did not independently verify or test the reliability of the data provided by the Forest Service or others. We obtained comments on a draft of this report from the Forest Service and CEQ. These agencies' comments and our responses are presented in appendixes IV and V.

The Forest Service's Decision-Making Process Is Costly and Time-Consuming, Often Falling Short of Expectations

Some Members of Congress are concerned about the costs, time, and complexity of the Forest Service's decision-making process. They are also concerned that the Forest Service often has not been able to achieve the objectives in its forest plans. Hearings held during the 104th Congress identified opportunities to improve the efficiency and effectiveness of the Forest Service's decision-making.

The Forest Service's Decision-Making Process Is Costly and Time-Consuming

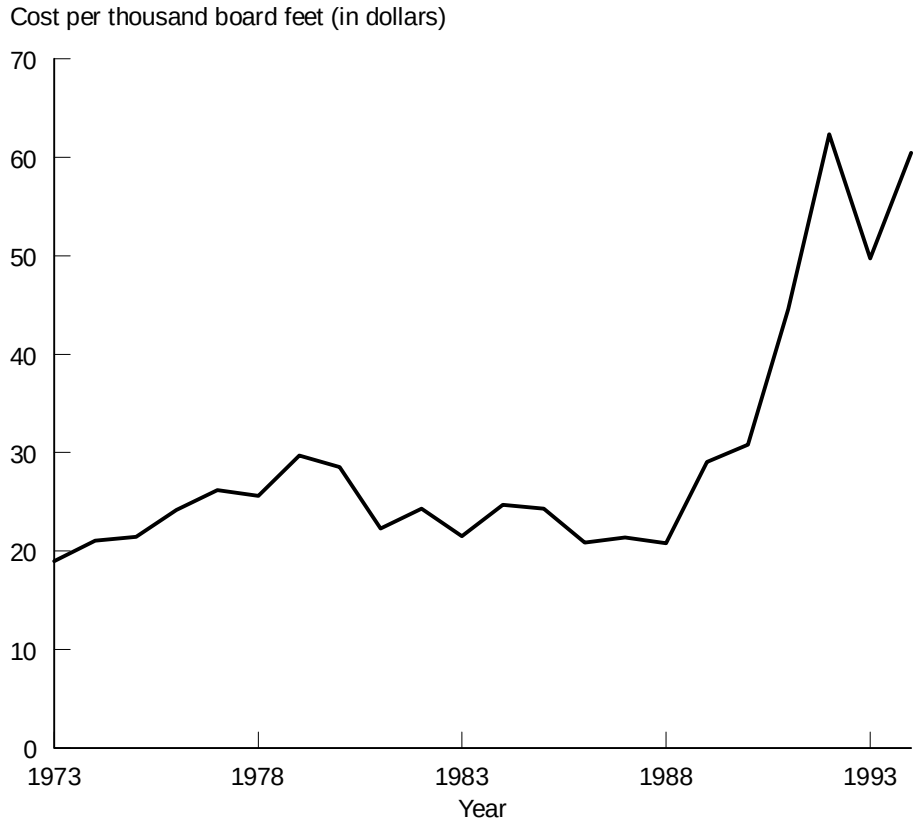
The last of the 123 forest plans covering all 155 forests in the National Forest System was approved in 1995, and the first plans, approved in the early 1980s, are due for revision. Forest plans have generally taken from 3 to 10 years to complete, and recent plans for forests in the Pacific Northwest have cost between $5 million and $8 million to develop. Amending or revising forest plans can also be costly and time-consuming. For instance, the Black Hills National Forest in South Dakota estimates that it has spent over 7 years and more than $3 million revising its plan, which still has not been approved.

In addition, the Forest Service spends more than $250 million a year conducting environmental analyses and preparing environmental documents to support project-level decisions, according to a Forest Service reengineering team.[1] In 1995, the Forest Service reported that it prepared about 20,000 environmental documents annually—more than any other federal agency. In 1994 (the last year for which data are available) the Forest Service issued almost 20 percent of all the final environmental impact statements prepared by federal agencies (50 out of a total of 253). According to the reengineering team, conducting environmental analyses and preparing environmental documents consumes about 18 percent of the funds available to manage the national forests and approximately 30 percent of the agency's field resources.

The costs and time required to complete environmental analyses and prepare environmental documents have increased for individual projects. The Forest Service's costs to undertake timber sales have tripled since 1988, and a sale can take up to 8 years to prepare. (See fig. 2.1.)

[1]Final Report of Recommendations: Project-Level Analysis Re-Engineering Team (Nov. 17, 1995). The team, consisting primarily of regional and forest-level personnel, was tasked by the Forest Service with designing a new process for conducting project-level environmental analyses.

Figure 2.1: Costs to Undertake Timber Sales, 1973-94



Source: Forest Service.

For example, preparation for the La Manga timber sale on the Carson National Forest in New Mexico began in 1987. The environmental analysis was conducted between July 1990 and March 1994. On the basis of the analysis, the forest decided to offer approximately 4.2 million board feet with an estimated value of about $718,000. The decision was appealed and litigated. On the basis of new information on wildlife in the sale area and a plan by the Fish and Wildlife Service to recover the threatened Mexican spotted owl, the forest reduced the volume of timber to be offered to 2.4 million board feet with an estimated value of about $411,000. According to forest officials, they spent an estimated $300,000 conducting the original environmental analysis and an additional $400,000 responding

to legal challenges, updating information, and reanalyzing the sale area. These estimates do not include the costs of using attorneys within Agriculture's Office of the General Counsel to defend the agency or of postponing other projects on the forest to allow staff and resources to be assigned to the La Manga project.

According to the Forest Service, it conducts extensive, complex environmental analyses in order to comply with the requirements of the National Environmental Policy Act (NEPA) and other environmental laws and to avoid or prevail against challenges to its compliance with these laws. Despite these analyses, the Forest Service receives over 1,200 administrative appeals to project-level decisions annually, and about 20 to 30 new lawsuits are filed each year. Many of these appeals and lawsuits are by parties seeking to delay, modify, or stop plans or projects that they oppose.

Although compliance with planning and environmental laws is costly and time-consuming, noncompliance is also, as two examples demonstrate.

- From October 1992 through June 1996, the Forest Service paid almost $6.5 million in claims for timber sale contracts that were suspended or canceled to protect endangered or threatened species. As of October 1996, the agency had pending claims with potential damages of about $61 million, and it could incur at least an additional $198 million in damages. Some of these contracts were suspended or canceled because the Forest Service had not developed plans that satisfied the requirements of laws such as NEPA, the National Forest Management Act, or the Endangered Species Act.[2] Forest Service officials believe that additional congressional funding is needed to help pay for the increased costs. In December 1996, Forest Service headquarters directed the agency's nine regional offices to plan and budget for fiscal year 1997 on the assumption that the Congress would approve a supplemental appropriation to pay for the increased costs.
- The Forest Service could incur significant costs because the Eldorado National Forest in northern California failed to comply with the requirements of planning and environmental laws. Forest officials decided to proceed with a number of timber sales on the basis of cursory, out-of-date environmental assessments that did not adequately analyze the sales' potential effects on fish, wildlife, plants, cultural resources, and water quality and did not consider significant new information, as required

[2]Timber Management: Opportunities to Limit Future Liability for Suspended or Canceled Timber Sale Contracts (GAO/RCED-97-14, Oct. 31, 1996).

under NEPA regulations. The contracts that were awarded have since been suspended. As a result, the Forest Service could incur $30 million in potential damages.

Objectives in Forest Plans Often Have Not Been Achieved

After spending over 20 years and over $250 million to develop forest plans, the Forest Service often has not been able to achieve the plans' objectives. As a result, the public has not been able to form reasonable expectations about the health of forests over time or about the future availability of forest uses.

In 1991, for example, we reported that the Forest Service had approved the plan for the Flathead National Forest in northwestern Montana in 1986 but had fallen short of the plan's timber-offering goal by about 37 percent during the first 5 fiscal years covered by the plan.[3] The forest has continued to fall short of its goal. Similarly, in 1994, we reported that timber sales on five forests we reviewed were below the goals identified in the plans for fiscal years 1991 through 1993.[4] (See table 2.1.) Three of the forests—the Deschutes and Mt. Hood in Oregon and the Gifford Pinchot in Washington—are in the Forest Service's Pacific Northwest Region. The other two forests—the Ouachita in Arkansas and the Chattahoochee-Oconee in Georgia—are in the Forest Service's Southern Region. These two regions sold more timber in fiscal year 1993 than the Forest Service's other seven regions.

Table 2.1: Comparison of Average Annual Timber Sale Goals and Timber Sale Volumes for Five National Forests

Volume in millions of board feet

		Timber sale volume		
Forest	**Timber goal**	**1991**	**1992**	**1993**
Deschutes	97.8	18.3	26.7	12.7
Gifford Pinchot	334.0	110.2	19.8	14.8
Mt. Hood	189.0	50.6	28.2	38.1
Chattahoochee-Oconee	101.5	63.3	54.1	49.2
Ouachita	146.7	39.8	95.8	131.2

The Forest Service approved the forest plans for the Deschutes, Gifford Pinchot, and Mt. Hood forests in 1991. However, the volume of timber sold

[3]Forest Service: The Flathead National Forest Cannot Meet Its Timber Goal (GAO/RCED-91-124, May 10, 1991).

[4]Forest Service: Factors Affecting Timber Sales in Five National Forests (GAO/RCED-95-12, Oct. 28, 1994).

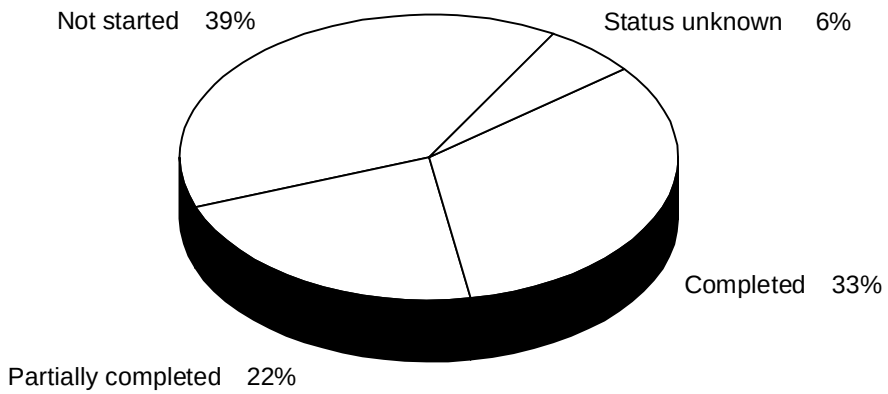
fell short of the plans' timber goals by about 83 percent during the first 3 fiscal years covered by the plans. The forest plan for the Chattahoochee-Oconee was approved in 1986. However, as a result of an administrative appeal, forest officials agreed in 1986 to limit average annual timber sales to 87 million board feet. The volume of timber sold fell short of the plan's revised timber goal by about 36 percent during fiscal years 1991 through 1993. The forest plan for the Ouachita was approved in 1987 and amended in 1990. At that time, the plan's timber goal was lowered from 159.0 million board feet to 146.7 million board feet. The volume of timber sold fell short of the plan's amended timber goal by about 39 percent during fiscal years 1991 through 1993.

At some of the forests visited during this review, we found that the Forest Service had either (1) revised or amended its plans to significantly reduce the timber goals or (2) acknowledged that the goals could not be met. For example, the Nantahala-Pisgah National Forest in North Carolina had reduced its yearly timber goal from 72 to 34 million board feet, or by 54 percent, and the Black Hills National Forest in South Dakota was reducing its yearly timber goal from 160 to 100 million board feet, or by 38 percent. In addition, the Nicolet National Forest in Wisconsin acknowledged that it could produce about 42 million board feet per year rather than the 97 million board feet established as a goal in its forest plan.

The Forest Service has also not met its objectives for sustaining wildlife. When actions designed to benefit wildlife have been included in approved forest plans, they have usually been implemented only partially or not at all. For example, between February 1988 and August 1990, we examined 51 Forest Service and Bureau of Land Management plans containing 1,130 wildlife-related action items scheduled to have been conducted before our review. Of these, 39 percent had not been started, 22 percent had been partially completed, and 33 percent had been fully completed, according to the available documentation.[5] (See fig. 2.2.)

[5]Public Land Management: Attention to Wildlife Is Limited (GAO/RCED-91-64, Mar. 7, 1991).

Figure 2.2: Disposition of Wildlife-Related Actions in 51 Forest Service and Bureau of Land Management Plans



Opportunities Exist to Improve the Efficiency and Effectiveness of the Forest Service's Decision-Making

Recent GAO work has found that reengineering inefficient work processes offers unprecedented opportunities to improve the delivery of government services and reduce the costs of programs.[6] Studies by the Forest Service support this finding. For example, according to the Forest Service reengineering team, improvements to the agency's process for conducting environmental analyses could improve timeliness and reduce costs by 10 to 15 percent initially and by 30 to 40 percent over time. Similarly, a Forest Service team, tasked with developing and implementing a more efficient way of managing the process of issuing livestock grazing permits, estimates that the model it designed (referred to as the adaptive learning model) could improve the timeliness of the process by 40 percent.

A reduction of 30 to 40 percent in the costs of the process used by the Forest Service to reach project-level decisions could reduce the costs of its decision-making by between $75 million and $100 million a year and reduce the time needed to complete some timber sales by up to 2 and 3 years. Officials at many regions and forests we visited during this review stated that reducing the costs and time of decision-making would, in turn, provide more resources to achieve the objectives in the forest plans. However, as discussed in the following chapters, improving the efficiency and effectiveness of the Forest Service's decision-making process will

[6]Managing for Results: Steps for Strengthening Federal Management (GAO/T-GGD/AIMD-95-158, May 9, 1995).

require that (1) the agency give adequate attention to improving accountability for expenditures and performance, (2) agreement be reached on how the agency is to resolve conflicts among competing uses on its lands, (3) the Council on Environmental Quality and the major federal land management agencies address interagency issues that transcend the Forest Service's administrative boundaries and jurisdiction, and (4) a systematic and comprehensive analysis be performed to resolve differences in the requirements of laws that help frame the agency's decision-making.

The Forest Service Has Not Given Adequate Attention to Improving Its Decision-Making Process

Some of the inefficiency in developing forest plans and reaching project-level decisions, as well as the ineffectiveness in achieving the plans' objectives, has occurred because the Forest Service has not given adequate attention to improving its decision-making process, including improving its accountability for expenditures and performance. As a result, the Forest Service must request more funds to accomplish fewer objectives during the yearly budget and appropriation process. In addition, long-standing deficiencies within the decision-making process, which have contributed to increased costs and time and/or limited the ability to achieve planned objectives, have not been corrected. These deficiencies include (1) not adequately monitoring the effects of past management decisions, (2) not maintaining comparable environmental and socioeconomic data that are useful and easily accessible to forest managers, and (3) not adequately involving the public throughout the decision-making process. However, landmark legislation enacted in the 1990s, if implemented successfully, will strengthen accountability within the Forest Service and improve the efficiency and effectiveness of its decision-making.

The Forest Service Is Not Sufficiently Accountable for Its Expenditures

The Chief Financial Officers Act of 1990 requires federal agencies to be more accountable for their expenditures of appropriated funds by requiring them to (1) develop integrated accounting and financial management systems that are to provide complete, reliable, consistent, and timely financial information and (2) provide for the systematic measurement of performance. Improved accountability for expenditures is particularly important within the Forest Service since the Congress has increased the agency's flexibility in fiscal decision-making. Beginning in fiscal year 1995, the Congress (1) simplified the Forest Service's budget structure, reducing the number of main appropriations from 13 to 9 and of funding items from 71 to 44, and (2) expanded the agency's reprogramming authority, giving it greater discretion in shifting funds between line items within each appropriation. However, this increased flexibility has not been accompanied by increased accountability in budget execution through better accounting for expenditures, and the Forest Service has made little progress in implementing the provisions of the Chief Financial Officers Act.

An audit of the Forest Service's financial statements for fiscal year 1995 by Agriculture's Inspector General resulted in an adverse opinion because of "pervasive errors, material or potentially material misstatements, and/or departures from applicable Government accounting principles affecting

Financial Statement accounts."[1] On the basis of this opinion, Agriculture reported that it could not provide reasonable assurance of the integrity of the Forest Service's management, accounting, and administrative control systems.

Our work, as well as that of the Inspector General, has also identified shortcomings in the Forest Service's accounting and financial data and information systems that preclude the agency from presenting accurate and complete financial information. These shortcomings include (1) various material weaknesses in the internal controls for financial management that result in a lack of accurate and reliable information and (2) accounting codes that do not accurately assign or track all costs to each resource program.

For example, in June 1996 we reported that the Forest Service was unable to provide us with data showing the costs and revenues of management activities being carried out at each of the national forests because of shortcomings in its accounting and financial information systems. According to the Forest Service's Associate Deputy Chief for Administration, the current system for maintaining cost data does not enable the agency to associate the costs incurred in generating revenues from various forest uses.[2] The shortcomings identified in our June 1996 report had been identified and reported by the Inspector General over the previous few years.

The Inspector General's audit of the Forest Service's financial statements for fiscal year 1995 found that the costs for firefighting personnel and equipment had been incorrectly charged by one regional office to other activities, resulting in overexpenditures of about $6.7 million by the region. The Inspector General reported that, overall, the Forest Service could not determine for what purposes $215 million of its $3.4 billion in operating and program funds were spent in fiscal year 1995. As a result, Forest Service managers are unable to adequately monitor and control spending levels for various programs and activities relating to decision-making or to measure the extent to which changes affect costs and efficiency.[3]

As evidenced above, the Forest Service has either (1) not implemented corrective actions intended to hold it fiscally accountable for its decisions,

[1]Audit of Forest Service's Fiscal Year 1995 Financial Statements, U.S. Department of Agriculture (USDA), Office of the Inspector General, Audit Report No. 08401-4-At.

[2]Forest Service's Financial Data Limitations (GAO/RCED-96-198R, June 19, 1996).

[3]Forest Service (GAO/AIMD-97-11R, Dec. 20, 1996).

stating that these actions would be too difficult or costly to implement, or (2) stopped monitoring corrective actions before they were completed. For example, agency officials informed us that they believe it would be difficult and costly to develop information systems that have the capability to produce the sale-by-sale information on obligations and expenditures needed to ensure compliance with a legislative prohibition against expending more funds for reforestation and other related activities on a timber sale area than have been collected from that sale area.[4] Moreover, in an audit of the Forest Service's fiscal year 1995 financial statements, the Inspector General stated that the Forest Service had stopped monitoring actions to improve the internal controls over its timber sale program and charge-as-worked fund usage (ensuring the use of proper accounting code charges) before the actions were completed. As a result, the agency does not know whether the corrective actions were ever implemented.

After Agriculture's Inspector General concluded that the agency's fiscal year 1995 financial statements were unreliable, the Forest Service established a working group to address these and other accounting and financial reporting problems. However, corrective actions to address accounting and financial reporting problems identified by the Inspector General are not scheduled to be implemented until the end of fiscal year 1998.

The Forest Service Is Not Sufficiently Accountable for Its Performance

The Forest Service has also made little progress in holding its managers accountable for their performance. Holding managers accountable implies a consequence for a certain decision and fixes the responsibility for outcomes.

For example, in its June 1990 Critique of Land Management Planning,[5] the Forest Service stated that, while the Congress should increase the agency's flexibility in fiscal decision-making, it should not expect the agency to be accountable for its performance. Specifically, the critique stated that "Congress must put its money where its statute is," but "this should be done without any further complication of the system through the introduction of new 'resource output goals' that are problematic to define and are of dubious value in program evaluation." The critique continued that "meaningful production goals for recreation, water,

[4]Forest Service's Reforestation Funding: Financial Sources, Uses, and Condition of the Knutson-Vandenberg Fund (GAO/RCED-96-15, June 21, 1996).

[5]Critique of Land Management Planning, Vol. 2, National Forest Planning: Searching for a Common Vision, Forest Service (FS-453, June 1990).

wildlife, and fisheries have yet to be established, even in theory, and reported accomplishments would be nearly impossible to evaluate objectively or even verify independently."

In response to congressional concerns about the Forest Service's inability to deliver what is expected or promised, the Chief, in the fall of 1991, formed a task force of employees from throughout the agency to review the issue of accountability. The task force's February 1994 report[6] stated that 60 percent of the findings by GAO and Agriculture's Inspector General focused on the inability of the Forest Service either to do what it agreed or was directed to do, or to do the task in question as it said it would. According to the task force, audits by GAO and the Inspector General confirmed that the agency can and does identify problems but is slow to take corrective action. This was especially true for internal Forest Service reviews. The task force observed that when external attention is not focused on an issue, "corrective action is not a top priority." Only an external review prompts corrective action, according to the task force, even when the Forest Service has already identified the problems disclosed through the external audit.

Using the information gathered, the task force defined accountability as "being answerable for what we do" and determined that in order to be accountable, the agency "must do what we agreed or were directed to do as we agreed or are required to do it, monitor and show our results, and take action to improve results." The report set forth a seven-step process to strengthen accountability. Steps in the process included (1) establishing work agreements that include measures and standards with customers' involvement, (2) assessing performance, and (3) communicating results to customers.

The report noted that the evidence supporting the need for increased accountability was "compelling" and that improving accountability for performance would not require a major financial outlay. Rather, the report called for a significant commitment on the part of the agency to change. To help the Forest Service change its behavior, the task force recommended that the agency (1) institutionalize its expectations for corporate accountability in the work agreements established with customers' involvement, (2) accelerate cultural change, and (3) monitor and track accountability through indicators or benchmarks.

[6]Individual and Organizational Accountability in the Forest Service: Successful Management of Work Agreements, USDA, Forest Service (Feb. 1994).

The concepts in the task force's report were adopted by the Forest Service's leadership team and distributed agencywide. However, without external attention, the task force's recommendations were never implemented throughout the agency. As a result, the agency has never fulfilled its stated goal to "achieve a leadership and organizational culture in which responsibility and accountability for excellence are shared by all employees in the execution of the Forest Service's mission." Rather, the task force's recommendations were identified in the agency's October 1995 draft long-term strategic plan as an effort to be implemented over the next decade.[7]

The Forest Service Must Request More Funds to Accomplish Fewer Objectives

Because the Forest Service has made little progress in holding managers accountable for their expenditures and performance, it must request more funds to accomplish fewer objectives in forest plans during the yearly budget and appropriation process. The Congress, in fiscal year 1991, asked the Forest Service to develop a multiyear program to reduce the costs of its timber program by not less than 5 percent per year. The Forest Service responded to these and other concerns by undertaking a cost-reduction study and issuing a report in April 1993.[8] However, the agency left the implementation of field-level action items to the discretion of each of its nine regional offices, and while some regions rapidly pursued the goal of becoming cost-efficient, others did not.[9] A second Forest Service report, issued in January 1995, examined policy options to improve the timber program's cost-efficiency.[10] However, the report's recommendations have not been implemented. Implementing the November 1995 recommendations of the Forest Service reengineering team, designed to correct weaknesses in the agency's project-level environmental analyses, would go a long way toward reducing the costs of the agency's timber program. However, at the end of 1996, the Forest Service had not acted to implement any of the team's recommended improvements agencywide.

With no incentive to act, the Forest Service is preparing to undertake the third major examination of its timber program in the last 4 years. Meanwhile, the costs associated with preparing and administering timber sales have continued to rise. (See ch. 2.) As a result, for fiscal year 1998,

[7]The Forest Service Program for Forest and Rangeland Resources: A Long-Term Strategic Plan, Draft 1995 RPA Program, USDA, Forest Service, Washington Office (Oct. 16, 1995).

[8]Timber Cost Efficiency Study—Final Report (Apr. 16, 1993).

[9]Forest Service: Status of Efforts to Achieve Cost Efficiency (GAO/RCED-94-185FS, Apr. 26, 1994).

[10]Timber Program Issues: A Technical Examination of Policy Options (Jan. 1995).

the agency is requesting $12 million (6 percent) more for timber sales management than was appropriated for fiscal year 1997 while proposing to offer 0.4 billion board feet (10 percent) less timber for sale. Given such a trend, some Forest Service officials expressed concern that the costs to prepare and administer some timber sales may exceed the gross receipts derived from them.

Moreover, without being held accountable for their performance in reaching decisions, some Forest Service managers have become more concerned about legal challenges to plans and projects than about the costs and time required to reach the decisions. For example, according to the Forest Service, it conducts extensive, complex environmental analyses not only to comply with the requirements of the National Environmental Policy Act (NEPA) and other environmental laws but also to avoid or prevail against challenges to its compliance with these laws. In its 1995 report,[11] the Forest Service reengineering team, tasked with designing a new process for conducting project-level environmental analyses, noted that the agency sometimes conducts (1) environmental assessments and studies and prepares environmental documents for decisions that are noncontroversial and/or could be categorically excluded from environmental analysis and (2) redundant analyses instead of focusing on what is new and using existing analyses to support new decisions when possible.

The Forest Service Has Not Corrected Long-Standing Deficiencies in Its Decision-Making Process

Because the Forest Service has not been held sufficiently accountable for its expenditures and performance, it has not corrected long-standing deficiencies in its decision-making process. These deficiencies, which have driven up costs and time and/or driven down the agency's ability to achieve planned objectives, center on inadequate monitoring, data, and public involvement.

Many of the studies and reports that have addressed these deficiencies within the Forest Service's decision-making process have also recommended improvements—some of which reflect best practices evolving in the field. Generally, these changes require nothing more than involving the appropriate parties at the appropriate times and basing decisions on sound information. However, the Forest Service has either ignored the recommended improvements or left their implementation to the discretion of regional offices and forests. As a result, their implementation has been uneven and their results mixed.

[11] Final Report of Recommendations: Project-Level Analysis Re-Engineering Team (Nov. 17, 1995).

Monitoring and Evaluation Are Not Performed

Regulations implementing the National Forest Management Act (NFMA) require the Forest Service to monitor and assess the effects of its management practices on the lands' productivity. Adequate monitoring of the effects of past management decisions is critical to accurately estimate the effects of similar future decisions, including their cumulative impact on the environment.

Moreover, monitoring can be used as an effective tool when the effects of a decision may be difficult to determine in advance because of uncertainty or costs. Regulations implementing NEPA provide that when information relevant to reasonably foreseeable significant adverse effects is incomplete or unavailable, an agency shall—in the environmental impact statement accompanying the decision—(1) acknowledge this gap, (2) explain the relevance of the missing information, (3) summarize the scientific evidence available, and (4) evaluate the potential effects of the decision using research methods or approaches that are generally accepted in the scientific community. According to an interagency task force chaired by the Council on Environmental Quality (CEQ),[12] the agency can then condition the decision on the monitoring of uncertainties, indicate how the decision will be modified when new information is uncovered or when preexisting monitoring thresholds are crossed, and reexamine the decision in light of its results or when a threshold is crossed. According to the task force, if an agency spells out contingencies ahead of time and if others have had an opportunity to comment, management changes can be made without supplementing the NEPA analysis, as long as the changes and their associated effects have already been analyzed under the statute.

When the Forest Service proposed revisions to its planning regulations in April 1995,[13] it stated that an expanded and strengthened role for monitoring and evaluation was a "cornerstone" for implementing the proposed rule. Moreover, many Forest Service officials with whom we spoke, as well as several studies we reviewed, stated that monitoring and evaluation could be more efficient and effective than attempting to predict a project's outcome before implementing a project-level decision.

However, the Forest Service has historically given low priority to monitoring during the annual competition for scarce resources. In addition, almost 7 years after publishing its Critique of Land Management

[12]The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies, Vol. II, Implementation Issues, Interagency Ecosystem Management Task Force (Nov. 1995).

[13]60 Fed. Reg. 18886 (Apr. 13, 1995).

Planning,[14] which identified the need to improve monitoring, the Forest Service continues to approve projects that do not provide adequately for monitoring. Moreover, the agency generally does not monitor implementation of its plans as its regulations require. For example, in fiscal year 1995, only 78, or 63 percent, of 123 required annual monitoring and evaluation plans were prepared.

While the proposed revisions to the Forest Service's planning regulations state that projects to implement forest plans cannot be undertaken unless there is a "reasonable expectation" that adequate funding will be available to conduct monitoring and evaluation activities, they do not state how this determination will be made or who will be held accountable for making it. Moreover, monitoring programs that are funded may not be designed carefully enough to provide information of the kind or in the form that is most useful for evaluating past decisions and aiding in future decision-making. Several Forest Service officials told us that simplified, less costly monitoring plans with fewer, more well-chosen measurements could provide most of the information needed to determine the environmental effects of past management decisions. However, they also noted that because the need for improved monitoring was so widespread within the agency, adequate monitoring agencywide will likely require more resources than are currently being committed.

In a March 1991 report,[15] we stated that although the Forest Service's regulations required the agency to monitor the implementation of its forest plans, it had generally not done so. It had not collected comprehensive data on the current conditions of wildlife habitat and population trends for the thousands of wildlife species using public lands. Not having these data had precluded it from assessing the health of wildlife on public lands or the effects of federal management efforts.

Similarly, in October 1996, an interagency team that reviewed an emergency salvage timber sales program[16] reported significant gaps in carrying out the agreement's direction on field monitoring.[17] Gaps were

[14]Critique of Land Management Planning, Vol. 5, Public Participation (FS-456, June 1990).

[15]Public Land Management: Attention to Wildlife Is Limited (GAO/RCED-91-64, Mar. 7, 1991).

[16]"Salvage" timber generally refers to timber that is being made available for harvest because it is disease- or insect-infested, dead, damaged, downed by wind, affected by fire, or imminently susceptible to fire or insect attack.

[17]Interagency Salvage Program Review, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (Silver Spring, Maryland: Oct. 8, 1996). The five agencies were the National Marine Fisheries Service, the Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, and the Environmental Protection Agency.

identified in the effectiveness of (1) mitigation measures, (2) requirements and limitations, and (3) other project design features intended to ensure that activities are environmentally sound.

Not monitoring and evaluating its decisions could further increase the costs and time of decision-making by exposing the Forest Service to additional litigation. Specifically, the agency could be subject to claims of noncompliance with the monitoring requirements of NFMA. For example, a legal challenge filed against the agency in 1996 alleged inadequate monitoring of the results of the plan for the Shoshone National Forest in Wyoming. Although the agency settled the suit by agreeing to improve its monitoring, the Chief of the Forest Service told us that the agency's failure to monitor represents a potential major future litigation liability to the agency. He and other Forest Service officials noted that, in dismissing a challenge to the President's plan for the national forests in the Pacific Northwest, the federal district court judge stated that the court would entertain further litigation based on allegations that the Forest Service had failed to live up to its monitoring requirements.[18]

Furthermore, the Forest Service's historical noncompliance with the monitoring requirements of regulations implementing NFMA diminishes the chances that the public and federal regulatory agencies will trust the agency to fulfill its monitoring requirements in the future. Several environmental groups told us that they were concerned about the Forest Service's lack of monitoring on national forests. As a result, they will continue to insist that the Forest Service prepare detailed environmental analyses and documentation—which have become increasingly costly and time-consuming—before reaching project-level decisions rather than support what many Forest Service officials believe to be the more efficient and effective option of monitoring and evaluation. Thus, the Forest Service's past failure to monitor represents a lost opportunity to reduce the costs and time of future decision-making.

Data and Systems Are Still Limited

Three acts or their implementing regulations establish data requirements for the Forest Service: NFMA regulations require it to base its plans on comprehensive inventory data, NEPA regulations require it to consider high-quality information on the potential effects of a decision, and the Endangered Species Act (ESA) requires it to sufficiently understand species' habitat needs so that its decisions will ensure conservation of the species. In a 1980 report on the Forest Service's then relatively new

[18]Seattle Audubon Soc. v. Lyons, 871 F. Supp. 1291 (W.D. Wash. 1994).

planning process to implement NFMA,[19] we stated that (1) without a complete inventory of natural resources, forest plans are bound to be inadequate and (2) the need for good data is greatest when resource conflicts are being identified and mitigated and when initial land-use and natural resource allocations are being made.

Subsequent studies have shown that limitations in data and systems hindered the adequacy and implementation of many early forest plans. Thus, a decade later, we found that these deficiencies persist throughout the agency. In 1994, for example, we reported that limitations in forestwide data and estimating techniques—which led to overestimating the size of the timber inventory in timber harvest areas—had contributed to lower-than-expected timber sales at four of the five forests included in our review.[20]

In the revisions it proposed to its planning regulations in April 1995, the Forest Service conceded that "realistically, many forests do not have fully updated inventories at this time, so, regrettably, . . . delays [of 2 years or more] must still be expected in some cases when forest plans are revised." Similarly, in its 1995 report, the Forest Service reengineering team, tasked with designing a new process for conducting project-level environmental analyses, noted that the agency still did not have a system of comparable environmental information that was useful and easily accessible to managers.

Among its recommendations to streamline and improve the process for conducting project-level environmental analyses, the Forest Service reengineering team identified the need for a system of comparable environmental information that is useful and easily accessible to project officials. However, over a year later, the Forest Service had not acted on this and other recommendations that could be implemented within the current statutory and regulatory framework. Instead, the agency combined the task force's recommendations for needed actions with proposals from other initiatives and developed an "action plan" to implement them. The plan identified 13 major themes for fiscal year 1996, many of which were described as "high priority." However, none of the themes had been fully implemented throughout the agency at the end of the fiscal year, and the

[19]Changes in Public Land Management Required to Achieve Congressional Expectations (CED-80-82, July 16, 1980).

[20]Forest Service: Factors Affecting Timber Sales in Five National Forests (GAO/RCED-95-12, Oct. 28, 1994).

agency simply rolled them over to fiscal year 1997, again designating many as "high priority."

According to the Forest Service, the adaptive learning model (see ch. 2) developed to improve the timeliness of decision-making, which relies on having comprehensive inventory data, was successfully tested on the Wenatchee National Forest in Washington State. However, we observed that without adequate information, the model was difficult, if not impossible, to implement on the Lassen National Forest in northern California. Here, Forest Service officials were responsible for renewing livestock grazing permits, but because they had not collected information on the condition of the land, they could not agree on or make informed decisions about the level of grazing to allow. Although grazing had been permitted for a number of years, the forest had not monitored and evaluated the environmental effects of past grazing decisions.

In addition, as we first reported in 1980, the failure of the Forest Service to base its decisions on sound information has resulted in continued legal challenges to its plans and projects. These challenges have required the agency to delay, modify, or withdraw planned projects, thereby reducing the efficiency and effectiveness of its decision-making.

Public Participation in Decision-Making Is Limited

The public has expressed its desire to become more involved in the Forest Service's decision-making and has demonstrated its preference for presenting its concerns, positions, and supporting documentation during rather than after the agency's development of proposed forest plans and projects. It has also signaled its intent to challenge decisions that it has not been involved in reaching.

Both NEPA and NFMA create a positive duty on the part of the Forest Service to involve the public in its decision-making process. The Forest Service's June 1990 Critique of Land Management Planning concluded that although public participation in the agency's decision-making process had increased, improvements were needed. Moreover, while many managers had done very well, others had involved the public only minimally in the process. The document recommended that the agency find ways to inform and involve the public early and continuously in the process.

In 1992, however, the Office of Technology Assessment (OTA) reported that the Forest Service had not used public input efficiently or effectively in its

decision-making process.[21] According to OTA, much of the criticism was similar to that heard at least 20 years ago: The agency asks for public input, but the input does not affect final decisions. In 1995, the interagency task force chaired by CEQ echoed this finding. The task force reported that

> "the Forest Service dampens enthusiasm for effective public participation when it presents a management plan for a national forest to the public as a fait accompli. Often, the preferred alternative is presented, giving the correct impression that the agency already knows what it wants to do and is requesting public input only pro forma."

In the proposed revisions to its planning regulations, the Forest Service stated that although its success or failure in communicating with the public ultimately depends upon the people involved, certain expectations can be defined and minimum procedures established. In August 1996, the Forest Service revised its Land and Resource Management Planning Handbook[22] to give forest officials more flexibility and discretion in developing forest plans. However, the agency retained its guidance and instructions limiting the public's participation in developing the plans. The handbook directs forest officials not to release certain information critical to evaluating a forest plan until after the public comment period on the draft plan has closed and the final plan has been released. This information includes (1) the agency's process for evaluating alternatives for managing the forest and arriving at the preferred one identified in the draft plan; (2) the physical, biological, social, and economic criteria used to evaluate the alternatives; and (3) the results of the evaluation. Our work confirmed that forests comply with this requirement by using what is sometimes referred to as the "clay pigeon" approach, limiting the public primarily to reviewing and commenting on the preferred alternative in the draft plan. Moreover, according to many members of the public with whom we spoke, the Forest Service does not value their input and/or does not involve them actively in its decision-making process.

NFMA requires the Secretary of Agriculture to appoint advisory committees under the Federal Advisory Committee Act (FACA) if they are deemed "necessary to secure full information and advice." In an October 1995

[21]Forest Service Planning: Accommodating Uses, Producing Outputs, and Sustaining Ecosystems, OTA-F-505 (Washington, D.C.: Feb. 1992).

[22]Forest Service handbooks are the principal source of specialized guidance and instruction for carrying out the direction in the Forest Service manual. The manual contains legal authorities, objectives, policies, responsibilities, instructions, and guidance needed on a continuing basis by Forest Service line officers and primary staff in more than one unit to plan and execute assigned programs and activities.

report,[23] we stated that advisory committees established under FACA can be an effective tool for facilitating communication between federal and nonfederal parties. Similarly, the 1995 report by the interagency task force chaired by CEQ recommended that federal agencies consider making more extensive use of FACA-chartered advisory committees when seeking to collaborate closely with nonfederal parties on a regular and systematic basis.

However, the Forest Service has identified FACA as a barrier to, rather than a tool for, effective public participation in its decision-making. In the revisions to its planning regulations that it proposed in April 1995, the Forest Service states that interdisciplinary teams established to amend or revise forest plans will exclude the public. According to the Forest Service, membership on the teams must be limited to agency and other federal personnel "primarily due to the Federal Advisory Committee Act, which imposes extensive requirements on the creation and use of committees that include non-Federal personnel for the purpose of advising Federal agencies."

Inadequate public participation in decision-making can lead to appeals and litigation. Although our October 1995 report on public participation in federal efforts to restore the Everglades showed that public involvement in federal land management decision-making should not be viewed as a panacea to legal challenges, most studies and reports agree that for both federal and nonfederal stakeholders, the benefits of working together cooperatively to resolve differences often outweigh the costs of early and continuous public involvement.

Recently Enacted Federal Statutes Establish the Framework Necessary for Strengthening Accountability

Landmark legislation enacted in the 1990s, if implemented successfully, will strengthen accountability within the Forest Service and improve the efficiency and effectiveness of its decision-making. Specifically, the Chief Financial Officers Act of 1990, as discussed previously, is intended to hold federal agencies more accountable for their expenditures of appropriated funds. The Government Performance and Results Act of 1993 (GPRA) is designed to hold federal agencies more accountable for their performance. The Clinger-Cohen Act of 1996 (formerly entitled, in part, the Information Technology Management Reform Act of 1996) and the Paperwork Reduction Act of 1995 are intended to hold them more accountable for the adequacy of their information systems and data.

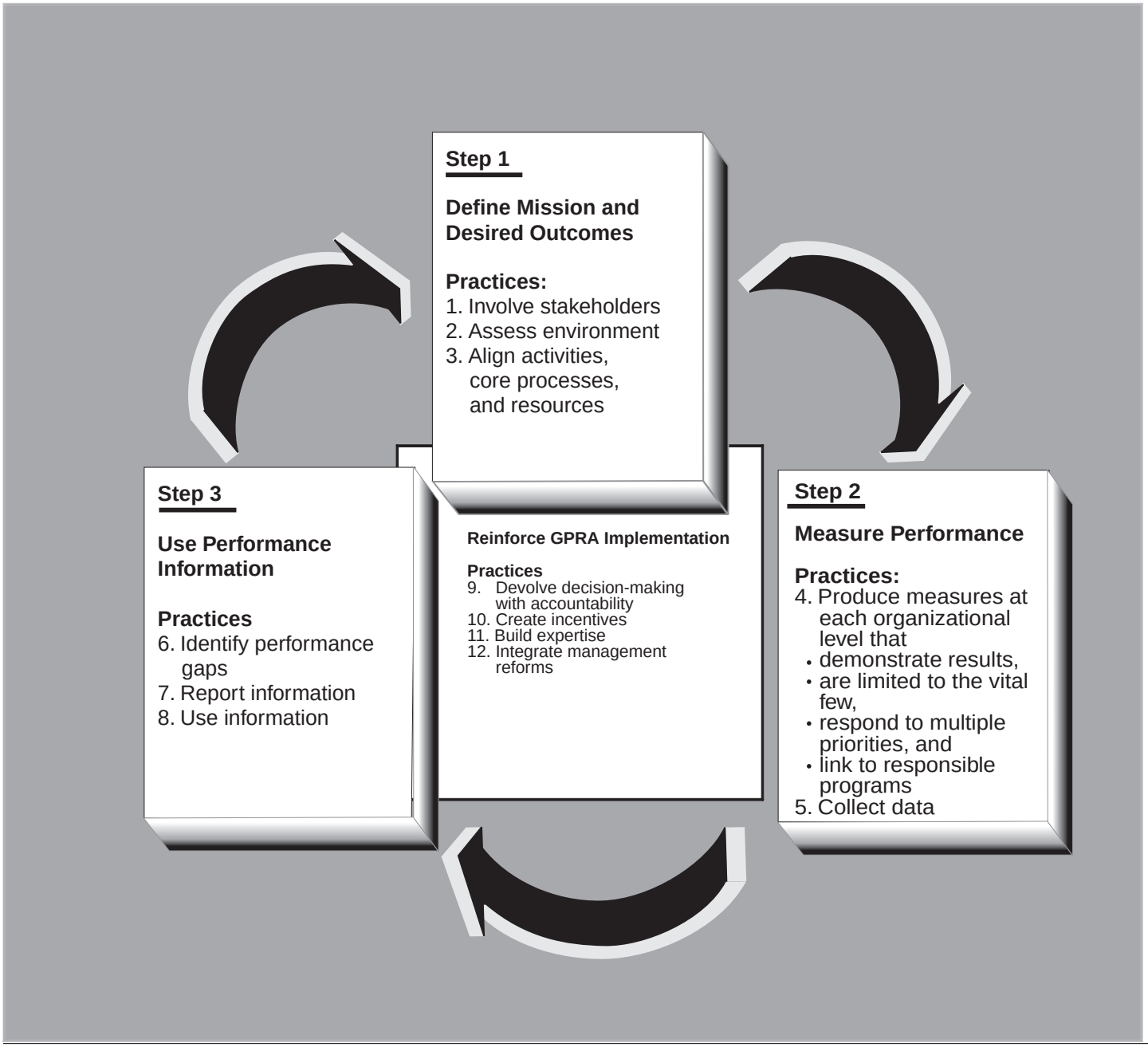
[23] Restoring the Everglades: Public Participation in Federal Efforts (GAO/RCED-96-5, Oct. 24, 1995).

The Government Performance and Results Act

GPRA is the primary legislative framework through which federal agencies will be required to set strategic goals, measure performance, and report on the degree to which goals have been met. It requires each federal agency to develop, no later than September 30, 1997, a strategic plan that covers a period of at least 5 years. Each plan must include the agency's mission statement; identify the agency's long-term strategic goals; and describe how the agency intends to achieve these goals through its activities and through its human, capital, information, and other resources. Under GPRA, strategic plans are the starting point for agencies to set annual goals for programs and to measure the performance of the programs in achieving those goals.

Starting with fiscal year 1999, the Forest Service and other federal agencies are required to produce annual performance plans containing (1) annual performance goals for gauging the progress made toward achieving longer-term strategic goals and (2) performance measures for assessing the progress made toward achieving annual performance goals. By March 31, 2000, federal agencies are to submit annual program performance reports for fiscal year 1999. (See fig. 3.1.)

Figure 3.1: Implementing GPRA: Key Steps and Critical Practices



The Clinger-Cohen Act and the Paperwork Reduction Act

Under the Clinger-Cohen Act of 1996, the Forest Service and other federal agencies must establish goals, measure performance, and report in their annual budget submissions to the Congress on how well their information

technologies are supporting their mission-related programs. This act also calls for federal agencies to "benchmark" their information technology management processes against comparable processes of public or private-sector organizations. Agencies are to revise or reengineer their processes, as appropriate, before making investments in information technology.

A related statute, the Paperwork Reduction Act of 1995, also provides for improving the productivity, efficiency, and effectiveness of federal operations, including those of the Forest Service, through better management of information resources to accomplish the missions and improve the performance of federal agencies. The act stipulates that agency officials are responsible and accountable for the information resources supporting their programs. Specifically, agency program officials, in consultation with their chief information officer and chief financial officer (or comparable official), are to define their program's information needs and develop strategies, systems, and capabilities to meet these needs. They are also required to develop a plan to meet their information needs that contains goals and methods for measuring progress toward achieving them. In addition, agencies are to maintain ongoing processes to ensure that information management is integrated with organizational planning, budget, financial management, and program decisions. The Director of the Office of Management and Budget, within the Executive Office of the President, is to report annually to the Congress on the agencies' progress in achieving their information management goals.

Conclusions

If the Forest Service is to develop forest plans and reach project-level decisions more efficiently and implement the plans more effectively, it will need to be held sufficiently accountable for its expenditures and performance. Accountability is the price that managers at every organizational level within the agency must pay for the freedom to make choices. The data and financial controls and systems required by the Chief Financial Officers Act; the performance goals, measures, and reports required by GPRA; and the information resources and technology goals, measures, and reports required by the Clinger-Cohen Act and the Paperwork Reduction Act are, in essence, the currency of that accountability. However, to ensure the full and effective implementation of these legislative mandates, sustained management attention within the Forest Service and sustained oversight by the Congress will be required.

Agreement Needs to Be Reached on How to Resolve Conflicts Among Competing Uses

The Government Performance and Results Act of 1993 (GPRA), if implemented successfully, will strengthen accountability for performance and results within the Forest Service and improve the efficiency and effectiveness of its decision-making. Successful implementation of the act's requirements is contingent on establishing long-term strategic goals that are based on clearly defined mission priorities. However, agreement does not exist on the Forest Service's long-term strategic goals. This lack of agreement is the result of a more fundamental disagreement, both inside and outside the Forest Service, over which uses to emphasize under the agency's broad multiple-use and sustained-yield mandate and how best to ensure the long-term sustainability of these uses.

In developing the strategic plans that they are required by GPRA to submit to the Congress by September 30, 1997, federal agencies are to consider the views of the Congress and other stakeholders. To ensure that the agencies do so, the act requires them to consult with the Congress and solicit the views of stakeholders.[1] This process may entail identifying legislative changes that are needed to clarify or modify the Congress's intent and expectations or to address differing conditions and/or citizens' needs that have evolved since the statutory requirements were established.[2] Such a consultation would create an opportunity for the Forest Service to gain a clearer understanding of how it is to resolve conflicts or make choices among competing uses on its lands. This understanding would, in turn, provide the agency with a basis for establishing long-term strategic goals, as well as the performance goals and measures that are linked to them.

[1]Managing for Results: Enhancing the Usefulness of GPRA Consultations Between the Executive Branch and Congress (GAO/T-GGD-97-56, Mar. 10, 1997).

[2]Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996).

The Forest Service Has Shifted Its Emphasis From Timber to Wildlife and Fish

The Forest Service's October 1995 draft long-term strategic plan, prepared under the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) (see app. I),[3] identified four new goals: (1) protecting ecosystems[4] by ensuring their health and diversity while meeting people's needs; (2) restoring deteriorated ecosystems to improve the likelihood that biological diversity, long-term sustainability, and future options are maintained; (3) providing multiple benefits to meet people's needs for uses, values, products, and services within the capabilities of ecosystems; and (4) ensuring organizational effectiveness by creating and maintaining a multidisciplinary and multicultural workforce, respecting expertise and professionalism, and empowering people to carry out the agency's mission while holding them accountable for achieving negotiated objectives. The agency also plans to establish these four goals as its long-term strategic goals under GPRA.[5]

The three goals relating to ecosystems reflect the ongoing shift in emphasis under the Forest Service's broad multiple-use and sustained-yield mandate from consumption (primarily producing timber) to conservation (primarily sustaining wildlife and fish). This shift is taking place in reaction to requirements in planning and environmental laws and their judicial interpretations—reflecting changing public values and concerns—together with social, ecological, and other factors.

The increasing emphasis on sustaining wildlife and fish conflicts with the older emphasis on producing timber and other commodities and underlies the Forest Service's inability to achieve the goals and objectives for timber production set forth in many of the first forest plans. In addition, this attention to sustaining wildlife and fish will likely constrain future uses of the national forests, such as recreation. The demand for recreation is expected to grow and may increasingly conflict with both sustaining wildlife and fish and producing timber on Forest Service lands.

[3]The Forest Service Program for Forest and Rangeland Resources: A Long-Term Strategic Plan, Draft 1995 RPA Program, USDA, Forest Service, Washington Office (Oct. 16, 1995.)

[4]One definition of an ecosystem is a distinct ecological unit that is formed when interdependent communities of plants and animals, which can include humans, interact with their physical environment (soil, water, and air).

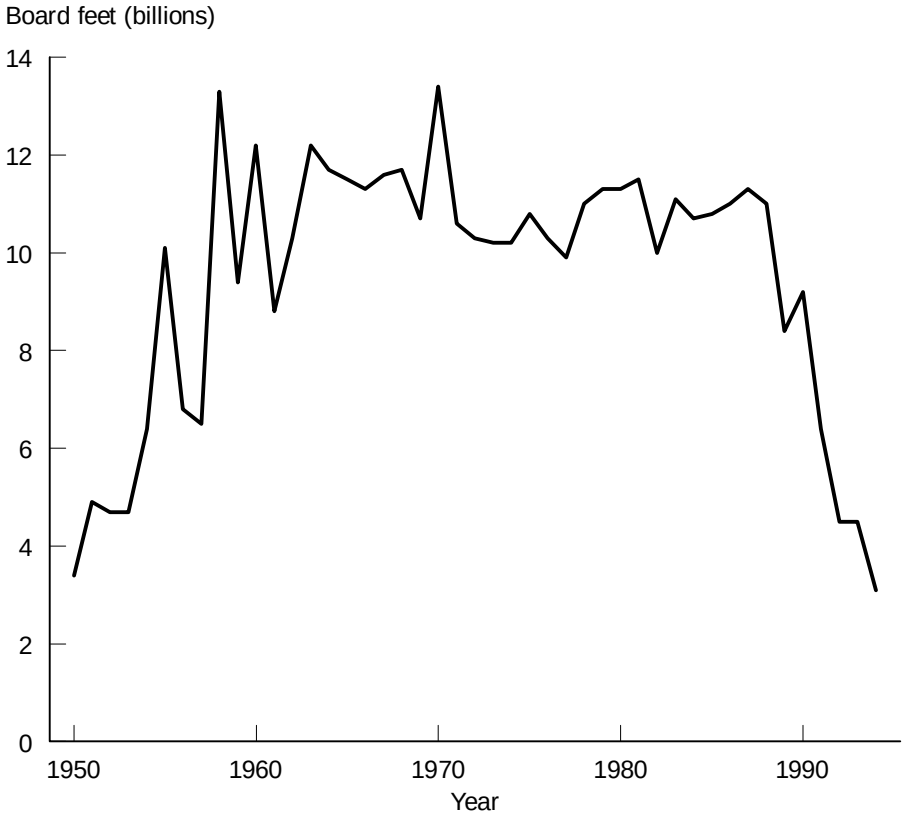
[5]See Concerning Implementation of the Government Performance and Results Act (GPRA) in the USDA Forest Service, statement by the Forest Service's Acting Deputy Chief, Programs and Legislation, before the Subcommittee on Management, Information, and Technology, House Committee on Government Reform and Oversight (Mar. 10, 1997).

The First Forest Plans Emphasized Timber Production

The Organic Administration Act of 1897 and the Multiple-Use Sustained-Yield Act of 1960, which guide the management of the nation's forests, provide little direction for the Forest Service in resolving conflicts among competing multiple uses on its lands (outdoor recreation, rangeland, timber, watersheds and water flows, wilderness, and wildlife and fish) or between current uses and future uses (sustained yield). The definition of multiple use contains no specific goals for any particular use and only a general environmental protection requirement (i.e., management is not to impair the long-term productivity of the land). As a result, the emphasis that the Forest Service gives to the various uses under its broad multiple-use and sustained-yield mandate responds to factors supplementing these acts, such as requirements and incentives in other laws, congressional expectations, and national and local values and concerns.

From the end of World War II through the late 1980s, the Forest Service emphasized timber production. Hence, the agency emphasized timber production in many of its first forest plans. Figure 4.1 shows the volume of timber sold from Forest Service lands between 1950 and 1994.

Figure 4.1: Volume of Timber Sold From Forest Service Lands, 1950-94



Note: Volume is in billions of board feet. A board foot is a measure of wood volume equal to a board 1 foot long by 1 foot wide by 1 inch thick.

Source: Forest Service.

Requirements and incentives in laws supplementing the acts that guide the management of the nation's forests encouraged the Forest Service to produce high levels of timber on its lands. For example, the Knutson-Vandenberg Act of 1930, as amended in 1976, allows the national forests to retain a portion of their timber sale receipts to help fund the reforestation of harvested areas, as well as the protection or improvement of nontimber resources, such as fish and wildlife habitat, and of recreation areas and facilities. The Forest Service maintains the Knutson-Vandenberg Trust Fund for this purpose. The agency was also mindful of the increased

demand for timber from federal lands to meet postwar housing construction needs and to replace the supply of timber from depleted industrial lands. In addition, in reports accompanying annual appropriation acts, the Congress set "target" levels of timber to be harvested and appropriated money for the administration of timber sales with the expectation that the targets would be met.

In addition to these incentives and expectations, the linear computer programming models used by the Forest Service to estimate forest plan objectives focused on timber and were not able to account accurately for interactions with other uses. Sometimes, the goals for timber were arbitrarily increased by Agriculture's Under Secretary for Natural Resources, or inputs to the models were adjusted to produce the desired results. For example, the Forest Service did not allow the timber-offering goal on the Flathead National Forest in northwestern Montana to be inconsistent with the harvest levels of the preceding few years. To project this goal, the Forest Service modified the locations and methods of timber harvesting used in the models without identifying the resulting environmental effects.[6]

Some of the first forest plans also did not adequately (1) consider species listed as endangered or threatened under the Endangered Species Act (ESA) and/or (2) anticipate the listing of candidate species[7] or the designation of habitat critical to the survival of listed species. For example, plans for national forests in Arizona and New Mexico included decisions to move to more even-age timber harvesting[8] and to harvest on steep slopes. These decisions would have adversely affected the habitat of the Mexican spotted owl, which was, at the time, designated by the Forest Service as a sensitive species[9] under regulations implementing the National Forest Management Act (NFMA) and became a candidate for listing under ESA shortly after the plans were approved. The subsequent listing of the owl was a primary reason why the forests did not achieve the plans' objectives. Furthermore, although the needs of wildlife were

[6]Forest Service: The Flathead National Forest Cannot Meet Its Timber Goal (GAO/RCED-91-124, May 10, 1991).

[7]Candidate species are recognized by the Fish and Wildlife Service and/or the National Marine Fisheries Service as being vulnerable enough to support proposals that would list them as endangered or threatened. See Endangered Species Act: Types and Number of Implementing Actions (GAO/RCED-92-131BR, May 8, 1992).

[8]Even-age timber harvesting is a method that involves removing most or all of the trees from the timber-harvesting site at one time.

[9]Sensitive species are those for which there is some evidence of risk, but that are not sufficiently imperiled to be listed as threatened or endangered under the Endangered Species Act.

considered in developing the first forest plans, in some cases, Forest Service managers chose to emphasize timber production and other uses, such as livestock grazing, that conflicted with sustaining wildlife and fish.[10]

Emphasis Has Increasingly Shifted to Sustaining Wildlife and Fish

During the last 10 years, the Forest Service has increasingly shifted its emphasis from producing timber to sustaining wildlife and fish under its broad multiple-use and sustained-yield mandate. This shift is taking place in response to requirements in planning and environmental laws—enacted primarily during the 1960s and 1970s—and their evolving judicial interpretations. In particular, section 7 of ESA represents a congressional design to give greater priority to the protection of endangered species than to the other missions of the Forest Service and other federal agencies.[11] When proposing a project, the Forest Service bears the burden of demonstrating that its actions will not likely jeopardize listed species.

Social, ecological, and other factors have also contributed to the shift in emphasis. These factors include (1) an increasing knowledge of the importance of naturally functioning systems—such as watersheds, airsheds, soils, and vegetative and animal communities—to the long-term sustainability of other forest uses, including timber production;[12] (2) an increasing recognition that past Forest Service management decisions have led to degraded aquatic habitats, declining populations of some wildlife species, and increased forest health problems;[13] (3) an increasing number of environmental restrictions that have necessitated the use of more costly and time-consuming timber-harvesting methods;[14] and (4) activities occurring outside the national forests, such as timber harvesting on state and private lands, whose effects the agency must assess in deciding which uses to emphasize on its lands.

For example, on June 4, 1992, the Chief of the Forest Service announced a new policy of multiple-use ecosystem management on the national forests and grasslands. According to the Chief, the announcement was based on

[10]Public Land Management: Attention to Wildlife Is Limited (GAO/RCED-91-64, Mar. 7, 1991).

[11]TVA v. Hill, 437 U.S. 153, 185 (1978).

[12]Ecosystem Management: Additional Actions Needed to Adequately Test a Promising Approach (GAO/RCED-94-111, Aug. 16, 1994).

[13]See, for example, Federal Fire Management: Limited Progress in Restarting the Prescribed Fire Program (GAO/RCED-91-42, Dec. 5, 1990).

[14]Forest Service: Factors Affecting Timber Sales in Five National Forests (GAO/RCED-95-12, Oct. 28, 1994).

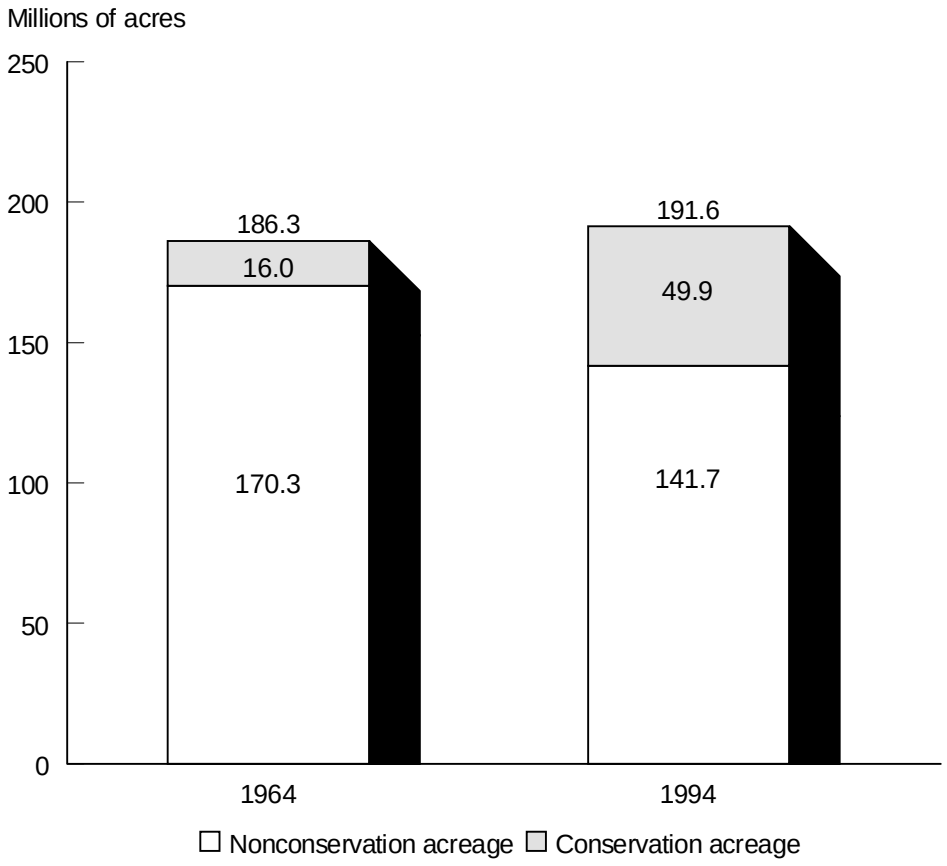
the results of experiments to develop more environmentally sensitive ways to manage the forests. In conjunction with this new ecosystem management policy, the Forest Service announced plans to reduce the amount of timber harvested by clearcutting[15] by as much as 70 percent from fiscal year 1988 levels.

In addition, the acreage available for timber production has declined steadily. Portions of the national forests have been set aside by the Congress or administratively withdrawn for conservation—as wilderness, wild and scenic rivers, national monuments, and recreation. In 1964, less than 9 percent (16 million acres) of national forest land was managed for conservation. By 1994, this figure had increased to 26 percent (almost 50 million acres).[16] (See fig. 4.2.)

[15]Clearcutting is a harvesting method that involves removing all of the trees from a timber-harvesting site at one time.

[16]Land Ownership: Information on the Acreage, Management, and Use of Federal and Other Lands (GAO/RCED-96-40, Mar. 13, 1996).

Figure 4.2: National Forest Lands Withdrawn for Conservation Purposes



Most of the federal acreage that has been set aside for conservation purposes is located in 12 western states.[17] In western Washington State, western Oregon, and northern California, where 24.5 million acres of federal land were available for commercial timber harvest, about 11.4 million acres, or 47 percent of the available acreage, have been set aside by the Congress or administratively withdrawn under the original forest plans for such uses as wilderness, wild and scenic rivers, national monuments, and recreation.

[17]The 12 western states are Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Other environmental requirements have further reduced the amount of federal land available for timber production. For example, 7.6 million acres (31 percent) of these federal lands that were available for commercial timber harvesting have been set aside or withdrawn as habitat for species that live in old-growth forests, including the threatened northern spotted owl, or as riparian reserves to protect watersheds. To protect the forests' health, only limited timber harvesting and salvage timber sales are allowed in some of these areas.

In total, 77 percent of the 24.5 million acres of these federal lands that were available for commercial timber harvesting have been set aside or withdrawn, primarily for conservation or to meet environmental requirements. In addition, requirements for maintaining biological diversity under NFMA—as well as for meeting standards for air and water quality under the Clean Air and Clean Water acts, respectively—may limit the timing, location, and amount of harvesting that can occur. Moreover, harvests from these lands could be further reduced by plans to protect threatened and endangered salmon.[18]

Sustaining Wildlife and Fish Constrains Other Uses

The Forest Service is increasingly unable to avoid, resolve, or mitigate conflicts among competing uses on national forests by separating them among areas and over time. Therefore, while sustaining wildlife and fish may be important to the long-term sustainability of other forest uses, including timber production, the increasing emphasis on protecting and restoring ecosystems and on sustaining wildlife and fish (1) conflicts with the older emphasis on producing timber and underlies the Forest Service's inability to achieve the goals and objectives for timber production set forth in many of the first forest plans and (2) will likely constrain future uses of the national forests, such as recreational uses.

The volume of timber sold from Forest Service lands decreased from a peak of over 11.3 billion board feet in 1988 to 3.1 billion board feet in 1994, a decrease of about 73 percent. (See fig. 4.1.) Timber sold from Forest Service lands in western Washington, western Oregon, and northern California declined from 4.3 billion board feet in 1989 to 0.9 billion board feet in 1994, a decrease of about 80 percent.

At the forest level, the Forest Service approved the forest plans for the Deschutes and Mt. Hood national forests in Oregon and the Gifford

[18]Private Timberlands: Private Timber Harvests Not Likely to Replace Declining Federal Harvests (GAO/RCED-95-51, Feb. 16, 1995).

Pinchot National Forest in Washington in 1991; however, the volume of timber sold during fiscal years 1991 through 1993 (the first 3 fiscal years covered by the plans) fell short of the plans' timber goals by about 83 percent. (See table 2.1.) Similarly, at the Chattahoochee-Oconee National Forest in Georgia, officials estimated that the costs per million board feet to prepare timber sales and administer harvests rose by approximately 36 percent between 1988 and 1993, when the agency began to increase its use of other, more costly and time-consuming harvesting methods to comply with requirements in environmental laws and regulations. As a result, less timber was prepared for sale than had been planned. (See table 2.1.)[19]

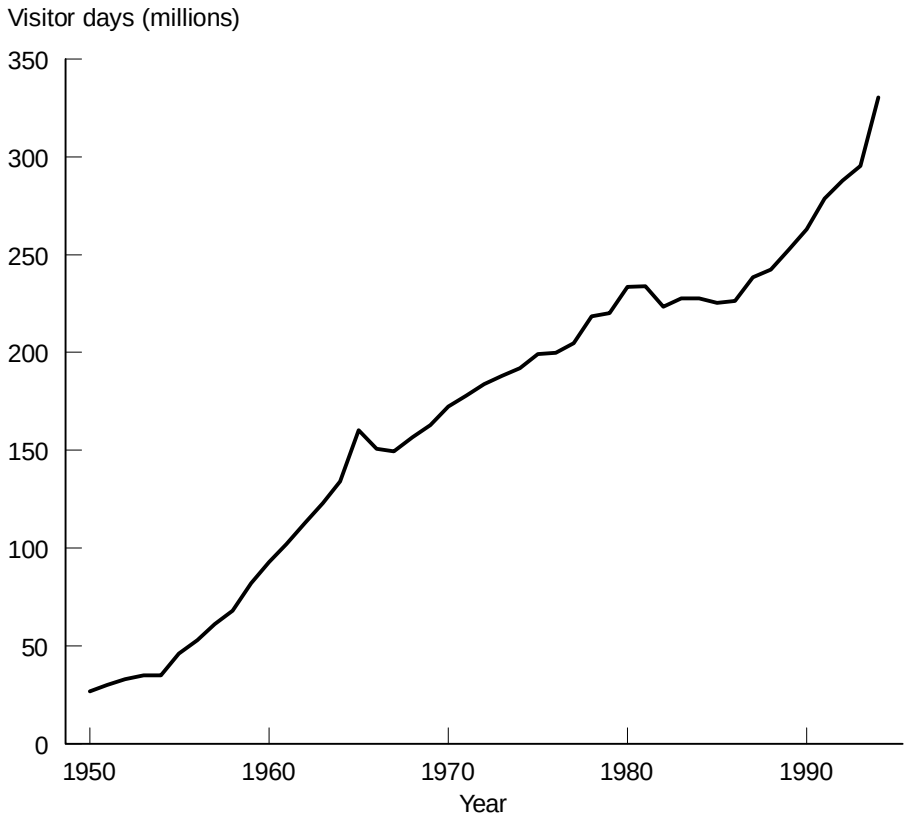
In addition, increasing attention to sustaining wildlife and fish will likely constrain future uses of the national forests. For example, the demand for recreation is expected to grow and may increasingly conflict with both sustaining wildlife and fish and producing timber on Forest Service lands.

According to the Forest Service, the American public has increased its recreational use of the national forests substantially, from about 25 million visitor days in 1950 to nearly 350 million visitor days in 1995. (See fig. 4.3.) This demand is expected to increase steadily over the next 50 years and will require the agency to spend more time and resources reconciling the demands for recreation and for sustaining wildlife and fish.[20]

[19]Forest Service: Factors Affecting Timber Sales in Five National Forests (GAO/RCED-95-12, Oct. 28, 1994).

[20]The Forest Service Program for Forest and Rangeland Resources: A Long-Term Strategic Plan, Draft 1995 RPA Program, USDA, Forest Service, Washington Office (Oct. 16, 1995.)

Figure 4.3: Visitor Days in National Forests, 1950-94



Note: Data through 1964 are in "visits." A visit equals one entry into a national forest. Data after 1964 are in "visitor days." A visitor day equals a 12-hour visit. For example, three people visiting a national forest for 4 hours each would equal one visitor day. In 1965, a visit averaged 0.83 visitor days.

Source: Forest Service.

For example, officials at the Chequamegon National Forest in Wisconsin told us that recreational snowmobiling and all-terrain-vehicle use are rapidly increasing on the forest, posing ever more serious conflicts with the agency's efforts to maintain or restore wildlife and fish habitat. The officials said they could not have anticipated this phenomenon when the forest plan was approved in 1986, and they anticipate that snowmobiling

and all-terrain-vehicle use in the forest will likely have to be constrained in order to sustain wildlife and fish.

Additionally, officials at the Nantahala-Pisgah National Forest in North Carolina told us that a very significant increase in rafting on rivers in their forest and in other forests adjacent to it has forced the agency to restrict and closely monitor this activity to prevent resulting stream bank erosion that damages fish and riparian habitat. Similarly, consideration of the potential effects of artificial snow-making on the levels and quality of the lakewater needed for aquatic habitat in the White Mountain National Forest in New Hampshire has limited the expansion of ski facilities on the forest.

The demand for habitat to sustain wildlife and fish is expected to grow on Forest Service lands, in part because the Department of the Interior has adopted a policy that increases the federal land management agencies' ultimate responsibility for protecting threatened and endangered species. Specifically, under an August 1994 "no surprise policy," the Fish and Wildlife Service agreed, in exchange for commitments by nonfederal landowners to adopt properly functioning habitat conservation plans deemed adequate by Interior to protect threatened or endangered species, that (1) it would not ask for more land or mitigation funding from the private landowners or state or local governments even if a species protected by such a plan continued to decline and (2) the subsequent listing of a species as endangered or threatened under ESA would not result in additional mitigation requirements. Rather, any additional mitigation deemed necessary to protect a listed species covered by a habitat conservation plan must first be accomplished on federal lands. Thus, some Forest Service officials believe that the national forests will assume a growing proportion of the responsibility for protecting wildlife and fish and that endangered and threatened species and their habitats will increasingly be concentrated on federal lands.

Agreement Does Not Exist on Which Uses the Forest Service Should Emphasize on Its Lands

While the Forest Service continues to reduce its emphasis on consumption and increase its emphasis on conservation, the Congress has never explicitly accepted this shift in emphasis or acknowledged its effects on the availability of other uses on the national forests. Disagreement over the Forest Service's priorities, both inside and outside the agency, is manifested in conflicting legislative incentives and congressional expectations, differences in the beliefs of Forest Service personnel, and legal challenges to the agency's plans and projects.

One result of the internal and external disagreement over the Forest Service's priorities is that budgeting decisions reflected in final appropriations change the priorities of the forest plans during their implementation.[21] In a 1980 report,[22] we noted that the balanced use and development of resources on national forests had been hampered by a continuing budgetary emphasis on timber production in the Forest Service. As a result, other resources, such as wildlife and fish, had not received needed management attention. A decade later, the Forest Service stated that during the yearly budget review by the Secretary of Agriculture, the Office of Management and Budget, and the Congress, money is added to or subtracted from budget line items with little or no recognition that the items are related. Consequently, (1) the congressional appropriation and accompanying direction can comprise a very different mix of funding than is called for by the forest plans and (2) "there is no point in the public investing time negotiating plans if Congress acts to set bounds on planning—through mandated timber sale targets, for example."[23] A report issued by the Office of Technology Assessment (OTA) in 1992[24] reaffirmed this concern, noting that "resulting appropriations bear little resemblance to the integrated management presented in the forest plans."

The Congress Has Sent Mixed Messages

The requirements in planning and environmental laws—enacted primarily during the 1960s and 1970s—have directed the Forest Service to place increasing emphasis on sustaining wildlife and fish. However, legislative incentives emphasizing timber production persist.

Despite the increasing emphasis on conservation in recent legislation, the Forest Service still relies on timber production to fund many of its activities. A substantial portion of the receipts from timber sales are distributed into a number of funds and accounts that the agency uses to finance various activities. According to OTA, these receipts accounted for nearly one-third of the Forest Service's budget annually. These receipts, coupled with appropriated funds linked primarily to timber production, constitute most of the agency's operating funds. Therefore, many forest

[21]Synthesis of the Critique of Land Management Planning, Vol. 1, Forest Service (FS-452, June 1990).

[22]Changes in Public Land Management Required to Achieve Congressional Expectations (CED-80-82, July 16, 1980).

[23]Critique of Land Management Planning, Vol. 2, National Forest Planning: Searching for a Common Vision, Forest Service, (FS-453, June 1990).

[24]Forest Service Planning: Accommodating Uses, Producing Outputs, and Sustaining Ecosystems, OTA-F-505 (Washington, D.C.: Feb. 1992).

managers have the opportunity to increase their own budgets by increasing timber sales.[25]

For example, the Knutson-Vandenberg Act of 1930, as amended, authorizes the use of timber sale receipts not only to reforest harvested areas but also to improve and protect the land's future productivity and help fund regional and headquarters office expenses. The Knutson-Vandenberg Trust Fund received about 25 percent of the total timber receipts during fiscal years 1992 through 1994.[26] In addition, NFMA creates incentives for salvage sales through the Salvage Sale Fund, a permanent appropriation. The Forest Service replenishes this fund through salvage sale receipts. These receipts are then used to prepare and administer future salvage sales and to pay for designing, engineering, and supervising the construction of roads associated with such sales. The Salvage Sale Fund received about 18 percent of the total timber sale receipts during fiscal years 1992 through 1994.[27] An October 1996 report[28] by an interagency team states that, because salvage sales can be more easily funded than other forest health activities, they are sometimes selected over other activities that might be more appropriate in particular circumstances.

The Congress has taken other actions that have emphasized timber production in the short term. It has (1) limited the judicial review of challenges to certain Forest Service decisions, usually timber sales; (2) suspended the application of some environmental requirements; and/or (3) mandated increases in the amount of timber to be offered for sale. For example, section 2001 of Public Law 104-19—the Emergency Salvage Timber Sale Program, known as the "salvage rider" or the "timber rider"—went far beyond procedurally expediting salvage sales to improve the forests' health and allowed the sale of both green and salvage timber from national forests. This rider exempted all such sales from administrative appeals, limited judicial review, and deemed the sales to be in compliance with environmental laws.

[25]Forest Service Management: Issues to Be Considered in Developing a New Stewardship Strategy (GAO/T-RCED-94-116, Feb. 1, 1994).

[26]Forest Service: Distribution of Timber Sales Receipts, Fiscal Years 1992-94 (GAO/RCED-95-237FS, Sept. 8, 1995).

[27]See footnote 20.

[28]Interagency Salvage Program Review, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (Silver Spring, Maryland: Oct. 8, 1996). The agencies were the National Marine Fisheries Service, the Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, and the Environmental Protection Agency.

According to OTA's 1992 report, congressional efforts to change the judicial review process "seem to be attempts to resolve substantive issues without appearing to take sides." The report concludes that "such changes are unlikely to improve forest planning or plan implementation, or reduce conflict over national forest management." Moreover, increasing the short-term production of timber may require the Forest Service to amend or revise its forest plans to take into account the environmental effects of the sales.[29]

As a result, the Congress continues to send a mixed message to the Forest Service concerning which uses to emphasize and how to resolve conflicts among competing uses on its lands. According to an analysis that grew out of a 1993 symposium sponsored by the Society of American Foresters on change in the Forest Service,[30] the movement toward wildlife and fish was mandated by the Congress through the National Environmental Policy Act and NFMA. However, according to the analysis, "Ironically, Congress can serve as a primary obstacle to the Forest Service's implementation of the very laws the Congress has enacted for it by setting unrealistic harvest levels and not having appropriations in sync with the goals set through the RPA and NFMA planning processes that Congress itself mandated."

Priorities Within the Forest Service Are Mixed

The mixed message from the Congress about which uses to emphasize and how to resolve conflicts among competing uses filters down through the Forest Service. For example, according to another analysis prepared in response to the 1993 symposium on change in the Forest Service, over 20 percent of the agency's personnel believe that timber still should be the most important forest use and 60 percent believe that the agency still considers timber to be the most important forest use. Additionally, a 1994 survey of Forest Service personnel stated that nearly half did not believe that the current levels of uses in their forests could be sustained for 100 years, and about 70 percent said that the agency's target-driven behavior does not match its stated policy.[31] Similarly, the interagency team that reviewed the "salvage rider" timber program observed in 1996 that Forest Service personnel implementing the program fell into three groups: Some

[29]The "Timber Rider": Section 2001 of the Rescissions Act (CRS Report for Congress, 96-163A, Feb. 22, 1996).

[30]"Change in the United States Department of Agriculture Forest Service and Its Consequences for National Forest Policy," Policy Studies Journal, Vol. 23, No. 2 (1995).

[31]Policies and Mythologies of the U.S. Forest Service: A Conversation With Employees, Research Report for the Director, Pacific Northwest Experiment Station and Chief, USDA Forest Service, University of Washington, College of Forest Resources (Seattle, Washington: Feb. 1994).

focused only on achieving additional salvage timber volume, others focused only on protecting forest ecosystems, while still others focused on balancing the two objectives.

During field visits, we found that timber production still often receives more emphasis than other uses and still plays a significant role in individual performance management, career development, and pay and promotion. As one district ranger said, "of course, all targets are important, but everyone understands which one is considered by the agency to be the most important—timber."

In August 1996, the Forest Service amended its forest planning and timber management handbooks to give forest officials more flexibility and discretion in developing forest plan alternatives. However, the handbooks continue to emphasize timber, prescribing that the plans be developed around combinations of small geographic units called "analysis areas," which are to be constructed from data on timber stands and categories rather than from information on all forest uses. In our visits to national forests, agency officials told us that developing plans around analysis areas had contributed to an emphasis on timber in the original plans and an inability to account accurately for timber's interactions with other uses.

Stakeholders' Expectations Are Mixed

Supporters or former beneficiaries of the Forest Service's historical emphasis on timber production may view the agency's increasing emphasis on sustaining wildlife and fish as a constraint to, rather than a goal of, decision-making. Others who believe that sustaining wildlife and fish needs to be emphasized may think that the agency is not moving quickly enough to implement the shift in emphasis. Without agreement on how the Forest Service is to resolve conflicts or make choices among competing uses on its lands, proponents of both positions have looked to the courts to decide which uses the agency should emphasize.

Our prior work has shown that dissatisfaction with an agency's process for public involvement often cannot be dissociated from dissatisfaction with the outcome of the process.[32] Thus, it is difficult to determine how many of the over 1,200 administrative appeals and 20 to 30 new lawsuits contesting the Forest Service's decisions each year can be attributed to the lack of agreement on the Forest Service's priorities. However, parties opposed to the emphasis given to a particular use can cause the Forest Service to delay, alter, or withdraw projects by availing themselves of the

[32]Restoring the Everglades: Public Participation in Federal Efforts (GAO/RCED-96-5, Oct. 24, 1995).

opportunities for administrative appeal and judicial review that are provided by statute or regulation.

The Government Performance and Results Act Provides a Framework to Reach Agreement

GPRA requires federal agencies, when developing their strategic plans, to consult with the Congress and solicit the views of stakeholders. Full agreement among stakeholders on all aspects of an agency's efforts is relatively uncommon because stakeholders' interests can differ often and significantly. However, to be successful, such a consultation between the Forest Service and the Congress would need to focus on the issues of long-term sustainability and conflict resolution rather than solely on balancing multiple uses in the short term.

Efforts to Reach Agreement on Resolving Conflicts Have Not Been Successful

Recently, several efforts have been made to reach agreement on how to resolve conflicts. However, these efforts have merely reaffirmed the agency's broad multiple-use mission rather than provided the Forest Service with clearer guidance for resolving conflicts or making choices among competing uses on its lands.

For example, both the Chief of the Forest Service and Agriculture's Under Secretary for Natural Resources and Environment expressed their hope that the Seventh American Forest Congress would produce new insights and valuable ideas to guide the Forest Service into the next century. Toward this end, the Forest Congress convened about 1,100 federal, state, local, and tribal officials and representatives from environmental, professional forestry, industry, and recreation groups in Washington, D.C., in February 1996. The focus of the convention was on identifying a common vision for America's forests and the principles needed to guide the country toward this vision.

While the convention reaffirmed the Forest Service's broad multiple-use mission, it did not tackle the tough issue of how the Forest Service is to resolve conflicts or make choices among competing uses on its lands. For example, participants at the convention were allowed to treat each principle as a "stand-alone point." As a result, they could agree with conflicting principles. For instance, they could recognize the special importance of old-growth forests while agreeing that the remaining publicly owned old-growth forests should not be protected for future generations.[33] Because the participants were never required to make hard choices among competing uses, disparate groups—from supporters of

[33]Final Report, Seventh American Forest Congress (Apr. 2, 1996).

timber production to advocates of old-growth preservation—could support the principle of multiple uses on national forests without addressing or resolving the inherent conflicts it involves.

Consultation Should Result in Agreement on Long-Term Strategic Goals

Successful consultation between the Forest Service and the Congress would lead to agreement on the agency's long-term strategic goals. If such agreement is to occur, the Forest Service will need to clearly outline the logic and thinking behind its increasing emphasis on sustaining wildlife and fish under its broad multiple-use and sustained-yield mandate and explain how it would resolve conflicts or make choices among competing uses on its lands under its proposed long-term strategic goals. Toward this end, both the Forest Service's Chief and Agriculture's Under Secretary for Natural Resources and Environment have testified that the National Forest System's management now emphasizes the maintenance of ecosystems' health to sustain the production of all goods and services derived from national forests. According to them, management activities such as timber sales serve as "tools" for improving the forests' health. For example, salvage timber sales are sometimes used to improve a forest's health.

Performance Goals and Measures Would Be Based on Long-Term Strategic Goals

In a February 25, 1997, letter to the Director of the Office of Management and Budget, the Speaker of the House, the House Majority Leader, the Senate Majority Leader, and key committee chairmen from both the House and the Senate set forth their expectations for agencies' consultations with the Congress under GPRA. In the letter, they stated that the consultation process should result in a reasonable degree of agreement on the performance measures that will be used to gauge success. If the four goals in the Forest Service's October 1995 draft long-term strategic plan remain unchanged, the Congress could expect to see performance goals and measures based on both desired future ecological outcomes and desired outputs of goods and services. The Congress should be careful to ensure that the agency does not use the same performance goals and measures it used to pilot-test GPRA's performance planning and reporting requirements during fiscal years 1994 through 1996.[34] These performance goals and measures were linked both to the four goals in the Forest Service's October 1995 draft long-term strategic plan and to four very different goals in the agency's 1990 strategic plan: (1) enhancing recreation, wildlife, and fisheries; (2) producing environmentally acceptable commodities; (3) improving scientific knowledge of natural resources; and

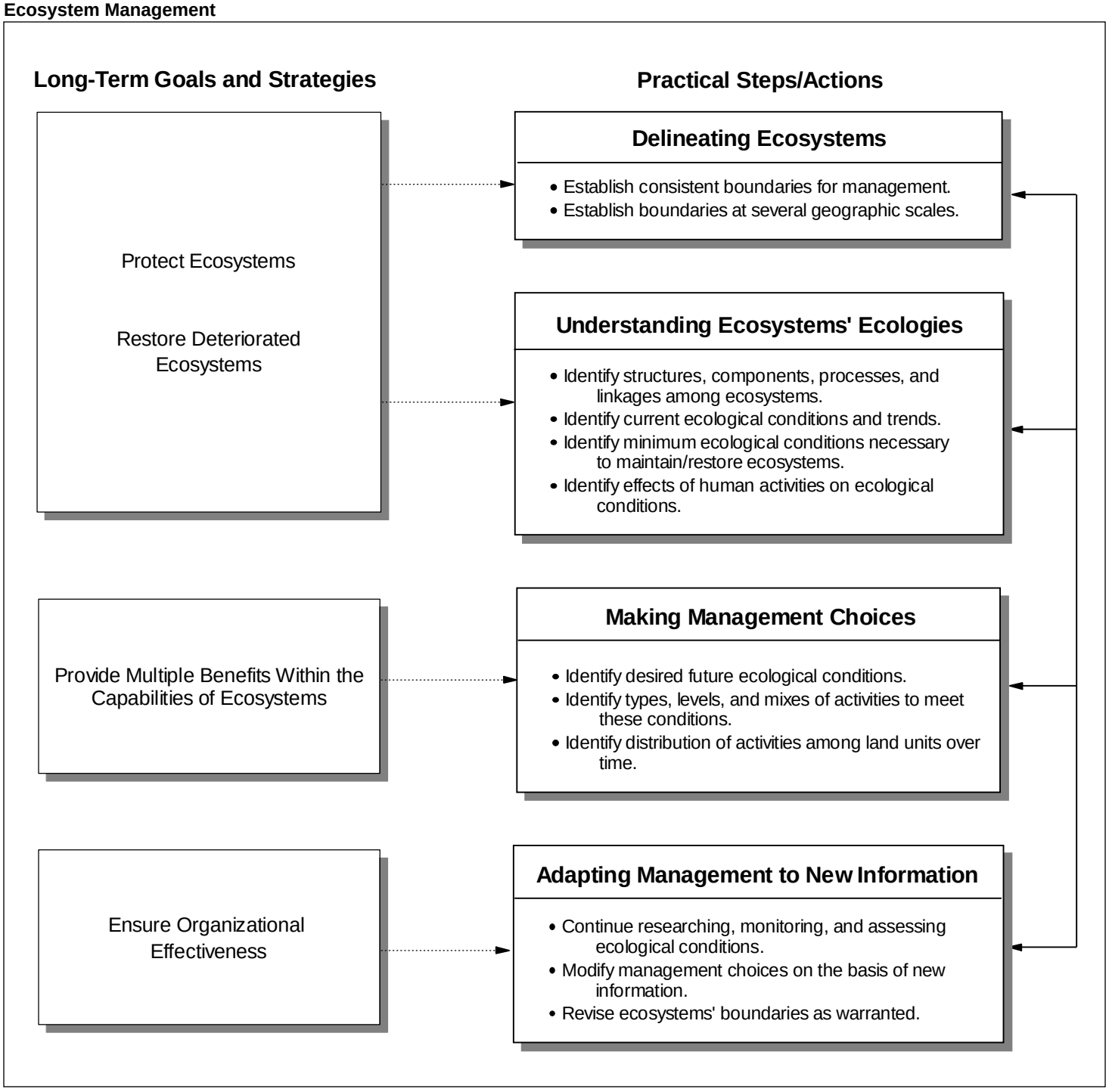
[34]GPRA Performance Reports (GAO/GGD-96-66R, Feb. 14, 1996).

(4) responding to global resource issues.[35] The four goals in the 1990 plan resulted in planned annual timber harvests from national forests of 11.1 billion board feet while the four goals in the 1995 draft plan resulted in planned annual timber harvests of 4.5 billion board feet, or less than half the 1990 level. Performance goals and measures capable of assessing the progress made toward achieving both sets of long-term strategic goals and resulting planned annual timber harvest levels would, therefore, be meaningless.

In commenting on our August 1994 report on ecosystem management, the Forest Service agreed that effectively implementing this management approach would require land managers to identify (1) the desired future ecological conditions; (2) the types, levels, and mixes of activities that can be sustained while still achieving these conditions; and (3) the distribution of these activities over time among the various land units within the ecosystem. Thus, implementing the Forest Service's three long-term strategic goals for ecosystems would require forest managers to first identify desired future ecological conditions (outcomes); then identify the types, levels, and mixes of activities (outputs) that can be sustained while still achieving these conditions; and finally distribute these activities over time among the various land units within the ecosystem. (See fig. 4.4.)

[35]The Forest Service Program for Forest and Rangeland Resources: A Long-Term Strategic Plan, Recommended 1990 RPA Program, Forest Service (May 1990).

Figure 4.4: Relationships Between the Forest Service's Four Long-Term Strategic Goals and Practical Steps to Implement Ecosystem Management



GPRA's Requirements Must Be Integrated Into the Forest Service's Decision-Making Process

The February 25, 1997, letter also stated that the consultation process should include a discussion of the types of formats for strategic plans, performance plans, and performance reports that best meet the information needs of the Congress, federal line managers, and the general public. To comply with this directive, the Forest Service would have to integrate the requirements of GPRA into its current decision-making process.

The Forest Service is planning to develop two long-term strategic plans—one to comply with the requirements of GPRA and another to comply with the more extensive requirements of RPA. Hearings held by the Senate Committee on Energy and Natural Resources during the 104th Congress concluded that the plans developed under RPA have been continually altered by other federal agencies and routinely ignored by the Forest Service as a guide to the development of forest plans and management activities. Similarly, a 1990 OTA report states that plans developed under RPA are "of questionable usefulness to the agency, the Administration, and the Congress" because they ignore requirements in the act to discuss budget priorities and evaluate the plans' implementation in annual reports.[36] In light of the current tight budget climate and the annual competition for scarce resources within the agency, as well as the overlap in the requirements for strategic planning under RPA and GPRA, the Forest Service's current intention to develop two strategic plans appears to duplicate existing planning requirements rather than integrate GPRA's requirements into the agency's decision-making process.

In addition, forest plans are intended to provide a key link between the Forest Service's long-term strategic goals and planned projects. (See app. I.) However, many variables affect the outcomes of the agency's decisions. As a result, the Forest Service often cannot achieve the objectives in its forest plans during the 10 to 15 years covered by the plans. To account for the effects of variables such as changing natural conditions and funding, as well as new information and events, that can prevent the Forest Service from achieving the objectives in its forest plans, some agency officials have suggested that the agency (1) shorten the periods covered by the plans to 3 to 5 years, (2) link forest plans more closely to budgeting, and (3) include objectives for goods and services and desired conditions for resources at various funding levels in the forest plans. But rather than adopt these changes, the Forest Service has proposed removing from its forest plans measurable objectives for goods and services, such as quantities of wood for lumber and forage for livestock and numbers of

[36] Forest Service Planning: Setting Strategic Direction Under RPA (OTA-F-441, July 1990).

opportunities for recreation. Without measurable objectives for goods and services in the forest plans, the Forest Service must find another link between its (1) long-term strategic goal of providing multiple benefits to satisfy people's needs for uses, values, products, and services within the capabilities of ecosystems and (2) annual performance goals and measures for gauging the progress made toward achieving the long-term goals and holding line managers accountable for their performance.

The February 25, 1997, letter also stated that the federal agencies should be prepared to explain how the plans and reports required by GPRA will be used in the day-to-day management of the agency. We have found that integrating human resource management activities into the Forest Service's organizational mission, rather than treating them as isolated support functions, could improve the implementation of GPRA.[37] This sort of integration may include tying individual performance management, career development programs, and pay and promotion standards to the Forest Service's strategic goals.

Conclusions

As discussed in chapter 3, the failure of the Forest Service to give adequate attention to improving accountability for its performance and results has resulted in long-standing deficiencies within its decision-making process that have contributed to increased costs and time and/or the inability to achieve planned objectives. GPRA, if implemented successfully, will strengthen accountability for performance and results within the agency and improve the efficiency and effectiveness of its decision-making. However, as noted by the internal Forest Service task force on accountability, successful implementation of the act will depend on (1) strong leadership within the agency to change an organizational culture of indifference toward accountability and (2) sustained oversight by the Congress to provide the external attention to the issue needed to prompt corrective action.

Successfully implementing GPRA includes consulting with the Congress. The desired outcome of the consultation between the Forest Service and the Congress would include an agreement on the agency's long-term strategic goals. For such an agreement to occur, the Forest Service would need to clearly outline the logic and thinking behind its increasing emphasis on sustaining wildlife and fish under its broad multiple-use and sustained-yield mandate and indicate how it would resolve conflicts or

[37]Transforming the Civil Service: Building the Workforce of the Future, Results of A GAO-Sponsored Symposium (GAO/GGD-96-35, Dec. 26, 1995).

make choices among competing uses on its lands under its proposed long-term strategic goals.

The Congress could, in turn, accept or reject the agency's increasing shift in emphasis from producing timber to sustaining wildlife and fish and acknowledge the effects of this shift on the availability of other uses on the national forests. Through consultation, the Forest Service and the Congress might also identify legislative changes that are needed to clarify or modify the Congress's intent and expectations or to address changes in conditions and/or citizens' needs that have occurred since the Organic Administration Act and Multiple-Use Sustained-Yield Act were enacted.

If the four goals in the Forest Service's October 1995 draft long-term strategic plan remain unchanged, the Congress could expect to see (1) performance goals and measures based on both desired future ecological outcomes and desired outputs of goods and services and (2) individual performance management, career development programs, and pay and promotion standards tied to the strategic goals. For its part, the agency could expect to see annual appropriations that are consistent with its mission priorities.

The Congress and the Forest Service must also consider how best to integrate the requirements of GPRA into the agency's current decision-making process. On the one hand, the Congress needs to consider the benefits and costs of the agency's developing two long-term strategic plans—one to comply with the requirements of GPRA and another to comply with the more extensive requirements of RPA. On the other hand, the Forest Service needs to identify how it will link its long-term strategic goal of providing multiple benefits to satisfy people's needs for uses, values, products, and services within the capabilities of ecosystems with its annual performance goals and measures for gauging the progress made toward achieving the long-term goal and holding line managers accountable for their performance if it removes from its forest plans measurable objectives for goods and services.

Matter for Congressional Consideration

In light of (1) the current tight budget climate, (2) the annual competition for scarce resources within the Forest Service, and (3) the questionable value of the agency's current long-term strategic plan, we recommend that the Congress consider amending the Forest and Rangeland Renewable Resources Planning Act to eliminate its requirement that the Forest Service develop a strategic plan covering a period of a decade or more.

The agency would still be required to develop a long-term strategic plan covering a period of at least 5 years to comply with the requirements of the Government Performance and Results Act.

Recommendation to the Secretary of Agriculture

Because the Forest Service has proposed removing from its forest plans measurable objectives for goods and services, such as quantities of wood for lumber and forage for livestock and numbers of opportunities for recreation, we recommend that the Secretary of Agriculture direct the Chief of the Forest Service to identify how the agency will link its long-term strategic goal of providing multiple benefits to satisfy people's needs for uses, values, products, and services within the capabilities of ecosystems with its annual performance goals and measures for gauging the progress made toward achieving the long-term goal and holding line managers accountable for their performance.

Agency Comments and Our Evaluation

In commenting on our draft report, the Forest Service said that it intends to consult on its strategic goals with the Congress and the public, but neither it nor the Council on Environmental Quality commented on the matter for congressional consideration.

In commenting on our draft report, the Forest Service did not directly address our recommendation to the Secretary of Agriculture but identified several actions that, if implemented, would improve the efficiency and effectiveness of its decision-making process. These actions include establishing strategic goals and related performance measures for managers as well as working in partnership with other agencies more closely and issuing revised regulations for implementing the National Forest Management Act. However, the agency did not discuss either a schedule to implement the improvements or a plan to closely monitor progress and periodically report on performance, both of which GAO believes are needed to break the cycle of studying and restudying issues without any accountability or clear sequence for resolving them.

Interagency Issues Affect the Forest Service's Decision-Making

Issues that transcend the Forest Service's administrative boundaries and jurisdiction also adversely affect the efficiency and effectiveness of the agency's decision-making. In particular, the Forest Service and other federal land management agencies have had difficulty reconciling the administrative boundaries of national forests, parks, and other federal land management units with the boundaries of natural systems, such as watersheds and vegetative and animal communities, both in planning and in assessing the cumulative impact[1] of federal and nonfederal activities on the environment.

Over the past few years, several major studies have examined the need to reconcile the differences in the geographic areas that federal agencies must consider when reaching decisions. Among the options that have been suggested are changes to the Council on Environmental Quality's (CEQ) regulations and guidance implementing the provisions of the National Environmental Policy Act (NEPA). According to CEQ officials, changes to NEPA regulations and guidance are not being considered at this time. Instead, CEQ plans to rely primarily on interagency agreements. However, interagency agreements (1) have not been lived up to by agencies in the past, (2) are generally not enforceable by outside parties, and (3) do not provide a basis for common approaches among all agencies. Moreover, since federal agencies sometimes do not work efficiently and effectively together to address issues that transcend their boundaries and jurisdictions and often lack the environmental and socioeconomic data required to make informed decisions, strong leadership by CEQ would help to ensure that interagency agreements accomplish their intended objectives.

Differences Between Administrative and Ecological Boundaries Are Sometimes Difficult to Reconcile

The Forest Service and other federal land management agencies have had difficulty reconciling differences in the geographic areas that must be considered in reaching decisions under different planning and environmental laws. This difficulty has increased the costs, time, and complexity of the Forest Service's and other federal land management agencies' decision-making.

The Forest Service and other federal land management agencies are authorized by laws such as the National Forest Management Act (NFMA) to plan primarily along administrative boundaries, such as those defining

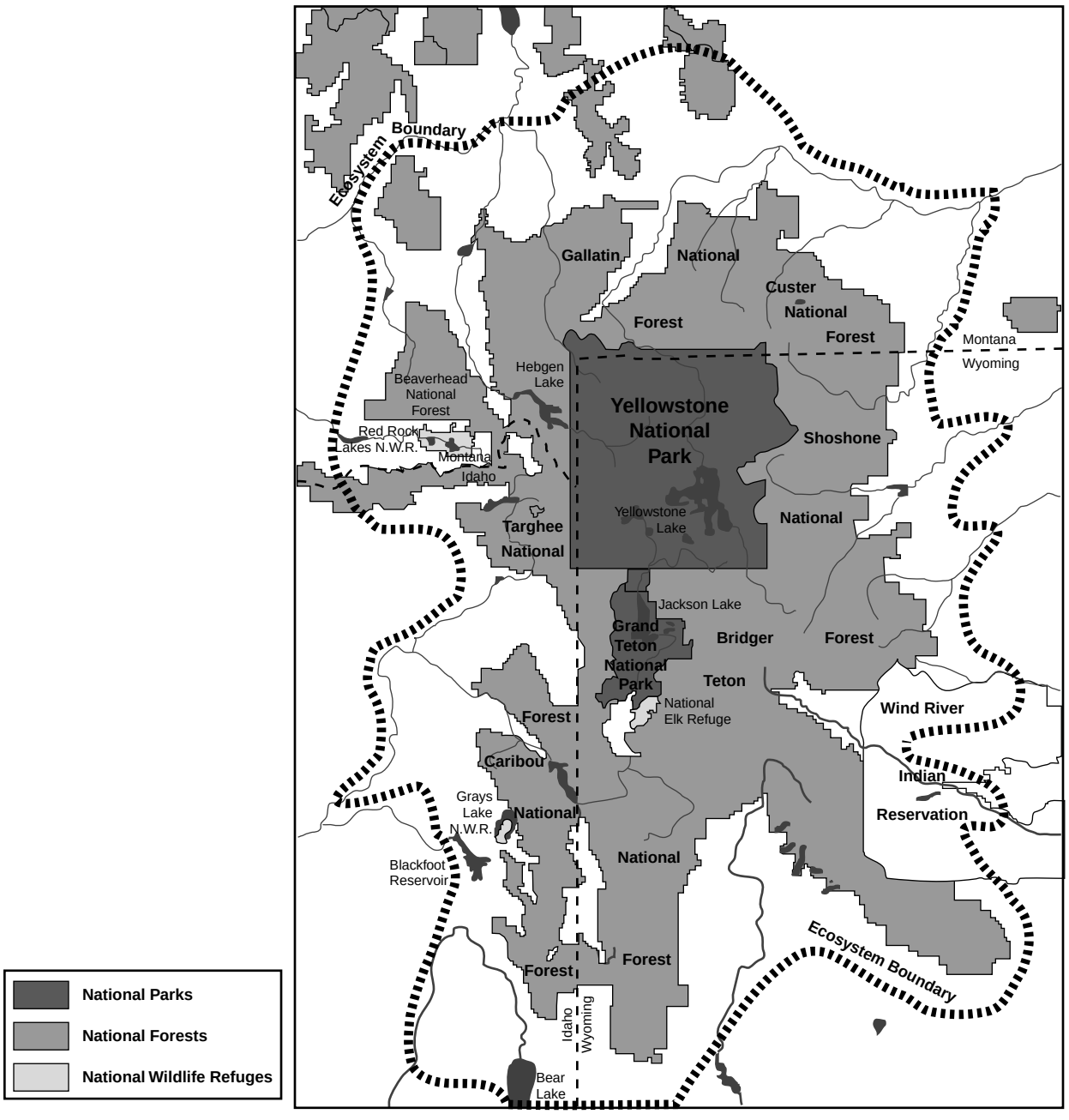
[1]Regulations issued in 1978 by the Council on Environmental Quality to implement the provisions of the National Environmental Policy Act require federal agencies to assess the effects of a proposed action on such resources as water, wildlife, and soils in combination with those of other past, present, and reasonably foreseeable future actions occurring on both federal and nonfederal lands.

forests, parks, resource areas, and wildlife refuges. Conversely, environmental statutes and regulations require the agencies to analyze environmental issues and concerns along the boundaries of natural systems, such as watersheds, airsheds, soils, and vegetative and animal communities. For example, regulations implementing NEPA require the agencies to assess the cumulative impact of federal and nonfederal activities on the environment.

Because the boundaries of administrative units and natural systems are frequently different,[2] federal land management plans have often considered effects only on those portions of natural systems or portions of their components—such as the habitats of threatened and endangered species, the flyways of migratory birds, and wetlands—that exist within the boundaries of the administrative units covered by the plans. For example, a widely recognized boundary of the Greater Yellowstone ecological unit in Montana, Wyoming, and Idaho encompasses all or part of seven national forests, two national parks, and three national wildlife refuges—most of which are covered by different plans—as well as other federal and nonfederal lands (see fig. 5.1)

[2]Ecosystem Management: Additional Actions Needed to Adequately Test a Promising Approach (GAO/RCED-94-111, Aug. 16, 1994).

Figure 5.1: Boundary Suggested for the Greater Yellowstone Ecological Unit



Source: Greater Yellowstone Coalition.

The effects of the resulting inconsistencies on management were evident in some of the forests we visited. The Tahoe National Forest in northern California, for example, is a checkerboard of federal and private lands, created when the federal government granted alternating sections of land to railroad companies. Tahoe officials told us that planning and managing for diverse plant and animal communities, as required by NFMA, is difficult when the boundaries of the forest are not consistent with those of species' habitats.

Not analyzing the effects of decisions on natural systems and their components at the appropriate ecological scale can result in duplicative environmental analyses for individual plans and projects, increasing the costs and time required for analysis and reducing the effectiveness of federal land management agencies' decision-making. In particular, federal land management plans and projects often consider effects only on portions of natural systems or portions of the habitats of wide-ranging species, such as migratory birds, bears, and anadromous fish (including salmon).[3] According to an interagency task force chaired by CEQ,[4] it is not uncommon for multiple environmental analyses to be filed for individual agencies' actions, even though the activities occur in the same region or even at the same site.

Similarly, two resolutions sent by the Western Governors' Association in 1996 to the President, federal agencies, and congressional committee chairs[5] expressed concern over NEPA's implementation. One cited "duplicative environmental analyses of projects by multiple federal agencies . . . each with its own set of NEPA regulations and processes which further adds confusion and complexity." In a second resolution, the governors noted that the "current implementation of NEPA analysis at multiple levels has created a strain on resources of federal, state, and local governments and the private sector. Associated delays are counter to the interests of all levels of government."

Cumulative Impact Is Difficult to Assess

Government, academic, business, and nongovernmental organizations that participated in a study by CEQ of NEPA's effectiveness, published in 1997,

[3]See, for example, Final Report of Recommendations: Project-Level Analysis Re-Engineering Team, Forest Service (Nov. 17, 1995).

[4]The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies, Vol. II, Implementation Issues, Report of the Interagency Ecosystem Management Task Force (Nov. 1995).

[5]Resolution 96-005, "Implementation of the National Environmental Policy Act," and Resolution 96-011, "Future Management of the National Forests and Public Lands," Western Governors' Association (Omaha, Neb.: June 1996).

underscored that assessing the cumulative impact of a decision "magnifies the difficulty" of performing NEPA analyses.[6] In addition, prior GAO work has shown that the Forest Service and other federal agencies have, in many instances, not complied with the requirement for assessing a decision's cumulative impact. For instance, in June 1990,[7] we reported that 71 of 82 land-use plans and related environmental impact statements covering Bureau of Land Management and Forest Service lands having high oil and gas potential did not cite the cumulative impact of a reasonably foreseeable development scenario. A number of the agencies' decisions had been challenged and leasing suspended—primarily on Forest Service lands—on the basis of inadequate information about environmental effects. These actions had resulted in lost or delayed federal revenues.

For example, the Forest Service's Region 1, which covers 24 million acres and includes 15 forests in northern Idaho, Montana, North Dakota, and northwestern South Dakota, suspended leasing in 1985 following a district court's decision that the Forest Service had not adequately assessed the environmental effects of its leasing decisions.[8] In 1990, we estimated that about $9.6 million in rental revenue was lost annually on the 5.4 million acres that the agency believed would have been leased in the region and on leases that had been suspended because existing environmental studies did not comply with NEPA's provisions.

We found evidence during our current work that the Forest Service is still experiencing difficulty in complying with the requirement for assessing cumulative impact. For example, in a 1996 response to public comments on a proposed salvage timber sale in the Idaho Panhandle national forests, a Forest Service district ranger stated that the agency's "analysis of direct, indirect, and cumulative impact includes effects of management activities on National Forest System lands only." By contrast, NEPA regulations require the agency to consider the effects on natural systems of past, present, and reasonably foreseeable future actions occurring on both federal and nonfederal lands.

Forest Service officials in headquarters and several field locations that we visited during this review told us that compliance with the requirement for assessing cumulative impact is often difficult because some effects cannot

[6]The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-Five Years, CEQ, Executive Office of the President (Jan. 1997).

[7]Federal Land Management: Better Oil and Gas Information Needed to Support Land Use Decisions (GAO/RCED-90-71, June 27, 1990).

[8]Conner v. Burford, 605 F. Supp. 107 (D. Mont. 1985).

be adequately determined before a forest plan is approved or a project-level decision is reached owing to scientific uncertainty and/or the prohibitive costs of obtaining the necessary data. For example, officials performing a broad-scoped environmental analysis for the Interior Columbia River Basin[9] told us that the basin contains 74 separate federal land units, each with its own management plan and information database. In addition, about 40 percent of the acreage within the basin is privately owned and managed, further complicating assessments of cumulative impact. As a result, some Forest Service officials believe that, for some projects, enhanced monitoring and evaluation may be more efficient and effective in assessing cumulative impact than additional NEPA analyses. As stated in chapter 3, adopting this approach would require the agency to identify how a decision would be modified when new information is uncovered or when preexisting monitoring thresholds are crossed; however, the Forest Service has historically not complied with the monitoring requirements of NFMA.

Changes to Regulations and Guidance Have Been Suggested

Over the past few years, several major studies have examined the need to reconcile the differences in the geographic areas that federal agencies must consider when reaching decisions and assessing the cumulative impact of federal and nonfederal activities on the environment.[10] Among the options that have been suggested are changes to CEQ's regulations and guidance for implementing the provisions of NEPA. The Forest Service and other federal agencies are currently allowed, but not required, to tier, or link, plans and projects to broader-scoped studies. One option that has been suggested is that CEQ amend its regulations to require that a NEPA analysis accompanying a plan or project (1) be tiered to broader-scoped studies and (2) concentrate on issues specific to the area covered by the plan or project. However, according to CEQ officials, changes to NEPA regulations and guidance are not being considered at this time.

To reconcile natural and administrative boundaries and to better assess the cumulative impact of their decisions, as CEQ's regulations require, the Forest Service and other federal agencies are currently examining the efficiency and effectiveness of using broader-scoped environmental analyses. These analyses have been performed in areas such as the Interior Columbia River Basin and the Sierra Nevada mountains in California.

[9]The Interior Columbia River Basin covers 145 million acres—or 8 percent of the nation's surface area. It is located mainly in Oregon, Washington, Idaho, and Montana but also covers small portions of northern California, Nevada, Utah, and Wyoming. The basin includes 35 national forests, comprising about one-fourth of the National Forest System's lands.

[10]See, for example, footnotes 2, 3, and 4.

According to the Chief of the Forest Service, such analyses can result in more efficient planning and a better understanding of conditions, trends, and forests' health, allowing ongoing projects to continue uninterrupted. Similarly, the 1995 report by the interagency task force chaired by CEQ and a 1995 report by a Forest Service reengineering team[11] state that broader-scoped analyses can be cost-effective in the long run because they (1) eliminate the redundancy involved in performing many smaller analyses for individual projects and (2) tailor the analyses, including those addressing cumulative impact, to the appropriate ecological scale.

The task force and the reengineering team both believed that tiering site-specific analyses to broader-scoped studies would allow agencies to conduct project-level NEPA analyses more efficiently. When a broader-scoped study has been performed, tiering allows the project-level environmental analysis to concentrate on issues specific to the project and to explain how the project relates to the issues discussed in the broader-scoped study.

The task force noted other benefits that accrue from broad-scoped interagency NEPA analyses. These benefits include (1) ensuring the consideration of cumulative impact and management strategies at a scale that may be overlooked in site-specific NEPA documents; (2) allowing federal agencies to share resources and expertise and minimizing agencies' working at cross-purposes; (3) creating a baseline for sharing information; (4) reorienting analyses toward proactive, preventive efforts in anticipation of issues, such as the listing of a species under the Endangered Species Act (ESA), before concrete proposals are made; and (5) establishing coordinated monitoring approaches and avoiding duplicative or ineffective monitoring at site-specific levels by different agencies.

The task force also cited potential drawbacks of broader-scoped analyses. These drawbacks include (1) possible inefficiencies and ineffectiveness in the use of resources created by adding a level of NEPA documentation and (2) the potential limited usefulness of such broader-scoped studies—and their vulnerability to legal challenges—caused by uncertainty over such issues as the appropriate ecological scale for analysis.

The task force suggested two options for broader-scoped studies: (1) federal agencies could voluntarily conduct broader-scoped analyses, which could then be used only as "guides" during the agencies'

[11]See footnote 3.

decision-making processes and would not be subject to CEQ's regulations or (2) CEQ could revise its regulations to require tiering. The task force noted that "CEQ's views are entitled to substantial deference in the courts" and that

> "to improve implementation and reduce litigation risk, CEQ could issue regulations or guidance, building upon its recent report on incorporating biodiversity into NEPA analysis. . . .[12] Among other things, the regulations or guidance could identify important ecological assessment techniques and core ecological issues, including multiple ecological scales and long-term ecological timeframes."

Similarly, a 1996 report by a former CEQ official concluded that "CEQ has never been more needed . . . for dealing with increasingly difficult environmental problems" and "seeing to it that government efforts produce results in an economically efficient manner and not just greater bureaucracy, waste and frustration." The report further noted that "CEQ's regulations will need periodic refinement and nudging" and echoed the task force in stating that "courts give great deference to CEQ's regulations."[13]

In addition, a 1996 report by 50 government, industry, and environmental officials suggested that CEQ's and federal land management agencies' regulations be reviewed and appropriately revised to better address larger, landscape-scale issues.[14] Federal agency, industry, and environmental experts with whom we spoke also identified the need for CEQ to require, rather than allow, site-specific analyses to be tiered to broader-scoped studies.

At an October 1995 hearing before the Senate Energy and Natural Resources Committee, the Chair of CEQ agreed to work with the Committee to ensure that NEPA is implemented as efficiently and effectively as possible. After the hearing, the Chairmen of two of the Committee's Subcommittees sent a letter to the Chair of CEQ expressing their and other Committee members' frustration with CEQ's apparent reluctance to streamline the NEPA process and suggesting that CEQ and the Forest Service work together to revise their regulations so that they

[12]Incorporating Biodiversity Considerations Into Environmental Impact Analyses under the National Environmental Policy Act, CEQ (Jan. 1993).

[13]Boyd Gibbons, "CEQ Revisited: The Role of the Council on Environmental Quality," Henry M. Jackson Foundation (1996).

[14]The Keystone National Policy Dialogue on Ecosystem Management: Final Report, The Keystone Center (Keystone, Colo: 1996).

prospectively identify (1) the scope of the environmental analysis and (2) the NEPA documents required at each level of decision-making. In the letter, the Subcommittee Chairmen strongly recommended that the revision attempt to outline a system of tiered NEPA documentation showing how the levels of analysis are related and at what level and under what circumstances specific types of decisions are made.

CEQ's study of NEPA's effectiveness, published over a year after the two Subcommittee Chairmen wrote their letter, does not directly discuss amending CEQ's regulations to require tiering and to identify the NEPA documents required for decision-making. Instead, the study restates the issues that the interagency task force identified in 1995 as important to the efficient and effective implementation of the act. And, rather than make recommendations to improve the efficiency and effectiveness of the NEPA process, the study promises that CEQ will embark on a third major effort to reinvent the NEPA process over the next several years. According to CEQ officials, this effort to reinvent NEPA will not consider changes to CEQ's implementing regulations.

Efforts Will Continue to Rely Primarily on Interagency Agreements

Rather than change its NEPA regulations to require that site-specific analyses be tiered to broader-scoped studies, CEQ plans to rely primarily on interagency agreements as a means of resolving issues that transcend the administrative boundaries and jurisdictions of federal agencies. Several major studies of federal land management decision-making performed during the 1990s have identified the benefits of better interagency coordination. However, federal land management and regulatory agencies sometimes do not work efficiently and effectively together to address interagency issues. As a result, the interagency task force chaired by CEQ recommended that CEQ expand its guidance and revise its NEPA regulations to promote interagency coordination. However, according to CEQ officials, they have no plans to do so.

Better Interagency Coordination Is Critical to Improved Decision-Making

Our 1994 report on the four major federal land management agencies' implementation of ecosystem management[15] states that broader-scoped environmental analyses will require unparalleled coordination among federal land management and regulatory agencies. Similarly, the 1995 report by the interagency task force chaired by CEQ and CEQ's 1997 study of NEPA's effectiveness identified early interagency coordination as critical to efficient and effective decision-making.

[15]See footnote 2.

Our current work also shows that involving federal regulatory agencies at the beginning of the decision-making process and maintaining their involvement throughout the process may expedite decision-making. For example, the Forest Service involved the Fish and Wildlife Service in developing alternatives for a major restoration project on the Wenatchee National Forest in Washington State. These alternatives included timber harvesting. Because the Fish and Wildlife Service was involved at the beginning of the decision-making process when problems were identified, data were gathered, and relationships were established and because it remained involved throughout the process, it was able to quickly concur with the Forest Service's preferred alternative. The responsible Forest Service district ranger estimated that the Fish and Wildlife Service's early and continuous involvement was a major reason why only about half as much time was required to reach a decision for this project as for similar projects. Similarly, the Fish and Wildlife Service has found that its participation in an interagency information-sharing group in the Southern Appalachian highlands (an area straddling the borders of Alabama, Georgia, North Carolina, South Carolina, Tennessee, and Virginia) has allowed it to inform the Forest Service and other federal land management agencies about the potential effects of contemplated projects before formal consultation becomes necessary.

Federal Agencies Sometimes Do Not Work Well Together

Our 1994 report on ecosystem management, the 1995 report by the interagency task force chaired by CEQ, CEQ's 1997 study of NEPA's effectiveness, and other studies and reports have found that the Forest Service and other federal land management agencies do not always involve other federal agencies at the beginning of their decision-making processes and maintain the other agencies' involvement throughout their processes.

For example, in its January 1997 study of NEPA's effectiveness, CEQ states that many federal agencies have failed to involve all interested federal agencies early and continuously in their decision-making processes. Moreover, an interagency team that reviewed the "salvage rider" timber program observed in 1996 that, while coordination was working well in some places, in others "neither the letter nor the spirit of the collaborative process envisioned by the [memorandum of agreement was] observed, leaving significant conflicts unaddressed."[16]

[16]Interagency Salvage Program Review, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (Silver Spring, Md.: Oct. 8, 1996).

Our work also showed that some delays in implementing forest plans and reaching project-level decisions resulted from inadequate interagency coordination at the beginning of and/or throughout the decision-making process. Instead, some forests and districts limited the involvement by federal regulatory agencies primarily to reviewing and commenting on proposals that the forests or districts had developed. For example, the Forest Service did not involve federal regulatory agencies at the beginning of the decision-making process for the Thunderbolt salvage timber sale on the Boise and Payette national forests in central Idaho, choosing instead to have the agencies review and comment on the preferred alternative developed by the forests. The Fish and Wildlife Service, the National Marine Fisheries Service, and the Environmental Protection Agency (EPA) could not agree with the Forest Service on the risk posed by the sale to salmon-spawning habitat or the actions needed to mitigate the risk. The agencies' inability to agree delayed the project's implementation. Because salvage timber rapidly declines in value,[17] the delay lowered the sale price, reducing the revenues to the federal government.

Adequate coordination among the four major federal land management agencies has also not always occurred. For instance, according to a November 1996 report by the Forest Service and the Bureau of Land Management summarizing scientific findings on the ecological status of the Interior Columbia River Basin,[18] continuing the management approaches established under existing land management plans would produce declining trends in resource conditions on 95 percent of the lands administered by the two agencies. The report attributes the declining trends to the agencies' having developed the existing plans with little or no attention to coordinating their management.

CEQ Intends to Rely Primarily on Interagency Agreements

The November 1995 report by the interagency task force chaired by CEQ stated that the NEPA process provides a significant opportunity for interagency coordination and consultation on individual agencies' proposals. However, despite the opportunities it creates for interagency collaboration, the NEPA process has not generally been used as a basis for coordinating federal activities across natural systems. The task force concluded that the process could be used more effectively to promote collaboration and consensus-building among federal agencies and could

[17]Public Timber: Federal and State Programs Differ Significantly in Pacific Northwest (GAO/RCED-96-108, May 23, 1996).

[18]Status of the Interior Columbia Basin: Summary of Scientific Findings, General Technical Report PNW-GTR-385 (Nov. 1996).

serve as an important procedural mechanism for interagency coordination through, among other things, expanded CEQ guidance and revised NEPA regulations. However, the task force directed its recommendations for improving interagency coordination to individual federal agencies rather than to CEQ, and, according to CEQ, it does not plan to expand its guidance or revise its NEPA regulations to promote interagency coordination.

Instead, CEQ plans to rely on interagency agreements to improve coordination. However, interagency agreements (1) have not been lived up to by agencies in the past, (2) are generally not enforceable by outside parties, and (3) do not provide a basis for common approaches among all agencies. In its 1997 study of NEPA's effectiveness, CEQ states that the Forest Service and other federal land management and regulatory agencies have signed various memorandums of agreement to improve interagency coordination on forests' health and timber sales. According to CEQ, these agreements have resulted in a 50-percent reduction in the time needed for environmental review, including a 75-percent reduction in the time required for ESA consultations. Similarly, the interagency team that reviewed the salvage rider timber program observed that continuing and expanding early, collaborative involvement among the agencies reduced the time required to plan and implement salvage timber sales. However, as noted by the interagency salvage rider team, strong leadership will be needed to ensure that interagency cooperation and collaboration occur.

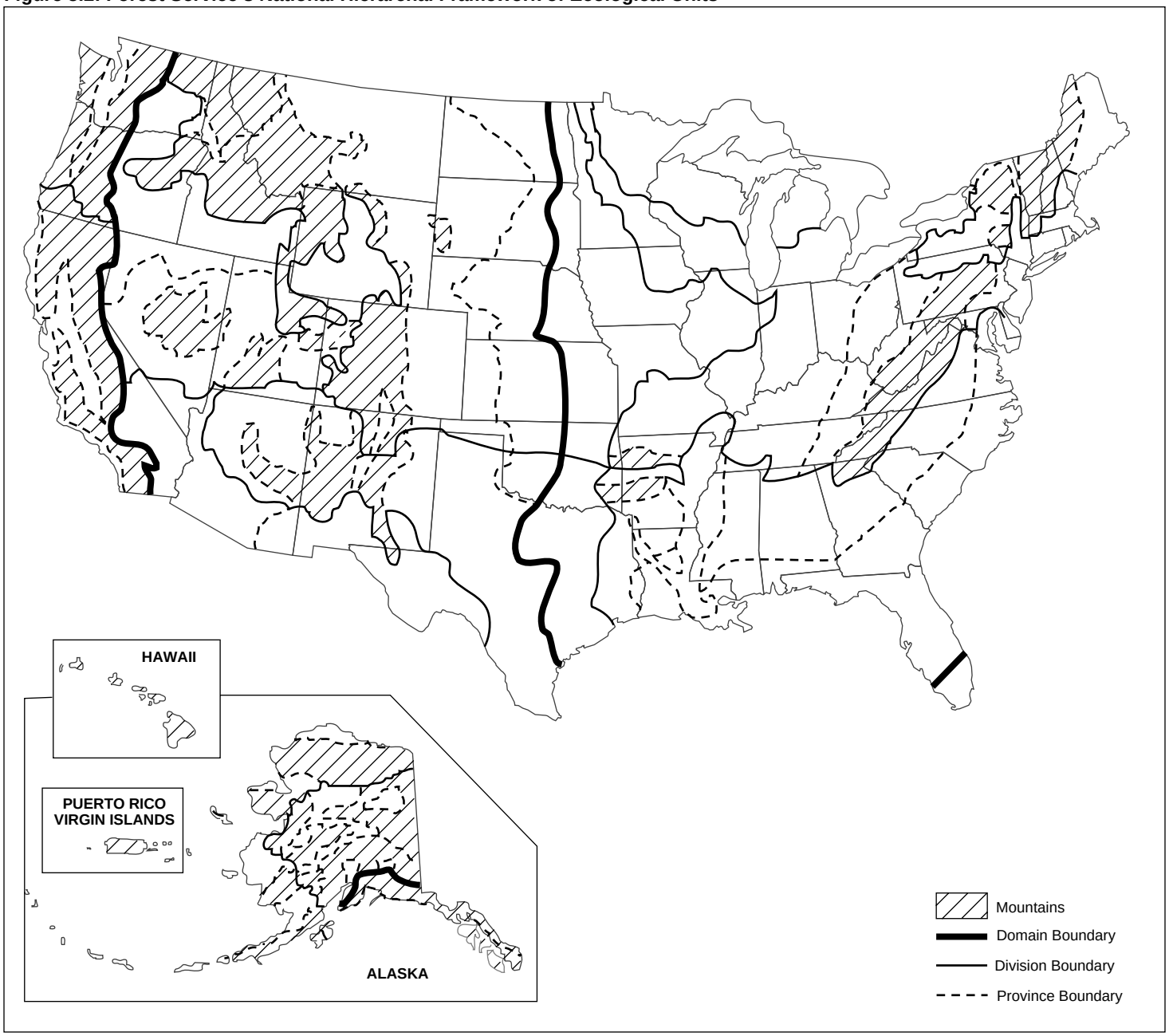
Consistent with its plan not to consider changes to NEPA's regulations and guidance, CEQ conducted a 3-year study and issued a draft handbook in September 1996[19] to identify the current state of the science and provide practical direction on assessing cumulative impact in NEPA analyses. The handbook (1) includes a disclaimer stating that it "is not formal guidance nor is it exhaustive or definitive, but rather it should assist practitioners in developing their own study-specific approaches" and (2) states in its preface that its recommendations "are not intended to be legally binding."

The draft handbook lays out eight principles for agencies to use in analyzing cumulative impact, including using the boundaries of natural systems. However, federal agencies have not agreed on how best to delineate the boundaries of the natural systems to be studied. For example, the Forest Service has developed a hierarchy for delineating ecosystems, called the National Hierarchal Framework of Ecological Units. (See fig. 5.2.) However, no other federal agency has officially

[19]Considering Cumulative Effects Under the National Environmental Policy Act, Final Draft, Interagency Review Version, CEQ (Sept. 24, 1996).

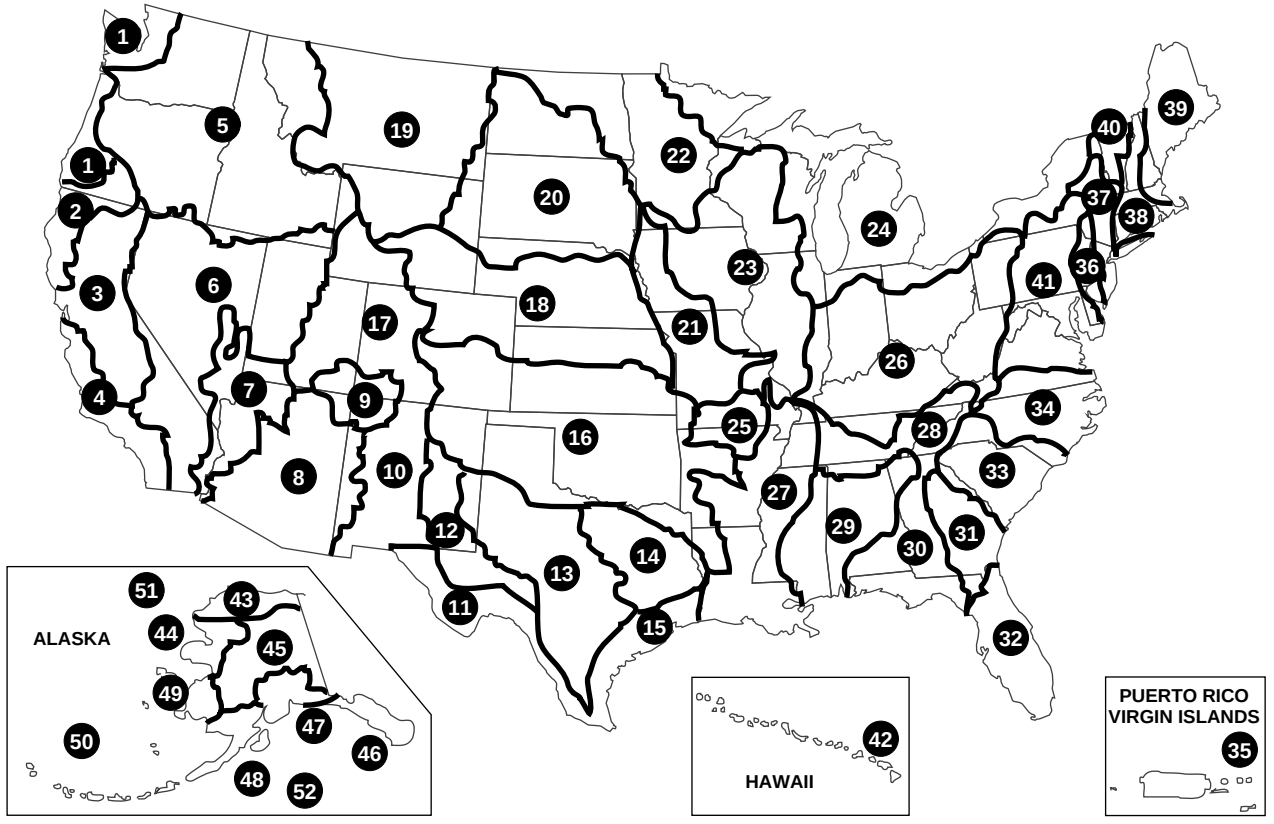
adopted this framework for use in its decision-making, and some agencies have developed different hierarchies. (See fig. 5.3.)

Figure 5.2: Forest Service's National Hierarchal Framework of Ecological Units



Source: Forest Service.

Figure 5.3: Fish and Wildlife Service's Ecological Unit Map



1. North Pacific Coast
2. Klamath/Central Pacific Coast
3. Central Valley of California/San Francisco Bay
4. South Pacific Coast
5. Columbia River Basin
6. Interior Basins
7. Lower Colorado River
8. Gila/Salt/Verde River
9. San Juan
10. Middle and Upper Rio Grande
11. Lower Rio Grande
12. Pecos River
13. Edwards Plateau
14. East Texas
15. Texas Gulf Coast
16. Arkansas/Red Rivers
17. Upper Colorado River
18. Platte/Kansas Rivers
19. Upper Missouri/Yellowstone Rivers
20. Main Stem Missouri River
21. Lower Missouri River
22. Mississippi Headwaters/Tallgrass Prairie
23. Upper Mississippi River/Tallgrass Prairie
24. Great Lakes
25. Ozark Watersheds
26. Ohio River Valley
27. Lower Mississippi River
28. Tennessee River
29. Central Gulf Watersheds
30. Florida Panhandle Watersheds
31. Altamaha/Sunwanee Rivers
32. Peninsular Florida
33. Savannah/Suntee/Pee Dee Rivers
34. Roanoke/Tar/Neuse/Cape Fear Rivers
35. Caribbean
36. Delaware River/Delmarva Costal Area
37. Hudson River/New York Bight
38. Connecticut River/Long Island Sound
39. Gulf of Maine Rivers
40. Lake Champlain
41. Chesapeake Bay/Susquehanna River
42. Pacific Islands
43.
44. Arctic Alaska
45. Northwest Alaska
46. Interior Alaska
47. Southeast Alaska
48. South Central Alaska
49. Bristol Bay/Kodiak
50. Yukon-Kuskokwim Delta
51. Bering Sea/Aleutian Islands
52. Beaufort/Chukchi Seas
    North Pacific/Gulf of Alaska

Source: Fish and Wildlife Service.

The Forest Service and several other federal agencies have agreed to develop a common framework for delineating natural systems. However, no such framework has been developed, and, although the agencies say that they intend to use such a framework, the agreement does not require them to do so for planning or for any other purpose. In addition, federal agency, industry, and environmental experts with whom we spoke identified the benefits of CEQ's providing leadership—through regulations and formal guidance—that would ensure that federal agencies use a coordinated approach to delineating natural systems. However, CEQ is not a signatory to the interagency agreement, nor does it have a defined role under the agreement.

Complete and Comparable Data Could Improve the Agencies' Ability to Conduct Studies and Coordinate Activities

Effective interagency coordination is dependent on, among other things, comparable environmental and socioeconomic data that are useful and easily accessible to decisionmakers. Useful and comparable environmental and socioeconomic data would also allow CEQ to better meet its responsibility under NEPA to provide the President and the Congress with annual assessments of national environmental conditions and trends, as well as evaluations of related federal programs and activities. However, (1) the environmental and socioeconomic data gathered by federal agencies are often not comparable, and large gaps in the information exist; (2) federal agencies may not know who has what information, how existing data can be used, and how information can be made available within agencies, across agencies, and to the public; and (3) information is often not available because there is no mechanism for identifying, locating, or assessing it or for determining its nature and quality.

A September 1995 report by the Environmental Law Institute[20] recommends, as one option, that CEQ exercise its existing authority under NEPA to promulgate regulations creating an interagency database.[21] To accomplish this, CEQ could require federal agencies to maintain and make available consistent, adequate data for the agencies' use in decision-making and for CEQ's use in developing statutorily required annual assessments and evaluations. According to CEQ, it does not plan to revise its regulations to require such data. Rather, it intends to rely on several efforts already under way to develop the data.

[20]The Environmental Law Institute is an independent research and education center funded by foundations, government, corporations, law firms, individuals, and other sources to convene diverse parties to work cooperatively to address environmental problems.

[21]Rediscovering the National Environmental Policy Act: Back to the Future, Environmental Law Institute (Sept. 1995).

Available Data Are Not Comparable

According to the 1995 report by the interagency task force chaired by CEQ, analyzing environmental issues and concerns at the appropriate ecological scale would require federal agencies to agree on the type of environmental information to be contributed and the format needed to make it readily accessible. The task force also concluded that environmental reviews would benefit from a wider use of socioeconomic analyses. Finally, the task force identified a critical need for an interagency database of ecological and socioeconomic information to facilitate agencies' compliance with informational requirements, such as the requirement for assessing cumulative impact under NEPA, and to ease compliance with requirements for interagency coordination.

However, as noted in our 1994 report on ecosystem management, available data, collected independently by various agencies for different purposes, are often noncomparable and insufficient for decision-making. Similarly, the interagency task force's report states that (1) frequently, the quality of the available data is inadequate or unknown; (2) a lack of consistency and comparability in collecting, analyzing, and storing data makes comparison difficult and continues to impede the creation of common databases and the sharing of existing data; and (3) the acquisition of software and hardware is rarely, if ever, coordinated, even among units within a single agency. For example, officials performing the broad-scoped environmental analysis for the Interior Columbia River Basin told us that each of the 74 separate federal land units within the basin maintains its own information database and that the databases are often not consistent or comparable. In addition, assessment of the socioeconomic effects of federal land management decisions was difficult because economic forecast data for counties and communities within the basin were limited. Our 1994 report on ecosystem management stated that many of the required socioeconomic data—on employment, production, and commerce—are gathered and/or maintained by federal, state, and local agencies; firms; private researchers; and industry organizations for many different purposes and are often noncomparable, insufficient, or uncertain.

CEQ's 1997 study of NEPA's effectiveness states that although obtaining adequate environmental data is the key to a thorough scientific review of a decision's cumulative impact, the current lack of high-quality environmental baseline data severely hampers the accomplishment of this requisite. Just as we observed of the Forest Service (see ch. 3), CEQ's study found that the four major federal land management agencies do not know the extent or location of archeological sites, wetlands, or other important environmental features. Moreover, the Forest Service does not maintain or

have access to a database containing the results of environmental analyses conducted under NEPA by other federal agencies or even by national forests or ranger districts. As a result, it does not know who has what information or how the data could be used to assess cumulative impact or other environmental effects.

Efforts Are Under Way to Improve Data

Two statutes—the Clinger-Cohen Act of 1996 and the Paperwork Reduction Act of 1995—provide a statutory framework and processes for CEQ to address interagency data needs. Both acts require CEQ and other federal agencies to examine and devise ways by which they can better carry out their missions through the use of improved information systems, including setting goals, establishing performance measurements, and reporting on progress. Additionally, the Paperwork Reduction Act provides that the Office of Management and Budget, also within the Executive Office of the President, may (1) designate a central collection agency, such as CEQ or another federal agency that CEQ might recommend, to obtain information for two or more agencies with similar data needs; (2) direct the sharing of information; and (3) require that agencies participate in establishing and maintaining a service through which they can locate, retrieve, and share commonly used information with one another and the public.

Several efforts are under way to develop comparable environmental and socioeconomic data that are useful and easily accessible to decisionmakers. For example, the Forest Service and other federal agencies have developed a common geographic information system (GIS) for the old-growth forests of the Pacific Northwest. The system is intended to (1) provide consistent data; (2) reduce duplication of effort; and (3) support the detailed environmental analyses needed for project-level decisions, forest plans, and analyses of cumulative impact for an entire region. The Forest Service and other federal agencies have also developed a data system for the Interior Columbia River Basin, which is intended to establish the relative ecological integrity and health of different areas as a basis for devising management strategies. In addition, the Forest Service and/or other federal agencies are developing data systems for other regions of the nation, including the Southern Appalachian highlands and the Great Lakes. However, differences among these systems may impede the analysis and sharing of data.

A Federal Geographic Data Committee, chaired by the Secretary of the Interior, is developing a national spatial data infrastructure[22] to improve the knowledge of and access to information. Specifically, the infrastructure is conceived to be an umbrella of policies, standards, and procedures under which organizations and technologies interact to foster the more efficient use, management, and production of geospatial data. Critical to the infrastructure's success is the participation of data generators, such as the federal government. When completed, this infrastructure should greatly improve information in a wide range of areas, including the analysis of environmental information and the monitoring of species listed under ESA and of sensitive land areas, such as wetlands.[23] However, no agreement exists among the Forest Service and other federal agencies on a consistent approach for using this information to assess common problems and issues in the same geographic areas. Some Forest Service officials have asked CEQ to take the lead in developing a common approach for assessing the data; however, CEQ has not yet responded to their request.

Conclusions

Improving the efficiency and effectiveness of the Forest Service's decision-making, as well as reducing the costs, time, and complexity of federal land management in general, will require federal agencies to adequately address issues that transcend their administrative boundaries and jurisdictions. In particular, they will need to reconcile the administrative boundaries along which they are authorized to plan with the ecological boundaries of the natural systems and components that they are required to protect and conserve.

Studies have suggested that CEQ's regulations for implementing NEPA be changed to require, rather than merely allow, federal agencies to tier plans and projects to broader-scoped studies and that CEQ's regulations and guidance be changed to improve interagency coordination and collaboration and to provide federal decisionmakers with useful and comparable environmental and socioeconomic data. Among the benefits of changing the regulations and guidance would be a reduced risk that decisions would be challenged over issues such as the appropriate ecological scale for analysis.

[22]Spatial or geographic data refer to information that can be placed on a map.

[23]Management Reform: Implementation of the National Performance Review's Recommendations (GAO/OCG-95-1, Dec. 5, 1994) and Management Reform: Completion Status of Agency Actions Under the National Performance Review (GAO/GGD-96-94, June 12, 1996).

Instead of revising its regulations or issuing guidance, CEQ has chosen to rely primarily on interagency agreements to address interagency issues. However, interagency agreements (1) have not been lived up to by agencies in the past, (2) are generally not enforceable by outside parties, and (3) do not provide a basis for common approaches among all agencies. Moreover, federal land management and regulatory agencies sometimes do not work efficiently and effectively together to address issues that transcend their boundaries and jurisdictions. While strong leadership by CEQ would help to ensure that interagency agreements accomplish their intended objectives, CEQ may also need to consider changes to regulations and guidance in its planned effort to reinvent federal agencies' implementation of NEPA.

Recommendations to the Chair of the Council on Environmental Quality

To ensure that CEQ's planned multiyear effort to reinvent NEPA's implementation improves the efficiency and effectiveness of the NEPA process, we recommend that the Chair of CEQ

- change CEQ's regulations implementing NEPA to require, rather than merely allow, federal agencies to tier plans and projects to broader-scoped studies and
- change CEQ's regulations and guidance implementing NEPA to improve interagency coordination; identify a baseline of comparable environmental and socioeconomic data that are needed for agencies to implement the act; and assume or assign responsibility for collecting, managing, and making the data available to other users.

We do not recommend precise changes to CEQ's regulations or guidance because we believe such changes are better left to CEQ to determine on the basis of its own internal study and evaluation of the outside views solicited during its NEPA reinvention effort.

Agency Comments and Our Evaluation

In its comments, CEQ agreed with the underlying goals articulated in our report for implementing NEPA but discussed different mechanisms that it is using to achieve these goals. These mechanisms include streamlining procedures at individual agencies and examining issues on a sector-by-sector basis (e.g., timber, grazing, and oil and gas). We agree with CEQ that (1) differences among the cultures, organizations, and institutional goals of various federal agencies, as well as the substantive nature of their underlying missions, require CEQ's regulations implementing the act to be generic in nature and (2) regulatory changes

often need to be tailored specifically to the agencies' individual processes. However, the thrust of our recommendation to the Chair of CEQ is intended to ensure that the Council's planned multiyear reinvention effort does not prematurely or arbitrarily close off options for improving the efficiency and effectiveness of the act's implementation across federal agencies' administrative boundaries and jurisdictions.

Differences in Laws' Requirements Affect the Forest Service's Decision-Making

Differences in the requirements of planning and environmental laws, enacted primarily during the 1960s and 1970s, produce inefficiency and ineffectiveness in the Forest Service's and other federal agencies' decision-making. Requirements to consider new information and events and differing judicial interpretations of the same statutory requirements have increased the costs and time of decision-making and have made it difficult for the Forest Service and other federal agencies to predict when any given decision can be considered final and can be implemented, reducing the ability of the agencies to achieve the objectives in their plans. Additional differences among statutorily required approaches for protecting various resources—such as endangered and threatened species, water, air, diverse plant and animal communities, and wilderness—have also sometimes been difficult to reconcile.

Adequately addressing these and other concerns would require a systematic and comprehensive analysis of the laws to avoid making changes that would entail unintended consequences for the future. However, statutory changes to improve the efficiency and effectiveness of the Forest Service's decision-making process cannot be identified until agreement is first reached on which uses the agency is to emphasize under its broad multiple-use and sustained-yield mandate and how it is to resolve conflicts or make choices among competing uses on its lands.

Requirements to Consider New Information and Events Entail Ongoing Reviews of Plans and Projects

Responding to new information and events can lead the Forest Service to recycle forest plan and project decisions. Under the National Environmental Policy Act (NEPA), federal agencies have an ongoing duty to evaluate new information relevant to the environmental effects of proposed actions. Under the Endangered Species Act (ESA), any new listing of a species as endangered or threatened, designation of habitat deemed critical to a listed species' protection, or discovery of new information requires that plans and projects be reviewed to determine their potential to affect listed species or their habitats.

For instance, the listing of a species as endangered or threatened under ESA after a forest plan has been approved can require the Forest Service to reinitiate formal consultations with the Fish and Wildlife Service and/or the National Marine Fisheries Service to amend or revise the plan. The listing may also stop the agency from implementing projects under the plan that could affect the species until the new round of consultations has been completed.

For example, recent federal court decisions[1] required the Forest Service to reinitiate formal consultations on several approved forest plans because a species of salmon in the Pacific Northwest and a species of owl in the Southwest were listed as threatened under ESA. The courts' rulings prohibited the agency from implementing projects under the plans that might have affected the species until the new rounds of consultations with the Fish and Wildlife Service and/or the National Marine Fisheries Service had been completed.

While new information and events can affect the outcomes of the Forest Service's decisions and prevent the agency from achieving the objectives in its forest plans or from implementing planned projects, the agency sometimes has not adequately anticipated the listing of candidate species or the designation of critical habitat. (See ch. 4.) Had the agency been better prepared, there would have been less likelihood that it would have been surprised by the listing of species under ESA after the plans were approved. For example, the Chief of the Forest Service informed us that the agency could be producing more timber now in the Pacific Northwest and Southwest regions if it had followed the advice of its specialists and taken action to protect the habitats of candidate species, such as the northern spotted owl and Mexican spotted owl, before they were listed under ESA and the agency was required by the courts to reduce timber harvests.

Differing Judicial Interpretations Have Created Conflicting Requirements

Additionally, through differing judicial interpretations of the same statutory requirements, the courts have sometimes established conflicting requirements. For instance, three federal circuit courts of appeals have held that the approval of a forest plan represents a decision that can be judicially challenged and prohibited from being implemented.[2] Conversely, two other federal circuit courts of appeals have held that a forest plan does not represent such a decision and that only a project can be judicially challenged, at which time the adequacy of the plan's treatment of larger-scale environmental issues arising in the project can be reconsidered.[3] Federal circuit courts have also differed on the applicability

[1]Pacific Rivers Council v. Thomas, 30 F.3d 1050 (9th Cir. 1994) and Silver v. Thomas, 924 F. Supp. 976 (D. Ariz. 1995).

[2]Sierra Club v. Thomas, 105 F.3d 248 (6th Cir. 1997); Sierra Club v. Marita, 46 F.3d 606 (7th Cir. 1995); and Idaho Conservation League v. Mumma, 956 F.2d 1508 (9th Cir. 1992).

[3]Sierra Club v. Robertson, 28 F.3d 753 (8th Cir. 1994) and Wilderness Society v. Alcock, 83 F.3rd 386 (11th Cir. 1996).

of NEPA to the designation of critical habitat for species listed as endangered or threatened under ESA.[4]

In proposing revisions to its planning regulations in April 1995,[5] the Forest Service attempted to clarify its position that a forest plan does not represent a decision and that only a project can be judicially challenged. According to the proposed rule, forest plans are used to allocate lands and resources within a plan's area through management prescriptions consisting of goals, objectives, standards, and guidelines. Hence, forest plans do not compel the agency to undertake any specific projects, but only, in the Forest Service's view, establish limitations on actions that may be authorized later when project-level decisions are made. In contrast, during a project, according to the Forest Service, site-specific activities are authorized and the agency reaches the threshold of an irreversible and irretrievable commitment of resources. Thus, for the Forest Service, challenges to the agency's compliance with NEPA are appropriate only at the project level.

Different Approaches to Protecting Resources Have Been Difficult to Reconcile

Environmental laws generally address individual resources, such as endangered and threatened species, water, and air. Conversely, the Forest Service's planning statutes, including the National Forest Management Act (NFMA), generally establish objectives for multiple resources, such as sustaining diverse plant and animal communities, securing favorable water flow conditions, and preserving wilderness. These different approaches to achieving similar environmental objectives—protecting individual resources versus protecting multiple resources—have sometimes been difficult for the Forest Service and other federal agencies to reconcile, at least in the short term.

An interagency task force chaired by the Council on Environmental Quality (CEQ) reported in 1995 that under some circumstances, the needs of a single species listed under ESA may be inconsistent or difficult to reconcile in the short term with the requirements for maintaining the forests' long-term health and sustaining diverse plant and animal communities (biological diversity) established under NFMA.[6] Maintaining the forests' long term health and sustaining biological diversity may also

[4]Douglas County v. Babbitt, 48 F.3d 1495 (9th Cir. 1995) (NEPA does not apply) and Catron County v. U.S. Fish & Wildlife, 75 F.3d 1429 (10th Cir. 1996) (NEPA applies).

[5]60 Fed. Reg. 18886 (Apr. 13, 1995).

[6]The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies, Vol. II, Implementation Issues, Report of the Interagency Ecosystem Management Task Force (Nov. 1995).

be difficult to reconcile in the short term with requirements to protect other resources, such as air and water.

For example, nature relies on periodic small wildfires to create a variety of habitats that sustain diverse plant and animal communities. However, until recently, a federal policy required the suppression of all fires on federal lands.[7] As a result, fuels and abnormally dense undergrowth have accumulated in many forests. The Forest Service now plans to prescribe burning to restore the forests' health and biological diversity and avoid unnaturally catastrophic fires. However, as noted by the Congressional Research Service in 1996, the standards for air quality required under the Clean Air Act may at times preclude the Forest Service from achieving this goal by limiting the timing, location, and amount of the prescribed burning.[8] In addition, the standards for water quality required under the Clean Water Act and the requirement for conserving species listed under ESA can limit the timing, location, and amount of the prescribed burning because soils from burned areas wash into streams, modifying species' habitats. Forest Service officials in the agency's Intermountain Region and in headquarters told us that they cannot implement recently proposed increases in prescribed burning and still meet the standards for air and water quality.

The Congressional Research Service's 1996 report also noted that salvage timber sales may sometimes be needed in combination with prescribed burning and other activities to improve the forests' health. However, water quality standards required under the Clean Water Act may at times limit salvage sales. For example, according to officials on the Idaho Panhandle national forests, concerns about water quality in a particular watershed had reduced a salvage sale's achievement of its objectives of improving the forests' health.

A Systematic and Comprehensive Analysis of the Laws Is Needed

Adequately addressing statutory requirements to consider new information and events, different judicial interpretations of the same statutory requirements, and different approaches to achieving similar environmental objectives under various planning and environmental laws would require a systematic and comprehensive analysis of the laws to avoid making changes that would entail unintended consequences for the future.

[7]Federal Fire Management: Limited Progress in Restarting the Prescribed Fire Program (GAO/RCED-91-42, Dec. 5, 1990).

[8]Forest Health: Overview, Congressional Research Service (5-548 ENR, revised June 7, 1996).

A report[9] on a workshop held at the Yale School of Forestry and Environmental Studies in October 1993 supports the concerns expressed by Forest Service and other Agriculture officials. The over 100 resource managers, scientists, and policy analysts—representing federal and state agencies, major corporations, and environmental organizations—concluded that the current statutory framework is a "spotty patchwork" of many often competing, contradictory, and/or conflicting laws and regulations involving multiple governments, agencies, and purposes. Similarly, one federal court has described the current framework of laws as a "crazy quilt of apparently mutually incompatible statutory directives."[10]

In addition, as examples in the preceding discussion have shown, unintended consequences have often been the rule rather than the exception in implementing planning and environmental statutes affecting federal land management. Therefore, any proposal to change the current statutory framework would require careful consideration to ensure that no unintended consequences would occur. In particular, potential gains in efficiency and effectiveness would need to be balanced against the policy reasons that led to the existing framework of laws and organizational structure.

For example, disagreements between the Forest Service and federal regulatory agencies—including the Fish and Wildlife Service, the National Marine Fisheries Service, the Environmental Protection Agency (EPA), and the U.S. Army Corps of Engineers—on whether and how the requirements of environmental laws and regulations can best be met sometimes delay Forest Service plans and projects. These disagreements often stem from differing evaluations of environmental effects and risks, which in turn reflect the agencies' disparate missions and responsibilities. For instance, the Forest Service may be willing to accept a greater level of risk to the recovery of a threatened or endangered species under its multiple-use and sustained-yield mandate than would the Fish and Wildlife Service or the National Marine Fisheries Service, both of which are charged unambiguously with conserving and protecting species threatened with extinction. For example, disagreements over protecting the spawning habitat of salmon in the Pacific Northwest and protecting endangered

[9]Building Partnerships for Ecosystem Management on Forest and Range Lands in Mixed Ownership, Workshop Synthesis, Forest Policy Center (Oct. 22-24, 1993).

[10]United States v. Brunskill, No. S-82-666-LKK, unpublished op. (E.D. Cal. Nov. 8, 1984) aff'd, 792 F.2nd 938 (9th Cir. 1986).

species' habitat in the Tongass National Forest in Alaska have resulted in delays at both the plan and project levels.

Therefore, even though transferring the responsibility for environmental compliance from the regulatory agencies to the Forest Service might help to expedite the implementation of forest plans and projects, any potential gains in efficiency from such transfers would need to be weighed against the policy reasons that led originally to separating the responsibility for managing the nation's forests for multiple uses from the responsibility for ensuring regulatory compliance with environmental and other laws. Moreover, other steps could be taken to expedite the implementation of forest plans and projects, including the consolidation of responsibility for environmental compliance in one federal agency. Such consolidation would provide the Forest Service and other federal land management agencies with what is sometimes referred to as "one-stop-shopping."

Furthermore, even if proposed changes to the current framework of laws were limited to legislation affecting the Forest Service, decisionmakers would need to consider the consequences of these changes for other federal land management agencies. Changes intended to help speed the implementation of the Forest Service's plans and projects could have a rippling effect throughout the federal land management structure. For instance, in developing a plan or reaching a project-level decision, the Forest Service or the Bureau of Land Management must assess the cumulative impact of the decision when its effects are added to those of other decisions occurring on both federal and nonfederal lands. Thus, exempting the Forest Service from, or granting it waivers to, environmental laws to increase the levels of goods and services produced on national forests could require countervailing reductions in the levels of goods and services produced on lands managed by the Bureau.

Some Forest Service officials, including the Chief, believe that an independent, bipartisan commission similar to the Public Land Law Review Commission[11] may need to be established to thoroughly review the current statutory framework. In its 1970 report to the President and the Congress, the Commission recommended changes to laws.[12] Similarly, in its response to a 1996 survey on land management by the Western

[11]The Public Land Law Review Commission was a bipartisan group established by the Congress in 1964 with members appointed by both the President and the Congress. This commission was tasked with conducting a thorough investigation of federal land management and reporting its findings to the President and the Congress.

[12]One Third of the Nation's Land: A Report to the President and to the Congress by the Public Land Law Review Commission (Washington D.C.: June 1970).

Governors' Association, the Forest Service stated that "a serious and bipartisan review" of the laws might "provide new insights and valuable ideas," and a draft report by the Forest Service and Agriculture's Office of General Counsel suggested that a legislative statement "outlining how ESA, NEPA, NFMA, etc., fit together in a uniform coherent manner" might be beneficial.

Lack of Agreement on the Forest Service's Mission Priorities Has Delayed Needed Analysis of the Laws

We have observed that no significant legislation was enacted on the basis of the Public Land Law Review Commission's proposals, in part because the proposals were not supported by a solid consensus for change.[13] The Forest Service's decision-making process is clearly broken and in need of repair, and a consensus for statutory change appears to be growing to improve the efficiency and effectiveness of the process. However, any legislation that may be needed to clarify or modify the Congress's intent and expectations requires that the Forest Service and the Congress reach agreement on the agency's long-term strategic goals, on the uses that the agency should emphasize under its broad multiple-use and sustained-yield mandate, and on how it is to resolve conflicts or make choices among competing uses on its lands. (See ch. 4.)

Without agreement on the Forest Service's mission priorities, we see distrust and gridlock prevailing in any effort to streamline the agency's statutory framework. For instance, during his Senate confirmation hearing in April 1995, the Secretary of Agriculture pledged to work with the Congress to identify statutory changes to improve the processes for implementing the Forest Service's mission. The Forest Service suggested options for changing the current statutory framework in 1995. However, the Secretary has not sent to the Congress either the agency's suggested options or his analysis. Administration officials have said that they are hesitant to suggest changes to the procedural requirements of planning and environmental laws because they believe that the Congress may also make substantive changes to the laws with which they would disagree.

Similarly, a draft Senate bill—entitled the Public Land Management Responsibility and Accountability Restoration Act—was circulated late in 1996. The draft bill is designed to provide the Forest Service and the Bureau of Land Management with the authority and ability to effectively manage their lands in accordance with the principles of multiple use and sustained yield and for other purposes. It would do this by supplementing

[13]Federal Land Management: Streamlining and Reorganization Issues (GAO/T-RCED-96-209, June 27, 1996).

the agencies' planning statutes and other laws that apply to lands managed by the two agencies. However, some environmental groups view the bill as an effort to emphasize timber production over other uses on federal lands. As a result, they predict that debate on the draft, if it is introduced as a bill, will end in a stalemate.

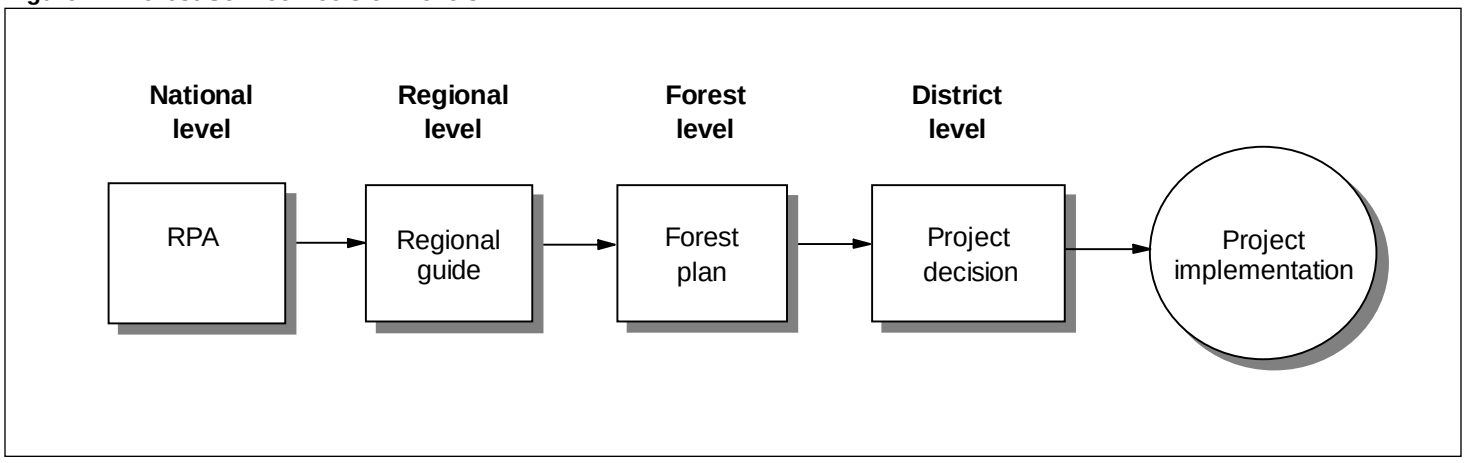
Conclusions

Differences in the requirements of planning and environmental laws, enacted primarily during the 1960s and 1970s, produce inefficiency and ineffectiveness in the Forest Service's and other federal agencies' decision-making. Adequately addressing these differences would require a systematic and comprehensive analysis of the laws to avoid making changes that would entail unintended consequences for the future. Moreover, for this analysis to result in changes to laws, there must be a solid consensus for change. However, such a consensus depends on reaching agreement on the Forest Service's long-term strategic goals, as well as on the uses that the agency is to emphasize under its broad multiple-use and sustained-yield mandate and on how it is to resolve conflicts or make choices among competing uses on its lands.

The Forest Service's Decision-Making Process

Decision-making in the Forest Service is a complex, multilevel process involving other federal agencies; state, local, and tribal governments; and the public. Many laws and regulations govern this process, and still more variables affect the final outcome—a decision to implement a project. Projects are "on the ground" activities, such as harvesting timber, restoring species' habitats, and constructing campsites. The Forest Service's decision-making process consists of a series of steps linking national, regional, forest, and district decision-making. This process becomes increasingly specific as planning progresses from the national to the forest and district level. Planning is iterative, requiring continuous monitoring, evaluation, and adjustment as information from the forest level flows up to the national level and down to the forest and district level. The four decision-making levels correspond to the agency's four administrative levels (see fig. I.1).

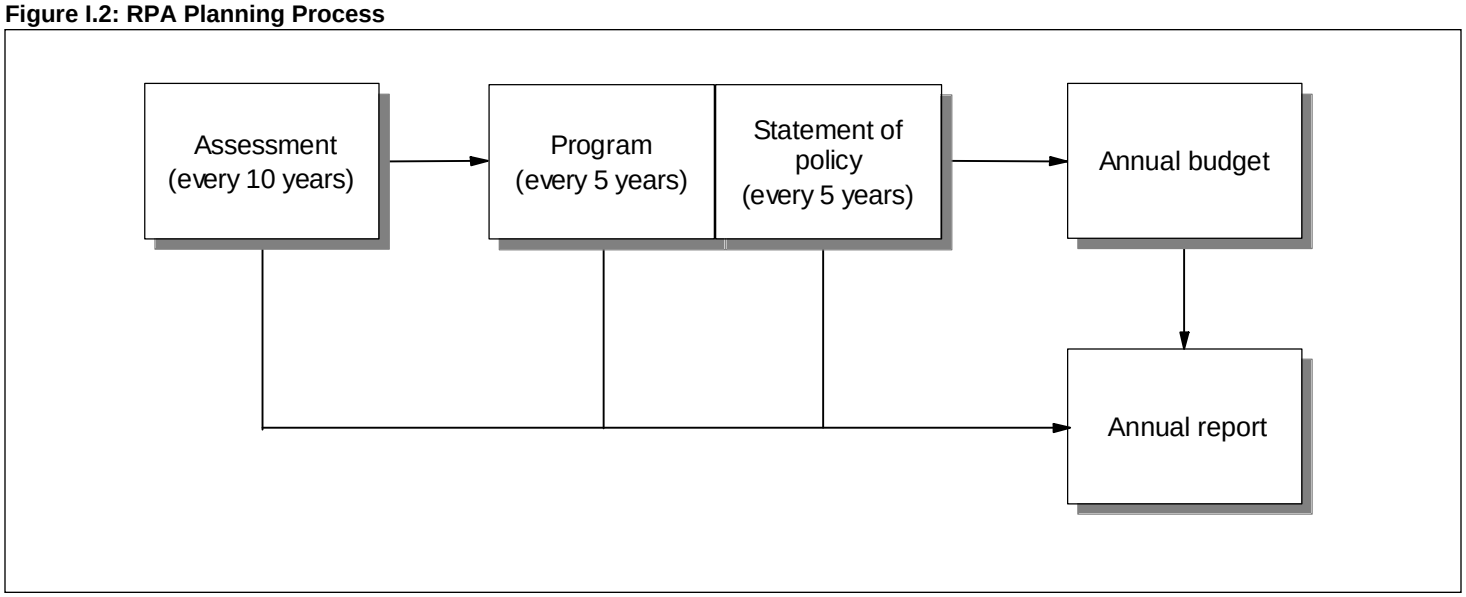
Figure I.1: Forest Service Decision Levels



At the national level, the Forest and Rangeland Renewable Resources Planning Act of 1974 (known as RPA) establishes a long-range strategic planning process through which the Forest Service reviews the condition of the country's long-range renewable resources. First, every 10 years the Forest Service conducts a comprehensive assessment of the nation's renewable resources, including timber, range, water, wildlife and fish, and wilderness. The assessment examines resource conditions, trends in supply and demand, and opportunities to invest in resource production. Projections are made of future supply and demand for each resource for at least four decades. On the basis of these projections, the assessment

identifies the potential opportunities to meet the nation's future needs. Then, every 5 years, the Forest Service prepares a program to respond to the trends and opportunities identified in the assessment. The program recommends a level of future outputs and associated costs and covers at least four decades. The assessment and the program are transmitted to the Congress along with a presidential statement of policy, which indicates the President's intention to implement the program through the annual budgeting process. The Congress may accept or revise the statement of policy. Once approved, the statement of policy and recommended program serve as a guide to the Forest Service's future planning and as a basis for future budget proposals. Finally, an annual report assesses the Forest Service's accomplishments and progress in implementing the program. (See fig. I.2.)

Figure I.2: RPA Planning Process



Source: Office of Technology Assessment.

At the regional level, each of the Forest Service's nine regions is required by the agency's regulations to develop a regional guide. The primary purpose of the guide is to help link the agency's strategic planning at the national level, through the RPA assessment and program, with forests' and districts' planning at more local levels. The Chief of the Forest Service

assigns to each region its share of the level of future outputs and associated costs recommended in the program. With this and other information, each region develops a guide to address issues best resolved at the regional level and to provide direction for managers in developing individual forest plans. For example, a regional guide might designate a transportation corridor running through a number of forests or prescribe harvesting methods based on the biological requirements of tree species or forest types. Regional guides also tentatively distribute resource targets among individual national forests.

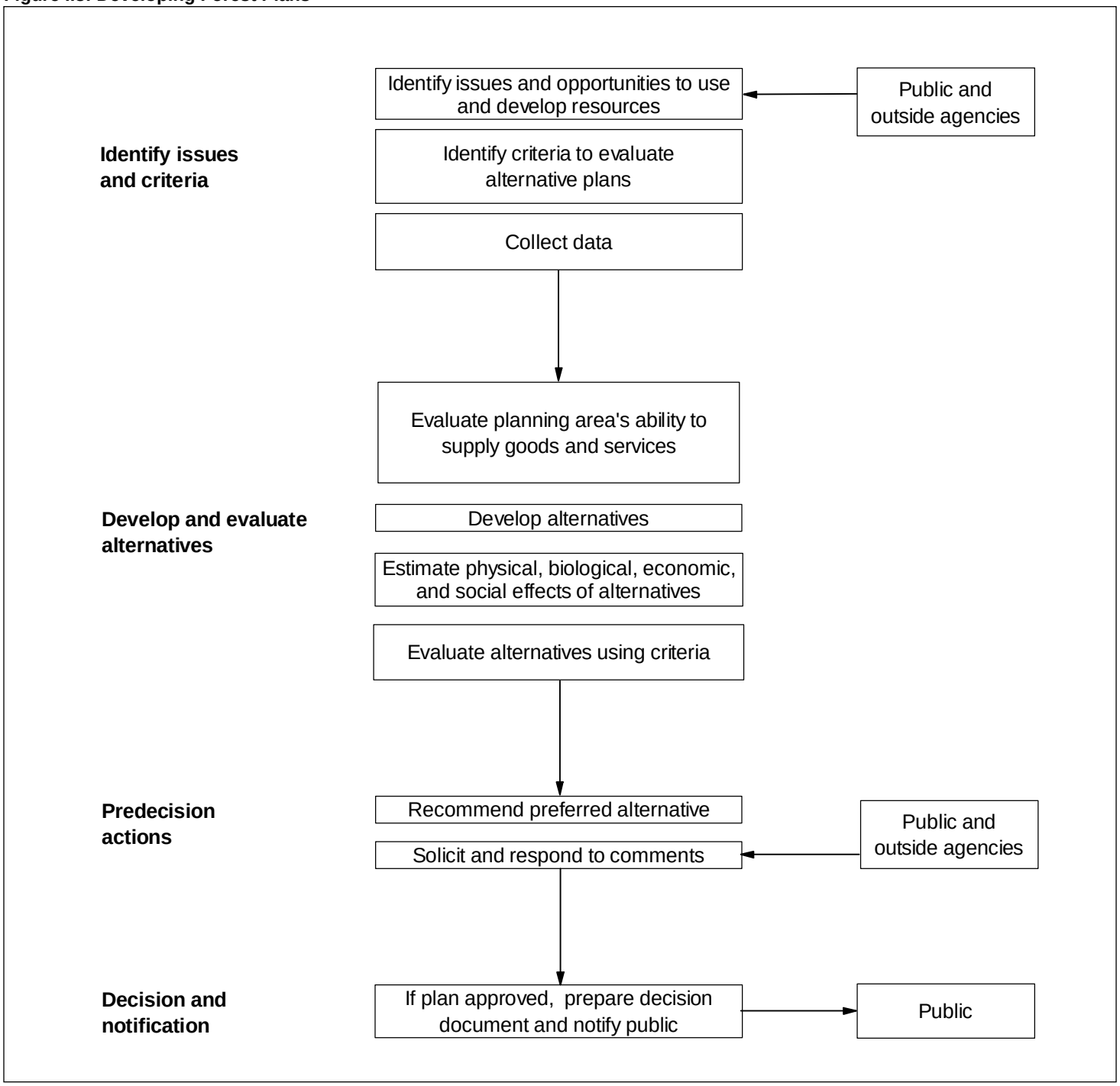
At the forest level, the National Forest Management Act of 1976 (NFMA) requires each forest or group of small adjacent forests to develop a land and resource management plan, commonly called a forest plan. These plans blend national and regional demands with local forests' capabilities and needs and serve as a basis for developing future budget proposals. The plans also provide direction for project-level decisions—decisions about on-the-ground activities—by establishing goals and objectives, standards and guidelines, and management areas. Goals and objectives describe the desired outcome of the forest plan, including the level of goods and services to be produced from forest resources and the resulting physical and biological changes. The goals and objectives also describe the desired future condition of the forest (for example, after 10 and 50 years). The description could include the age and composition of tree stands, acres of roadless areas, miles of roads, and numbers and kinds of facilities.

Plans also include standards and guidelines that impose limitations on how, when, and where activities can occur and usually protect a specific resource, such as streams or wildlife. Standards and guidelines can apply forestwide or to specific management areas. Management areas are areas with similar management objectives that are managed in the same way, such as wilderness, old-growth wildlife habitat, or national forest monuments.

In developing plans, forest planners consider a broad range of alternatives that, to the extent practicable, reflect the full range of major commodity and environmental resource uses and values that could be produced from a forest. The alternatives are formulated to provide different ways of addressing the major public issues, management concerns, and resource opportunities identified during the planning process. At least one alternative is designed to meet the forest's tentatively assigned share of the RPA program's goals; others have resource outputs that are above or below the RPA program's levels. After alternatives have been developed

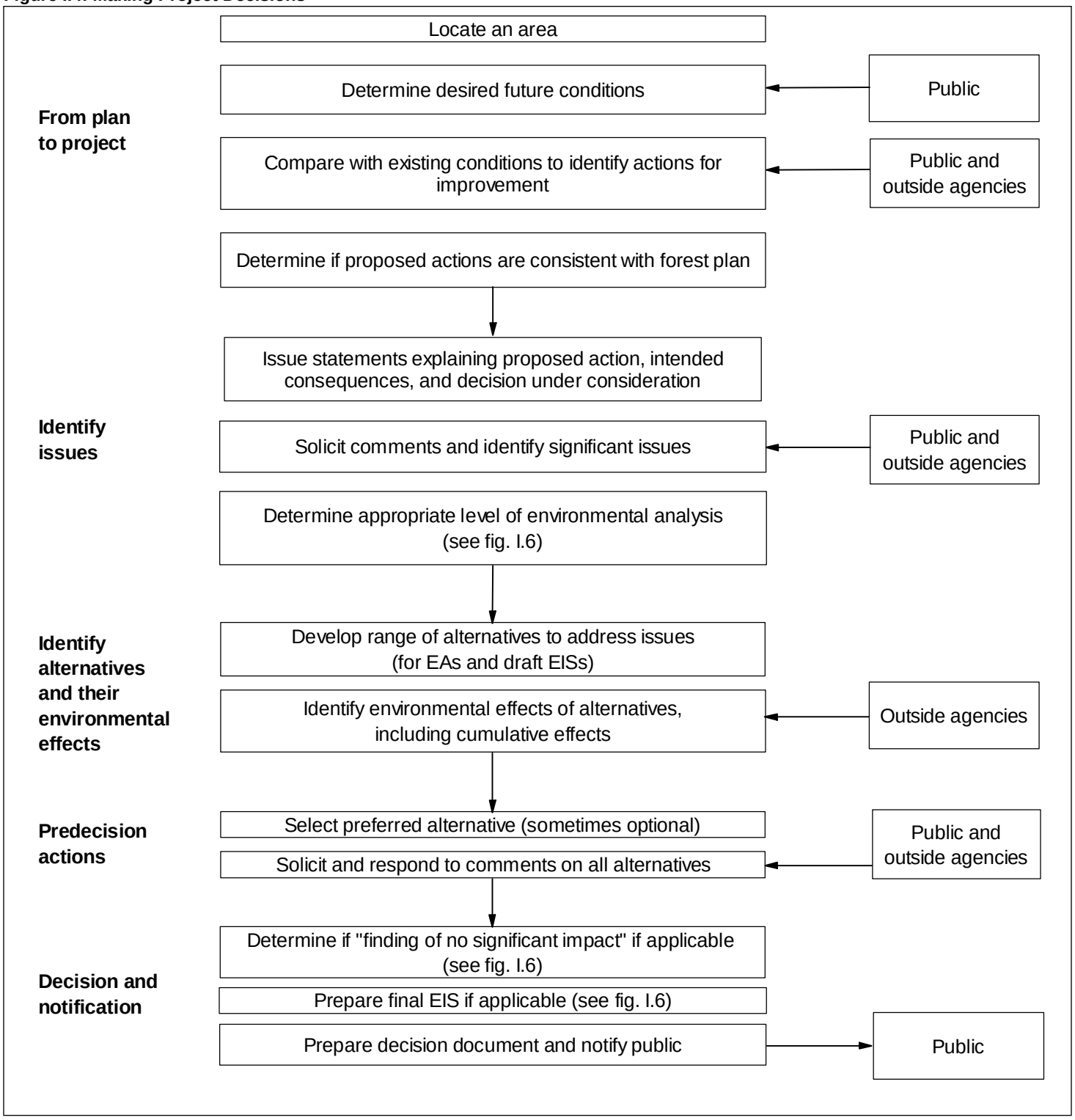
and evaluated, a preferred alternative is selected by the forest. The regional forester is responsible for approving the plan. As figure I.3 illustrates, the public and outside agencies— including federal, state, and local agencies; tribal governments; and others interested in the planning process—are consulted at several points in the process. Later, if circumstances warrant, the plan may be revised. Depending on the scope of the revisions, the same or an abbreviated process may be used to amend the plan. Plans must be revised at least every 15 years.

Figure I.3: Developing Forest Plans



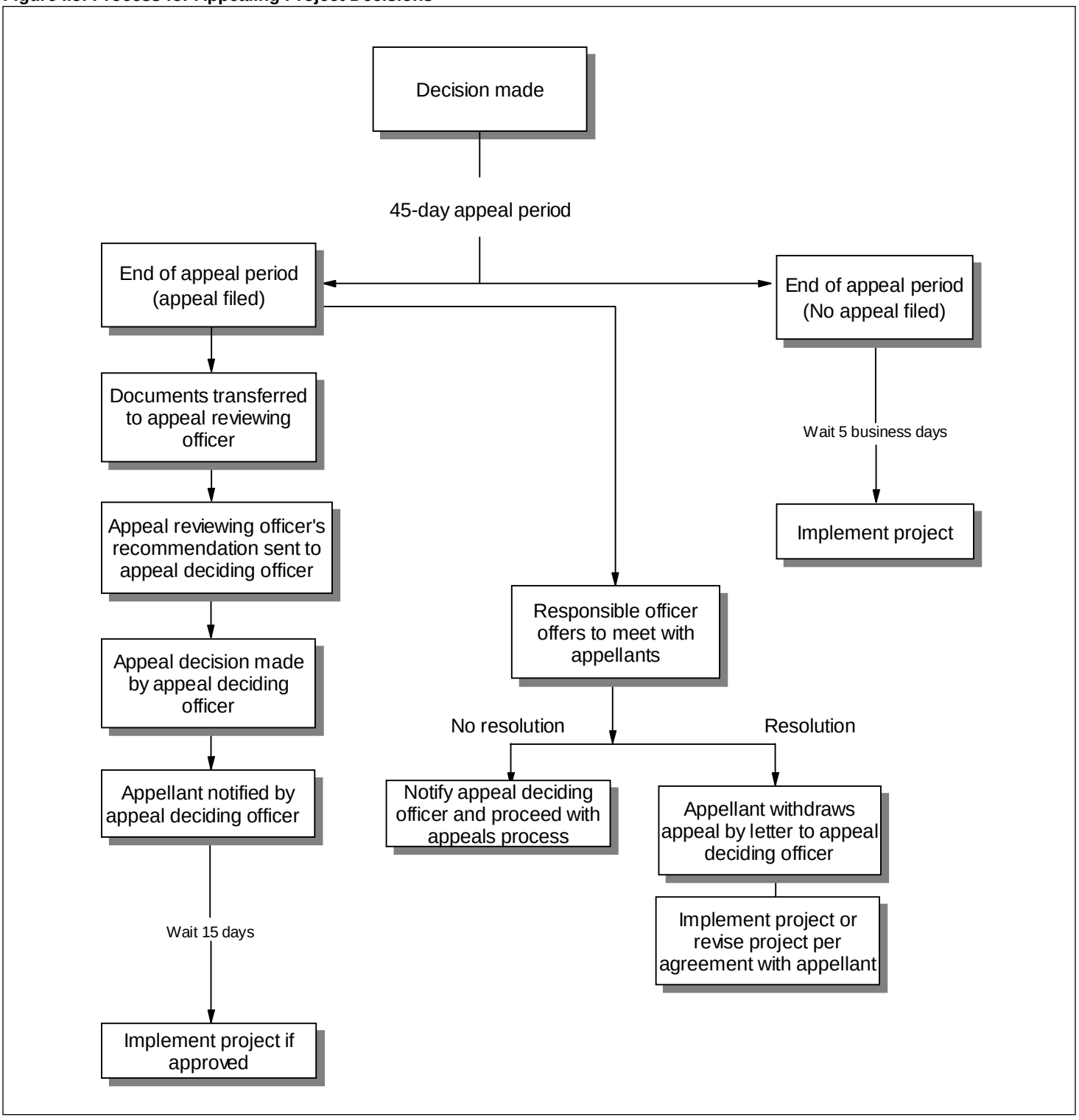
Plans are implemented on a project-by-project basis. Project decisions are usually made at the district, the lowest administrative level in the Forest Service. As figure I.4 indicates, the process of making a project decision shares several features with the process of developing a forest plan. Potential projects are identified that are consistent with the direction provided by the forest plan. Through consultation with the public and other agencies and governments, issues are raised, alternatives are developed and considered, and a preferred alternative is chosen.

Figure I.4: Making Project Decisions



Regional guides, forest plans, and project decisions can be judicially and administratively challenged. Administrative appeals must be exhausted before cases are brought before a court. The process generally used to appeal project decisions is different from the one generally used to appeal major changes to plans and regional guides. However, both processes provide an opportunity for the official who made the decision being appealed to meet informally with the appellants and for other interested parties and the public to become involved. Figure I.5 shows the process generally used for appealing project decisions.

Figure I.5: Process for Appealing Project Decisions



An appeal must be filed within 45 days of a project decision. When a decision is appealed, the official who made the decision (the responsible officer) must offer to meet with the appellant and attempt to informally resolve the appeal. The responsible officer is often a district ranger or forest supervisor. If this effort is not successful, the appeal reviewing officer, a Forest Service official of equal or higher grade and not otherwise involved, reviews the case. On the basis of his or her assessment of the documentation developed by the responsible officer in reaching the decision, the issues raised in the appeal, and comments submitted by interested parties, the appeal reviewing officer makes a recommendation to the appeal deciding officer. The appeal deciding officer is the Forest Service official responsible for rendering the final decision on an appeal and is generally the regional forester or his or her designate. The appeal deciding officer may affirm or reverse the responsible official's decision, in whole or in part, and may include instructions for further action.

Appeals of regional guides and national forest plans are generally subject to different Forest Service regulations. Depending on the type of decision being appealed, appeals must be filed within 45 or 90 days of the date specified in the legal notice announcing the decision. Appeals are filed with an official at the administrative level above that of the official who made the decision being appealed. For example, if the decision is made by a forest supervisor, the notice of appeal is filed with the regional forester; if the decision is made by a regional forester, the notice of appeal is filed with the Chief of the Forest Service. If the decision is made by the Chief of the Forest Service, the notice of appeal is filed with the Secretary of Agriculture. This is the only level of appeal available unless an official above the official with whom the appeal was filed exercises the discretion to call for a second-level review.

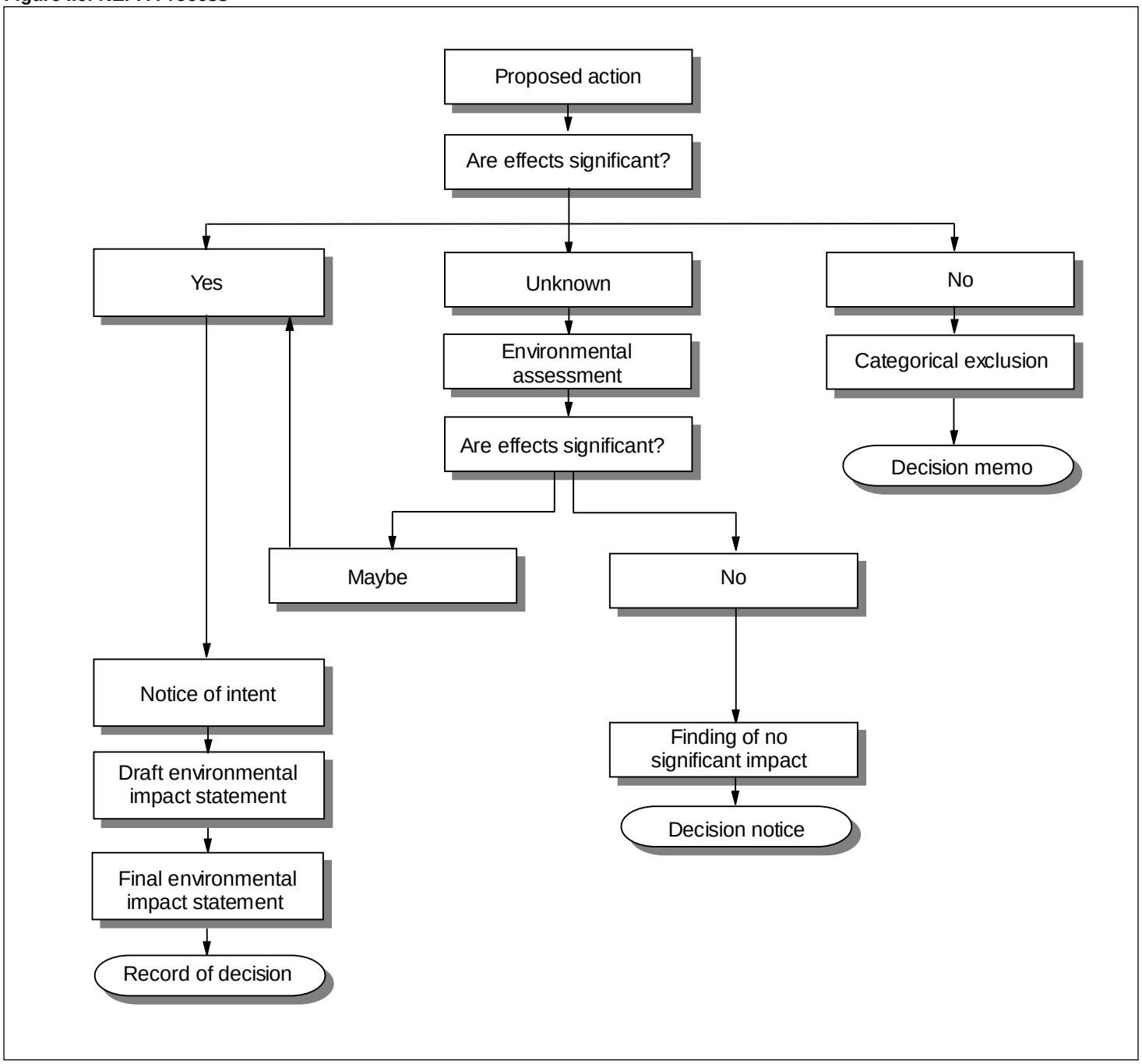
Although decisions made at the national level provide direction for plan- and project level-decisions, numerous laws also have a substantial effect on developing and implementing these decisions. Chief among these are laws protecting natural, cultural and historic resources, including the Clean Water Act, the Clean Air Act, the National Historic Preservation Act, the Archeological Resources Protection Act, and the Migratory Bird Treaty Act. Two of the most significant laws affecting the Forest Service's decision-making are the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA).

NEPA is a procedural law. As such, it does not establish any substantive standards or thresholds for permissible environmental effects. Its

implementing regulations require that high-quality environmental information be available to public officials and citizens before decisions are made and before actions are taken. NEPA requires all federal agencies, including the Forest Service, to prepare detailed environmental impact statements (EIS) for major federal actions that may significantly affect the quality of the human environment. The Forest Service is required to prepare EISs for forest plans and some project decisions.

The heart of an EIS is an analysis of the environmental effects of a proposed action and alternative actions that provides a clear basis for choice by the decision-maker and the public. In preparing an EIS, the Forest Service (like all agencies) must consider the direct, indirect, and cumulative effects on the environment of the proposed action in conjunction with past, current, and reasonably foreseeable future activities on Forest Service land, other federally and nonfederally owned government land, and privately owned land. If gaps in information about significant adverse effects exist, the Forest Service must identify them and describe how they will be dealt with. As figure I.6 demonstrates, if the Forest Service is not sure whether the effects of the proposed action are "significant," it conducts an environmental assessment (EA) to determine whether an EIS is warranted. A proposed action may also be categorically excluded from further analysis if the action falls into a predetermined category of activity that has no or minor environmental impact.

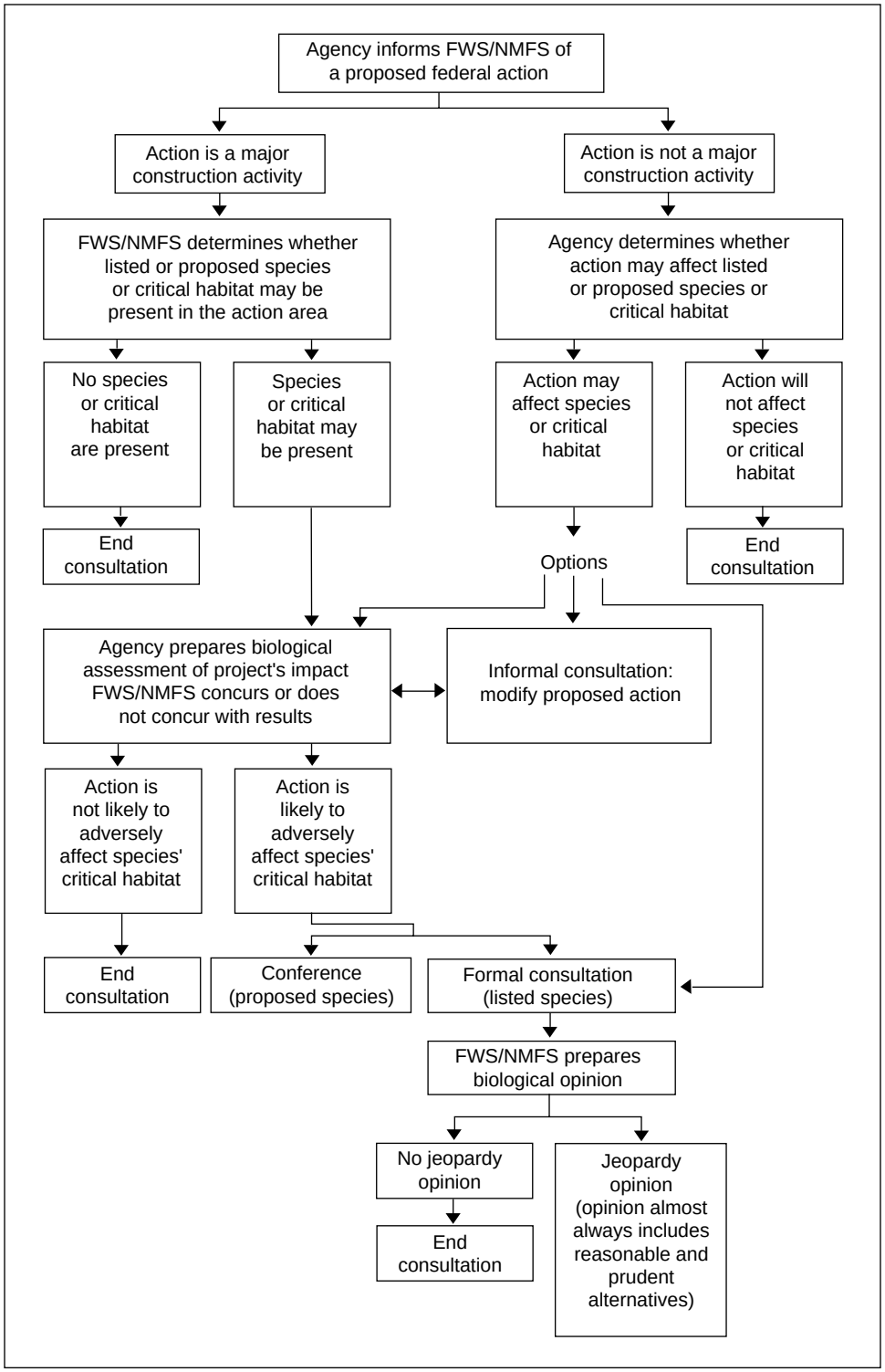
Figure I.6: NEPA Process



ESA requires all federal agencies, including the Forest Service, to ensure that their actions are not likely to jeopardize the continued existence of species listed as threatened or endangered or to adversely modify habitat critical to their survival. To fulfill this requirement, the Forest Service must consult with either the Fish and Wildlife Service (FWS) (for freshwater and land species) or the National Marine Fisheries Service (NMFS) (for marine species) when a plan or project could affect a listed species. The goal of this consultation is to identify and resolve conflicts between (1) the protection and enhancement of the listed species and (2) the actions proposed in the forest plan or project.

The process usually begins with informal discussions and/or correspondence between the Forest Service and FWS/NMFS (called "informal consultation") to assist the Forest Service in determining whether formal consultation is required. FWS/NMFS may suggest modifications to plans or projects to avoid adverse effects on listed species or critical habitat. These modifications may require the Forest Service to repeat some steps in the decision-making process, including developing a new EIS. The Forest Service proceeds to formal consultation if its actions may affect listed species or their habitat. However, the Forest Service need not formally consult if FWS/NMFS has confirmed, during informal consultation, that the proposed plan or project is not likely to adversely affect the listed species or their habitat. At the conclusion of the formal consultation, FWS/NMFS issues a "biological opinion" that reviews the potential effects of the proposed action on the listed species and/or critical habitat. FWS/NMFS must base the opinion on the best available biological information. FWS/NMFS issues a "no jeopardy" biological opinion if it finds that the proposed action is not likely to jeopardize the continued existence of the listed species or adversely modify their habitat. If FWS/NMFS finds that the action would appreciably reduce the likelihood of the species' survival and recovery, it issues a "jeopardy" biological opinion. Jeopardy opinions can include reasonable and prudent alternatives that define modifications to the Forest Service's plan or project that enable it to continue and still be consistent with ESA's requirements for protecting the species. Following the issuance of the biological opinion, the Forest Service determines whether it will comply with the opinion or seek an exemption from the act's requirements.

Figure I.7: ESA Consultation Process



In addition to the decision-making process, the annual Forest Service budget has a substantial effect on the national forests' management. Budgets affect the total funding available to implement forest plans and the character of the projects implementing the plans. Before Forest Service officials develop their budget requests, they receive instructions from Forest Service headquarters providing guidelines for meeting the long-term policies determined in the RPA planning process and for implementing forest plans to the extent practical within prescribed funding constraints. Each forest then develops a budget estimate, basing it on the projects anticipated for the fiscal year being budgeted. Because anticipated projects are based on forest plans, they are intended collectively to reflect an approach to implementing the forest plans. However, because the Congress appropriates funds by resource activity, these integrated requests must be converted into budget requests by resource activity. The budget for each resource activity is subject to modification by the administration and the Congress. Following reviews by the Office of Management and Budget and the Congress and the enactment of an appropriation bill, the appropriations are allocated to the regions and then to the forests. The appropriation for each resource activity must be converted back into multiple-use projects—not an easy task, because the appropriation is unlikely to provide for the balanced mix of resources needed to implement forest plans.

Figures I.8 and I.9 summarize the Forest Service's decision-making process. Figure I.8 combines the charts and other material discussed above into one summary chart, and figure I.9 graphically represents all the participants in the Forest Service' decision-making process.

Figure I.8: Summary of the Forest Service's Decision-Making Process

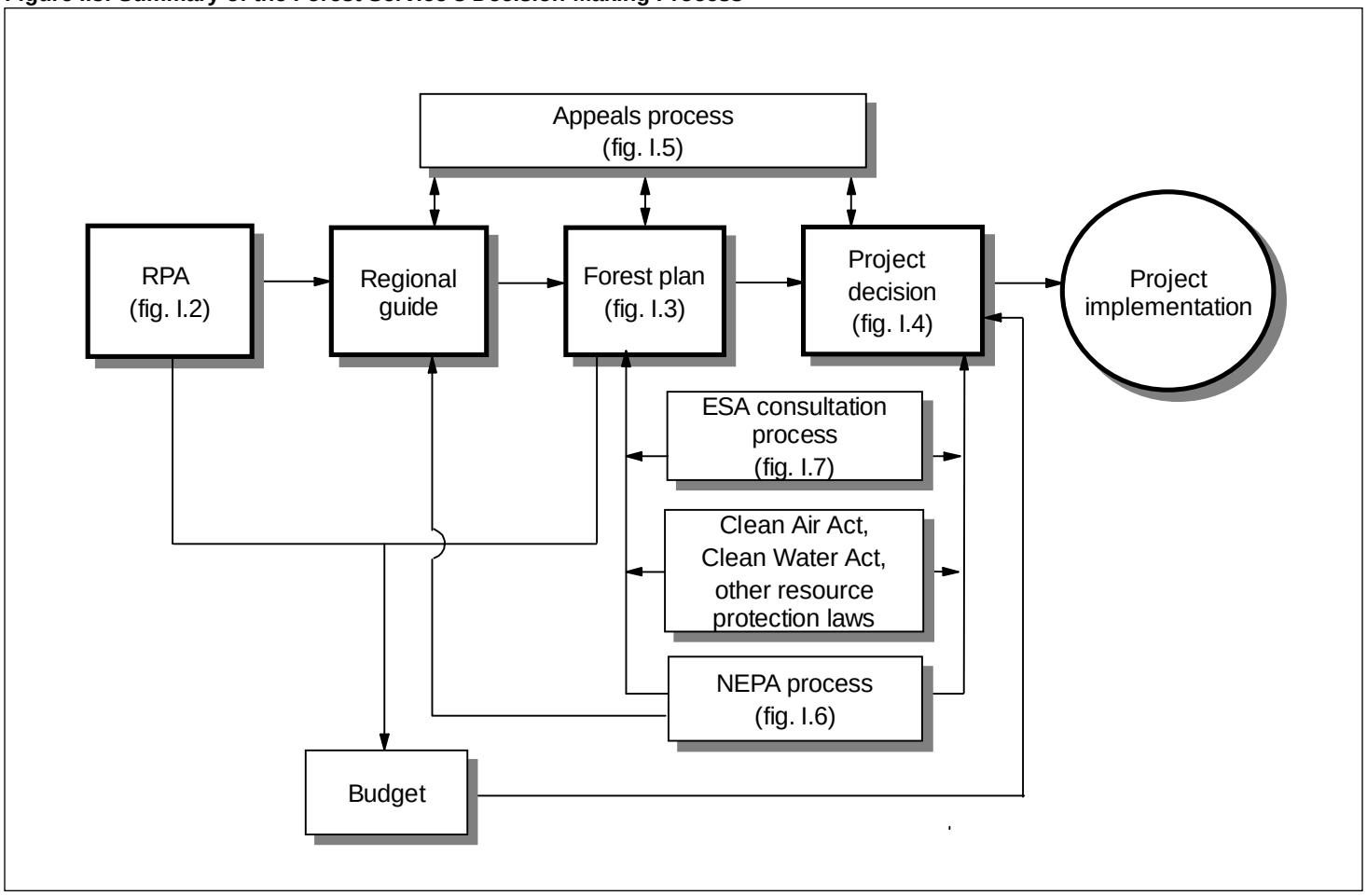
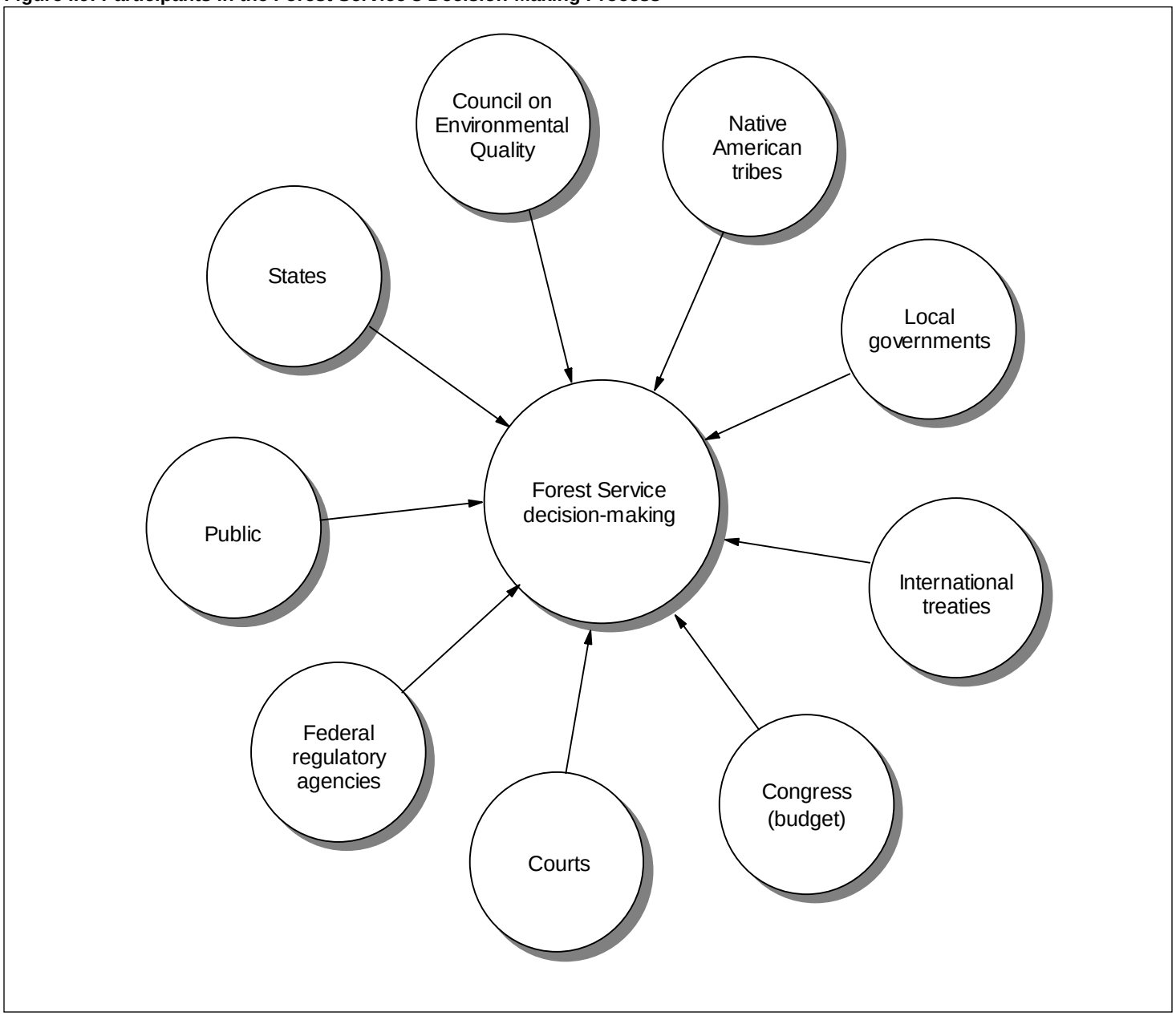


Figure I.9: Participants in the Forest Service's Decision-Making Process



National Forests Visited

Northern Region (Region I)

Clearwater National Forest (Idaho)
- Powell Ranger District

Deerlodge National Forest (Montana)
- Deer Lodge Ranger District

Flathead National Forest (Montana)
- Swan Lake Ranger District

Rocky Mt. Region (Region 2)

Black Hills National Forest (South Dakota)
- Bearlodge Ranger District
- Custer-Elk Mountain Ranger District
- Harney-Pactola Ranger District
- Spearfish-Nemo Ranger District

Southwest Region (Region 3)

Carson National Forest (New Mexico)
- Camino Real Ranger District
- El Rito Ranger District

Cibola National Forest (New Mexico)

Intermountain Region (Region 4)

Boise National Forest (Idaho)
- Cascade Ranger District
- Lowman Ranger District
- Mountain Home Ranger District

Pacific Southwest Region (Region 5)

Tahoe National Forest (California)
- Sierraville Ranger District

Pacific Northwest Region (Region 6)

Mt. Hood National Forest (Oregon)

Wenatchee National Forest (Washington)
Chelan Ranger District
Entiat Ranger District

Southern Region (Region 8)

Nantahala - Pisgah National Forest (North Carolina)
French Broad Ranger District
Toecane Ranger District

Ouachita National Forest (Arkansas)
Choctaw-Kiamichi-Tiak Ranger District
Cold Springs Ranger District

Eastern Region (Region 9)

Chequamegon National Forest (Wisconsin)
Glidden/Hayward Ranger District
Park Falls/Medford Ranger District
Washburn Ranger District

Nicolet National Forest (Wisconsin)
Eagle River/Florence Ranger District
Laona and Lakewood Ranger District

North Central Forest Experiment Station, Forestry Sciences Laboratory (Wisconsin)

Organizations Contacted

American Forest and Paper Association, Washington, D.C.

American Forests, Washington, D.C.

American Institute of Biological Sciences, Washington, D.C.

Appalachian Trail Conference, Asheville, N.C.

Arkansas Game and Fish Commission

Arkansas Natural Heritage Commission

Association of Consulting Foresters of America, Inc., Bethesda, Md.

ATOKA Engineering and Environmental Consulting, Hot Springs, Ark.

B.A. Mullican Lumber and Manufacturing Company, Maryville, Tenn.

Balanced Resource Solutions, Woodbridge, Va.

Black Hills Regional Multiple Use Coalition: Members include representatives from the following organizations:

Continental Lumber Co., Inc., Hill City, S. Dak.
Intermountain Forest Industries Association, Coeur d'Alene, Idaho
Off Road Riders Association, Black Hawk, S.Dak.
Pope & Talbot, Inc., Spearfish, S.Dak.
South Dakota Trail Riders, Rapid City, S.Dak.
Wyoming Stock Growers Association, Sundance, Wyo.

Boardman, Suhr, Curry & Field, Madison, Wis.

Boise Cascade, Inc., Emmett, Idaho

Boise Cascade, Inc., La Grande, Oreg.

Boise County Commission, Idaho City, Idaho

California Department of Fish and Game

California Department of Natural Resources

California Forestry Association, Sacramento, Calif.

California Regional Water Quality Control Board, Lahontan Region

Carson Forest Watch, Taos, N.Mex.

Cascade Checkerboard Project (Sierra Club), Seattle, Wash.

Center for Market Pocesses, Inc., Fairfax, Va.

CH2M Hill, Portland, Oreg.

Chequamegon Area Mountain Bike Association, Cable, Wis.

City of Salem, Oreg.

Columbia Carolina Corporation, Old Fort, N.C.

Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oreg.

Defenders of Wildlife, Portland, Oreg.

Defenders of Wildlife, Washington, D.C.

Department of Forest Resources, University of Minnesota, St. Paul, Minn.

Duke City Lumber Company, Inc., Espanola, N.Mex.

Earth Satellite Corporation, Rockville, Md.

Eastside Ecosystem Management Project, Walla Walla, Wash.

Ecological Society of America, Washington, D.C.

Endangered Species Coalition, Washington, D.C.

Environmental Law Institute, Washington, D.C.

Environmental Policy Network, Alexandria, Va.

Forest Conservation Council, Santa Fe, N.Mex.

Forest Guardians, Santa Fe, N.Mex.

Forest Inholders Guarding Habitat Together (FIGHT), Parks, Ark.

Forest Trust, Santa Fe, N.Mex.

Friends Aware of Wildlife Needs, Georgetown, Calif.

Governor's Federal Forest and Resource Policy Team, Salem, Oreg.

Great Lakes Indian Fish and Wildlife Commission, Odanah, Wis.

Greater Ecosystem Alliance, Bellingham, Wash.

Green Bay Packaging Inc., Morrilton, Ark.

Hanson Environmental Consultants, Englewood, Colo.

Huron River Watershed Council, Ann Arbor, Mich.

Idaho Conservation League, Boise, Idaho

Idaho Department of Fish and Game

International Joint Commission, Detroit, Mich.

Jim Crouch and Associates, Russelville, Ark.

Karuk Tribe of California, Orleans, Calif.

Labat-Anderson, Inc., Arlington, Va.

Lac du Flambeau Band of Lake Superior Chippewa Indians, Lac du Flambeau, Wisc.

Land-of-Sky Regional Council, Asheville, N.C.

Lane County Commissioner, Eugene, Oreg.

Las Truchas Community Representatives, N.Mex.

Lewis and Clark College, Graduate School of Professional Studies, Portland, Oreg.

Maxwell School of Citizenship and Public Affairs at Syracuse University, Syracuse, N.Y.

Mead Corp., Escanaba, Mich.

Michigan Department of Natural Resources

Michigan State University, Department of Forestry, Lansing Mich.

Mississippi Forestry Commission, Jackson, Miss.

National Academy of Sciences, National Research Council, Board on Biology and Institute of Laboratory Animal Resources, Commission on Life Sciences, Washington, D.C.

National Academy of Sciences, National Research Council, Board on Environmental Studies and Toxicology, Washington, D.C.

National Association of State Foresters, Washington, D.C.

National Audubon Society, Rapid City, S.Dak.

National Audubon Society, Walla Walla, Wash.

National Resource Defense Council, Washington, D.C.

National Wildlife Federation, Portland, Oreg.

Natural Resources Services, Eureka, Calif.

North Carolina Council of Trout Unlimited, Asheville, N.C.

North Carolina Wildlife Resources Commission

Northwest Forest Resources Council, Portland, Oreg.

Northwest Forestry Association, Portland, Oreg.

Northwest Timber Workers Resource Council, Emmett, Idaho

Office of the Governor, State of Idaho

Office of the Governor, State of Oregon

Office of the Governor, State of California

Oregon Department of Environmental Quality

Oregon Forest Industries Council, Salem, Oreg.

Oregon Natural Resources Council, Portland, Oreg.

Ouachita Watch League, Sims, Ark.

Pacific Lumber & Shipping Co., Seattle, Wash.

Pacific Meridian Resources, Emeryville, Calif.

Pacific Rivers Council, Eugene, Oreg.

Pacific Watershed Associates, Arcata, Calif.

Paul Bunyan Snowmobile Club, Lakewood, Wisc.

Pinchot Institute for Conservation, Washington, D.C.

Plum Creek Timber Co., Seattle, Wash.

Quincy Library Group, Quincy, Calif.

Resource Issues, Inc., Wayland, Mass.

Rocky Mountain Elk Foundation, Custer, S.Dak.

Rogue Institute for Ecology and Economy, Ashland, Oreg.

Save America's Forests, Washington, D.C.

Seventh American Forest Congress, New Haven, Conn.

Sierra Club, Nevada City, Calif.

Sierra Club, North Carolina Chapter

Sierra Club, Rapid City, S.Dak.

Sierra Pacific Industries, Redding, Calif.

Sipapu Ski Area, Vadito, N.Mex.

Skagit County Commissioner, Mount Vernon, Wash.

Smithsonian Institution, Biodiversity and Environmental Affairs, Washington, D.C.

Society of American Foresters, Bethesda, Md.

Southern Appalachian Forest Coalition, Asheville, N.C.

Southern Appalachian Man and the Biosphere Project, Gatlinburg, Tenn.

Southern Appalachian Multiple Use Council, Waynesville, N.C.

Southern Timber Purchasers Council, Atlanta, Ga.

Southwest Center for Biological Diversity, Tuscon, Ariz.

Sustainable Biosphere Initiative, Washington, D.C.

T & S Hardwood Corp., Sylva, N.C.

The Nature Conservancy, Arlington, Va.

The Ruffed Grouse Society, Rice Lake, Wis.

The Willapa Institute, Seattle, Wash.

Trinity County Planning Department, Weaverville, Calif.

Umatilla Forest Resources Council, Walla Walla, Wash.

Union County Commissioner, La Grande, Oreg.

University of Arizona, Water Resources Research Center, Tuscon, Ariz.

University of Florida, Urban and Regional Planning, Gainesville, Fla.

University of Kansas Law School, Lawrence, Kans.

University of Michigan, Department of Natural Resources and Forestry, Ann Arbor, Mich.

University of Oregon, Labor Education and Research Center, Eugene, Oreg.

University of Utah, College of Law, Salt Lake City, Utah

University of Wisconsin, Botany Department, Madison, Wis.

Vallecitos Community Representatives, N.Mex.

Vilas County Forestry Department, Eagle River, Wis.

Western Ancient Forest Campaign, Stanwood, Wash.

Western North Carolina Alliance, Asheville, N.C.

Western States Foundation, Washington, D.C.

Wheelabrator Shasta Energy Company Inc., Anderson, Calif.

Wilderness Society, Atlanta, Ga.

Wilderness Society, Washington, D.C.

Wildlife Management Institute, Washington, D.C.

Wisconsin Department of Natural Resources

WNC Pallet & Forest Products Company, Candler, N.C.

World Resources Institute, Washington, D.C.

Comments From the Forest Service

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

United States Department of Agriculture | Forest Service | Washington Office | 14th & Independence SW
P.O. Box 96090
Washington, DC 20090-6090

File Code: 1420

Date: April 21, 1997

Mr. Victor S. Rezendes, Director
Energy, Resources, and Science Issues
Resources, Community, and Economic
Development Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Rezendes:

Thank you for allowing us the opportunity to review the General Accounting Office's (GAO) draft report entitled "Forest Service Decision making: A Framework for Improving Performance". We agree with many of the goals of the report. Since becoming Chief of the Forest Service approximately 3 months ago, I have identified resolution for many of the issues that GAO examined, such as clarity of the Forest Service mission, accountability, and streamlining processes and decision making, as our highest priorities.

Rather than responding to all of the individual issues identified in the report, my staff and I would welcome the opportunity to brief GAO in greater detail on all of the actions the Forest Service is taking to clarify the agency's long-term strategic goals, improve accountability, and streamline our administrative procedures. I would like to take this opportunity to summarize for you how we are proceeding to improve our decision making.

In order to lend context to that discussion, I think it is important to examine a few resource trends. In the past 10 years, timber harvest on Federal lands has gone from over 12 billion board feet per year to about 4 billion board feet per year. Federal lands that formerly supplied about 25 percent of the nation's softwood sawtimber today supply about 10 percent. At the same time, other uses of national forests are growing rapidly. For example, in 1980, 560 million recreational visits were made to national forests. That figure grew to about 860 million by 1996. We anticipate that figure will exceed one billion visits by the year 2000. Recreation on Forest Service managed lands contributes $112 billion dollars to state economies and local communities each year.

What these trends indicate is that we are in the midst of a profound social change--a change of values and priorities. In the past, the production of commodities such as timber drove Forest Service budgets, the incentive and reward systems, and much of the agency's wildlife and fish habitat management,

watershed restoration, and recreation projects. Timber from Forest Service managed lands helped build homes for servicemen and their families returning from World War II. It fueled the industrial growth of this Nation. It helped to sustain state economies and resource dependent communities.

Today, however, society's priorities are shifting. The Forest Service's management priorities must keep pace with scientific knowledge of ecological systems and society's values. We believe that the multiple-use mission of the Forest Service, caring for the land and serving people, is not "difficult to reconcile." In fact, it has never been more relevant than today.

See comment 1.

Strategic Goals

GAO states that:

> Strengthening accountability for performance within the Forest Service and improving the efficiency and effectiveness of its decision making is contingent on establishing long-term strategic goals that are based on clearly defined mission principles.

The Forest Service shares this belief and intends to use the Government Performances and Results Act to articulate these "mission principles." We will report these to Congress by September 1997, as required by law. It is erroneous and premature to state that there is a "lack of agreement" on the Forest Service's long-term strategic goals. In keeping with another GAO recommendation, we intend to thoroughly vet these goals with the American people and Congress.

See comment 2.

The full array of multiple-use benefits that Forest Service managed lands provide to the American people is dependent on healthy, diverse, and productive lands and waters. Thus, I envision that our key strategic goals will include such things as:

- Maintaining and restoring healthy aquatic, forest, and rangeland ecosystems.
- Maintaining and restoring healthy riparian areas.
- Providing for environmentally responsible uses of national forests and grasslands and improving their capacity to respond to increasing recreation demands.
- Promoting public/private partnerships to maintain productive, healthy, and diverse ecological systems.

Simply stated, the Forest Service believes that without first securing the health, diversity, and productivity of the land, we simply cannot meet the needs of people. Our intention is to work with people to develop and implement meaningful strategic national goals and on-the-ground measures that reflect these and other appropriate issues. Once developed, we will continue to build the public support base, financial systems, budget processes, and incentives to accomplish these priorities.

Improving Accountability

On my first day as Forest Service Chief, I told all Forest Service employees:

> Our first priority is to the land and the people who use and care for it; and our responsibility is to deliver. Every Forest Supervisor in the Nation will have new, clearly-defined performance measures in key areas such as:

- Riparian condition and forest health
- Water quality
- Watershed health and soil stability
- Rangeland health (e.g., reduction of noxious weeds)
- Management of fire dependent landscapes, and
- Endangered species habitat protection.

Within the goals of the Government Performance and Results Act we will include performance measures and standards for Forest Supervisors that relate to maintaining healthy ecological systems. We will begin to develop these measures immediately and in the interim we will use existing measures.

These measures will be aggregated to determine how well the Forest Service is meeting its strategic goals as identified in the Government Performance and Results Act. They will also result in tangible social and ecological benefits. For example, diminishing the spread of noxious weeds will help assure productive rangelands for livestock and wildlife. Reducing fuel loads will help to maintain sustainable timber supplies and reduce the risk of wildfires to human lives and private property. Healthy aquatic systems will improve fishing, water quality and quantity, and habitat for threatened and endangered plant, animal, and fish species.

The Office of Inspector General has commented on the financial systems of the Forest Service. We agree that many serious problems exist regarding financial systems and have started extensive analysis to begin to correct them.

Streamlining Administrative Procedures

See comment 3.

GAO states that:

> Reducing the costs and time of its decision making and improving its ability to deliver what is expected or promised have not been given adequate attention throughout the Forest Service.

It is important to note that implementing streamlined procedures and making better decisions will not always result in "predictability" or "stability" of outputs; stability and predictability of expectations from the people we serve; or stability and predictability from the lands we manage.

The ecological systems managed by the Forest Service are inherently dynamic and unpredictable. The Forest Service manages these systems within the context of changing social trends and economic conditions.

The multiple-use challenge of the Forest Service is to provide recreation opportunities, productive fish and wildlife habitats, clean water, timber products, forage, minerals development, etc., within the context of healthy, diverse, and productive ecological systems. All of the goods and services provided by Forest Service lands are dependent on the health of the land. Meeting our mandates such as healthy watersheds, multiple-use, sustained yield, and species preservation, are contingent upon sustaining healthy lands and waters.

Summarized below are some of the many steps the Forest Service is taking in partnership with other agencies, states, and the Administration to improve our decision making processes.

See comment 4.

Landscape Planning and Management: GAO uses the Columbia River Basin to note that "Federal land management plans have often considered effects only on portions of natural systems or portions of the habitats of wide-ranging species such as ... anadromous fish." GAO neglects to point out that interagency efforts underway in the Interior Columbia River Basin are intended to provide unified direction to 74 separate Federal land management plans. The assessment addressed 35 national forests and 17 Bureau of Land Management Districts. Similarly, President Clinton's Forest Plan for the Pacific Northwest considered the effect of land management actions on over 1,500 species and simultaneously amended 15 forest plans covering 24 million acres of public lands, including 19 million acres of National Forest System lands. Similar landscape-based assessments are underway in the Appalachians and the the Great Plains. A Sierra Nevada assessment was completed in June 1996.

See comment 5.

Section 7 Consultations under the Endangered Species Act: GAO cites compliance with Section 7 of the Endangered Species Act as an example of inefficiency due to "overlapping" federal jurisdictions. We disagree. The Administration instituted a new endangered species consultation process for salvage timber sales in March 1995 that directed consultation occur simultaneously with timber sale preparation. The process was adopted nationwide by an interagency memorandum of understanding and expanded to address a wide variety of land management actions.

The streamlined consultation process has been a success. Between September 1, 1995, and September 1, 1996, the procedures were applied to about 1,600 individual actions and 29 multi-action programs in the States of Oregon, Washington, California, and Idaho. These actions included over 280 green timber sales, 279 salvage sales, 111 silvicultural actions, 178 recreation projects, 164 grazing projects, and 80 maintenance actions. Informal consultations were completed, on average, in 17 days and formal consultations completed in less than 47 days on average.

An interagency work group is currently preparing a memorandum of agreement to streamline program level consultations. This will further save the agencies time and effort, and reduce the need for more time-consuming formal consultations, while assuring better designed projects.

Streamlining the National Environmental Policy Act: In 1996, the Council on Environmental Quality identified five areas that are critical to making effective decisions under the National Environmental Policy Act; these included improving:

- Strategic planning
- Public information and input
- Interagency coordination
- Interdisciplinary and landscape approaches to decision making, and
- Use of science and adaptive management.

See comment 6.

Working together, the Council on Environmental Quality and the Forest Service are developing a model for use of the National Environmental Policy Act that will focus less on preparation of lengthy environmental documents and more on making better decisions and fully involving more people in management of their lands. The model is being tested on six national forests including the Caribou (Idaho), Wenatchee (Washington), Santa Fe (New Mexico), Grand Mesa (Colorado), Uncompahgre (Colorado), and Gunnison (Colorado) national forests. Tenets of the new decision making model include:

- Structured analysis by interdisciplinary teams
- Larger, ecologically-based analysis areas
- More clearly defined understanding of the purpose of, and need for, environmental analyses
- More effective integration of data and new information into decisions
- Fewer alternatives considered in greater detail
- Setting and monitoring environmental thresholds, and
- Adapting management direction as monitoring indicates that thresholds are being approached.

National Forest Management Act Planning Regulations: The Department of Agriculture released the proposed draft planning regulations in April 1995. When finalized, these planning regulations will: 1) streamline forest planning procedures and plans; 2) strengthen relationships with the public and with other State and Federal agencies and Indian tribes; 3) incorporate ecosystem approaches into decision making; and 4) clarify the agency's planning and decision making framework.

See comment 7.

See comment 8.

See comment 9.

Conservation Statutes

GAO repeatedly references "conflicting laws" and the "growing consensus" for new legislative mandates. We agree that there is an ongoing debate in this nation over how national forests and grasslands should be managed. We believe that to be a symptom of a greater understanding of the effects of management actions on the land and changes in social values. This debate is healthy and an important part of the democratic process that determines how the Federal lands are to be managed. Changes in existing environmental statutes should be the last step in improving management efficiency and performance. I believe the Forest Service has yet to exercise the full discretion it has under existing laws to improve management and decision making. The people we serve, all of the people, are now more fully engaged in defining the goals of the Forest Service.

The Forest Service strongly believes that we are a better, more secure, and stronger Nation because of laws such as the Clean Water Act, the National Environmental Policy Act, the Endangered Species Act, and the National Forest Management Act. These laws represent the conservation values of mainstream America. The debate surrounding their execution is background noise to a complex society and healthy, properly functioning democracy.

The challenge of the Forest Service is to link our processes, rewards, and incentives to the health of the land and water--not specific program areas. If we do not, then when specific programs falter and when society's values shift, as happened during the past 10-20 years, the agency itself suffers.

Thank you for the opportunity to review your draft report.

Sincerely,

Mike Dombeck

Mike Dombeck
Chief

The following are GAO's comments on the Forest Service's letter dated April 21, 1997.

GAO Comments

1. Our report does not state that the agency's multiple-use mission is difficult to reconcile. Rather, our report cites numerous examples of disagreements, both inside and outside the Forest Service, over (1) which statutorily specified uses the agency should emphasize and (2) how it should ensure sustainability and resolve conflicts among uses under its broad legal mandate to provide for both the multiple use and the sustained yield of resources on its lands. While the agency's intention to consult with the Congress on its long-term strategic goals as a part of its implementation of the Government Performance and Results Act (GPRA) is in accord with our report's recommendation, as the agency's comments themselves go on to note, this process is not yet complete. The ongoing disagreements, noted in our report, over the goals in the agency's 1995 draft long-term strategic plan suggest that this consultation process faces unresolved obstacles and that the lack of agreement on goals, needed for good management, has hampered the agency's efficiency, effectiveness, and accountability. Thus, we do not believe that our report is erroneous or premature in noting the existence of disagreements over the agency's strategic goals.

2. The examples of strategic goals for implementing GPRA identified prospectively in the Forest Service's comments do not include, as does the agency's 1995 draft long-term strategic plan, the goal of ensuring organizational efficiency and effectiveness. This goal is identified in our report as the central one for measuring the agency's progress in taking the actions that are needed to improve the agency's decision-making. In part because the Forest Service needs to better integrate GPRA's processes into its own decision-making process, our report also suggests that the Congress needs to consider the costs and benefits of the Forest Service's developing two separate long-term strategic plans.

3. We agree that the ecological systems within which the Forest Service's management activities take place are inherently dynamic, and our report notes that this dynamism, among other factors, affects the predictability of planning outcomes. However, our report also identifies several actions, suggested to enhance predictability, that the Forest Service has not undertaken. These include monitoring, obtaining better data, and strengthening public involvement, as well as shortening planning periods and better linking budgets and plans.

4. We concur that large-scale assessments, such as that being undertaken in the Interior Columbia River Basin, are intended to address issues that transcend the boundaries of individual management units. Our purpose in discussing these efforts is precisely to indicate that they provide a basis for applying unified direction on these issues across multiple land management plans.

5. Our report recognizes that the time for conducting some consultations has been reduced. However, our report also cites an October 1996 interagency team's analysis and other studies that identify ongoing serious problems with interagency coordination. Additionally, our report does not attribute inefficiency in complying with section 7 of the Endangered Species Act to overlapping jurisdictions; instead, it merely states that delays in implementing forest plans and reaching agreement on project-level decisions have been caused by inadequate interagency coordination.

6. We agree that the stated tenets of this model are largely consistent with our report's findings and recommendations. However, as our report states, our own observation of a field test of this model showed that, without adequate data—which were lacking during the test we observed—the model was difficult, if not impossible, to implement. Moreover, as our report also notes, the Forest Service has decided that the implementation of the model by its field units will be voluntary.

7. We agree that the ongoing debate over how national forests should be managed is a healthy and important part of the democratic process. We also agree, both as a general rule and in this instance, that statutory changes should not be undertaken until after it has been shown that regulatory or other executive branch actions cannot efficiently and effectively resolve identified problems. However, our report does not state that there is a growing consensus for new legislative mandates due to conflicting laws, nor does it recommend changing environmental laws. Rather, it cites evidence of (1) growing concerns by several parties, both inside and outside the agency, over difficulties in resolving differences among the requirements of some statutes and (2) increasing support among a wide spectrum of observers for undertaking an analysis of the laws to identify what statutory changes, if any, may be needed.

8. While the Forest Service may not have exercised its full discretion under existing laws to correct the management and decision-making problems identified in our report, it does not identify the source of such unused

discretion or indicate how exercising full discretion might obviate the usefulness of analyzing statutory provisions. As our report notes, in recent years the agency has not revised its procedures for monitoring, collecting data, and involving the public, as its own studies have repeatedly suggested, to resolve problems.

9. Overall, we believe that implementing the actions proposed generally here and elsewhere in the agency's comments would improve the efficiency and effectiveness of its decision-making process. However, our report notes that although the Forest Service can and does identify problems, without external attention it often fails, as its own analysis indicates, to take corrective action. In this case, for instance, we note that the agency's comments do not discuss either a schedule to implement the proposed improvements or a plan to closely monitor progress and periodically report on performance. We believe both are needed to break the cycle of studying and restudying issues without any accountability or clear sequence of steps for resolving them.

Comments From the Council on Environmental Quality

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY
WASHINGTON, D.C. 20503

April 17, 1997

Mr. Victor S. Rezendes
Director, Energy, Resources, and
Science Issues
General Accounting Office
Washington, D.C. 20548

Dear Mr. Rezendes:

Thank you for the opportunity to review and comment on GAO's proposed report entitled Forest Service Decision-Making: A Framework for Improving Performance. We are pleased to submit the following comments relating to those portions of the report that address the Council on Environmental Quality's (CEQ) role in overseeing the National Environmental Policy Act (NEPA).

See comment 1.

At the outset, we would like to observe that we agree with the underlying goals articulated in the draft report of promoting interagency collaboration, better use of the tiering process, and improved data for NEPA analyses. Any differences with the draft report concern only the mechanisms best suited to achieve those goals.

In addition I would like to comment on the timeliness of the GAO report, as CEQ is working hard to work on reinvention of NEPA implementation on a very ambitious scale - both on a case by case basis and on a more generic basis. We are looking generically at three sectors - timber, grazing, and oil and gas with all the agencies that deal with those issues and seeking common ground, common sense reforms that can make NEPA implementation in those sectors cost less, take less time and better serve the user communities and the public.

The CEQ regulations implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508) are necessarily generic in nature as they apply to every federal agency in the executive branch. The differences between the culture, organization and institutional goals of these agencies differ dramatically, as well as the substantive nature of their underlying missions. In our NEPA regulations, CEQ has sought to identify those procedural requirements that serve as common ground to fulfill the true purpose of NEPA - which, to quote the regulations themselves, "is not to generate paperwork - even excellent paperwork - but to foster excellent action."

See comment 2.

A case in point is the proposed report's recommendation that CEQ consider changes to CEQ's regulations that would "require, in the case of regulations rather than merely allow, federal agencies to tier plans and projects to broader scoped studies". The Clinton-Gore Administration indeed has initiated an unprecedented planning and NEPA analyses on a broad scale, especially in the context of land management. The Pacific Northwest Forest Plan was the first such multi-forest and land management unit, affected by the Administration's policy of

ecosystem management. However, we seriously question the feasibility of defining the optimal level of decisionmaking and analyses for every federal agency and for all types of actions in a single rulemaking. The scale of analysis must be determined by the scope of the decision to be made, and that scope varies significantly throughout the federal government. It is most appropriately decided by the agency proposing the action, in consultation with CEQ. CEQ has actively worked with agencies in furtherance of this approach. We feel it has been effective.

See comment 3.

One of the most important steps in this regard was the elimination of duplication between the processes for complying with NEPA and the Endangered Species Act for Habitat Conservation Plans (HCPs). These are plans that permit landowners to conduct certain activities over a long period of time, with the certainty and stability of a site-specific tailored agreement. Previously, applicants were going through two separate processes to comply with the two statutes. This resulted in duplicative analyses and public hearings for the same actions. This duplication has now been eliminated, significantly reducing permit processing time for private applicants. In fact, even the most complex HCP can now be completed in under ten months.

CEQ has also expended considerable effort in working with the Food and Drug Administration (FDA) over the past two years to streamline their NEPA process. According to the FDA, the changes being made as a result of that effort will result in an annual cost savings to industry of approximately $15.7 million, as well as improve FDA efficiency by eliminating unnecessary agency review costs of approximately $1 million. Equally important is that the regulations do not compromise the FDA's efforts to promote NEPA's policies and goals for better, more informed decision making.

Similarly, CEQ worked with the Department of Energy (DOE) as they developed proposed revisions to their NEPA regulations. DOE's final rule includes several streamlining features such as: establishing new categorical exclusions; expanding existing categorical exclusions; and eliminating the preparation of extensive documentation prior to preparation of an environmental impact statement (EIS). In consultation with CEQ, DOE simplified public notification requirements and streamlined the requirement for the content of Finding of No Significant Impact. These changes, and others like them, focus available resources on significant assessment process is useful to decisionmakers and the public.

CEQ is currently working with the Department of the Air Force to find streamlining opportunities. One clear opportunity to save time and money is to eliminate the necessity to have public hearings instead of informal public meetings. We have pointed out to the Air Force that public hearings are more expensive and not required by CEQ regulations. We are also reviewing additional categorical exclusions which will reduce the amount of documentation associated with Air Force NEPA compliance. We are also jointly exploring opportunities for integrating analytical requirements, eliminating duplication of effort. We expect that these revised regulations will be final this summer.

CEQ and the Federal Highway Administration (FHWA) cosponsored a conference in 1995 which focused on methods to streamline the NEPA process used in the development of highway projects. As a result of this very productive conference, the Department of

Transportation (DOT) is developing a proposed rulemaking that will link NEPA and its principles to DOT's decision making process. The proposed rules will affect the Federal Transit Administration (FTA) and the Coast Guard. The objective of these DOT agencies is to develop a single NEPA regulation that will reduce paperwork, streamline and expedite transportation planning and decision making, and lead to one overall public interest decision that integrates social, economic and environmental protection and community and neighborhood sustainability.

CEQ is also working with other agencies as they amend their NEPA procedures, including the Department of Housing and Urban Development and the Department of the Army. I want to reiterate that CEQ will continue to take advantage of these reinvention opportunities but we hope to institute even more sweeping changes through our NEPA Reinvention initiative.

See comment 4.

In the case of the Forest Service, the decisionmaking process for the national forest system is set forth in the National Forest Management Act (NFMA). The Forest Service has proposed amendments to the regulations implementing NFMA that would modify the levels of decisionmaking currently utilized. CEQ will work with the Forest Service on the best strategies for linking NEPA with the planning process under NFMA, and we expect that changes of this nature would also be reflected in changes to the Forest Service's NEPA procedures. But these changes would be tailored specifically to the Forest Service's processes and would not be intended to apply across the board to all other federal agencies.

See comment 5.

On a more technical note, we note on p. 93 the suggestion that federal agencies could voluntarily conduct broader-scoped analyses, which could then be used as "guides" during the agencies' decision-making processes and would not be subject to CEQ's regulations. It is not clear whether the suggestion is that these broader "guides" could permit agencies to tier directly to site-specific analysis. However, as we understand the intended nature of the "guides", agencies would not be able to tier from them because they were not subject to CEQ's regulations.

See comment 6.

The proposed report also recommends improving interagency coordination and collaboration, and suggests that rulemaking may be preferable to the use of interagency agreements to achieve those improvements. We heartily agree with the basic recommendation, and are constantly striving to accomplish those goals. It is not clear to us, however, precisely what regulatory changes the authors of the report contemplate in their discussion on this topic.

See comment 7.

The CEQ regulations currently set forth as one of their main purposes emphasizing cooperative consultation among agencies before analyses are prepared rather than submission of adversary comments on a completed document (40 CFR 1501.1.). They set forth detailed guidance regarding the relationships between lead agencies, cooperating agencies and joint lead agencies and provide for a dispute resolution process if interagency agreement is not reached on either the procedural relationship of the agencies to each other (40 CFR 1501.5) or if significant disagreement occurs between federal agencies on the proposed outcome of the process (40 CFR 1504.). They require the lead agency to invite the participation of all affected federal agencies (along with state, local agencies and affected Indian tribes) early in the process at the scoping stage (11501.7). The regulations also require federal agencies with jurisdiction by law or special expertise with respect to any environmental impact involved and agencies which are authorized to develop and enforce environmental standards to comment on environmental impact statements

within their jurisdiction, expertise, or authority, within the time period specified for comment. (40 CFR 1503.2), and they require the lead agency to respond to substantive comments in a meaningful way (40 CFR 1504.3). Procedures for one federal agency adopting another agency's NEPA analyses are set forth in the regulations (40 CFR 1506.3). Finally, CEQ guidance interpreting the regulations, both formally and informally, has consistently emphasized the need for interagency coordination and collaboration.

Despite this long litany of requirements, we acknowledge that, as the draft report says, federal agencies do not always work well together. That unfortunate fact is true despite the existence of regulatory requirements that are designed to promote interagency coordination and collaboration. It is for that very reason that CEQ has utilized interagency agreements to apply the generic regulatory direction to a set of specific interagency actions where we have identified the need for improvement. And, as the report itself notes, those efforts have borne some notable fruit (for example, the 50% reduction in time needed for environmental review cited on p. 99). We will continue to strive to learn from these agreements what works and what doesn't and, to the extent that our resources permit, to monitor the implementation of these agreements. We would note in this regard that the President's fiscal year 1998 budget requests four additional FTEs to enable CEQ to better undertake our NEPA reinvention effort and that effort focuses on, among other issues, improved interagency coordination and collaboration.

See comment 8.

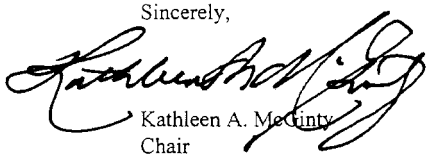
Further, the draft report recommends that the Chair of CEQ identify a baseline of comparable environmental and socioeconomic data that are needed and assume or assign responsibility for collecting, managing and making the data available to other users. We would note that no common set of data is appropriate for all scales of decisionmaking, and some of the multi-forest planning processes are, in fact, generating important data at a new level. Over the years, CEQ has been involved in numerous efforts to evaluate environmental data and trends and much of that experience is reflected in the President's annual Environmental Quality Report to Congress. We agree that with significant additional resources, however, further work could be accomplished in this area. Realistically however, it would be difficult to achieve a level of funding and staffing adequate to that need.

See comment 9.

On a final note, we are encouraged by the priorities that the new Chief of the Forest Service, Mike Dombeck has identified: improving agency accountability, decisionmaking process, and interagency cooperation.

Again, we appreciate the opportunity to comment on the draft report.

Sincerely,



Kathleen A. McGinty
Chair

KAM/pgu

The following are GAO's comments on the Council on Environmental Quality's letter dated April 17, 1997.

GAO Comments

1. GAO agrees with the Council on Environmental Quality (CEQ) that (1) differences among the cultures, organizations, and institutional goals of various federal agencies, as well as the substantive nature of their underlying missions, require the Council's regulations implementing the act to be generic in nature and (2) regulatory changes often need to be tailored specifically to the agencies' individual processes. However, the thrust of GAO's recommendation to the Council's Chair is intended to ensure that the Council's planned multiyear reinvention effort does not prematurely or arbitrarily close off options for improving the efficiency and effectiveness of the act's implementation across federal agencies' administrative boundaries and jurisdictions.

2. We agree that defining the optimal level of decision-making and analysis for every federal agency and for all types of actions in a single rulemaking would be problematic, and our report does not recommend such an effort. Rather, we believe that CEQ is in the best position to determine, on the basis of the findings of its reinvention analysis, the manner and number of additional rulemakings or guidance issuances under the National Environmental Policy Act (NEPA) that would best meet the needs identified in our report.

3. We agree that the examples cited by CEQ of its work with other agencies indicate many differences in the missions, issues, and circumstances these agencies face. However, we also note several points that these streamlining and analytical efforts have in common, such as simplified and improved public participation, expanded categorical exclusions, and reduced duplication of effort, which our report identifies as improvements also needed in CEQ's work with the Forest Service. Our recommendation that CEQ consider additional guidance and rulemaking is directed to resolving these problems, which affect many agencies—not to addressing problems that are unique to particular agencies.

4. We agree that not all proposed changes to the Forest Service's regulations for implementing NEPA should be applied "across the board to all other federal agencies." However, our report does not suggest this. Rather, it suggests that CEQ needs to ensure consistent treatment under NEPA of the same or related issues arising among multiple land management agencies operating in the same geographic areas, instead of

pursuing a disaggregated agency-by-agency approach. This same consideration applies to CEQ's disaggregated 'sector-by-sector' approach mentioned in the third paragraph of CEQ's comments, since interactions among separate activities that disturb soil, vegetation, or wildlife habitat (e.g., timber harvesting, grazing, or oil and gas development) in the same geographic area (e.g., the same watershed) need to be considered under NEPA, as does their cumulative impact.

5. We have modified the language in our draft report to state more clearly that a potential weakness of such voluntary broad-scale analyses is that agencies would not be able to tier their site-specific decisions to such analyses under NEPA.

6. We do not recommend precise changes to regulations or guidance to improve interagency coordination or address other issues because we believe such changes are better left to CEQ to determine on the basis of its own internal study and evaluation of the outside views solicited during its effort to reinvent federal agencies' implementation of NEPA.

7. We recognize that CEQ already has regulations and guidance requiring cooperative consultation among agencies before analyses are prepared, as well as addressing other aspects of interagency coordination. However, our report points out that these regulations and guidance are often not followed, and our recommendation calls on CEQ to make its directives clear and precise enough to ensure that this does not continue.

8. We agree that a common set of data would not be appropriate for all scales of decision-making and recognize that different data may be applicable to different scales. However, our report—which cites, among other authorities, the 1995 findings of the interagency task force chaired by CEQ—emphasizes that CEQ needs to clarify what different kinds of data are needed at which scales and how the data should be related to different types of tiered decisions.

9. We do not disagree that CEQ's current resources may not be sufficient to adequately implement our recommendation. However, although our report cites the 1996 study of CEQ's role prepared for the Henry Jackson Foundation, which noted that CEQ needed additional resources to adequately carry out its responsibilities under NEPA, an analysis of such needs was beyond the scope of our review. Additionally, our report does not recommend that CEQ itself necessarily collect all ecological and socioeconomic data. Rather, it says CEQ should identify what data are

needed and includes the option that CEQ assign others to collect the data as appropriate. Finally, as our report notes, the Forest Service's internal reengineering team report indicated that the establishment of centralized or jointly administered databases would ultimately reduce costs by eliminating duplication of effort among and within agencies.

Major Contributors to This Report

Energy, Resources, and Science Issues

Charles S. Cotton
Alan J. Dominicci
Brian W. Eddington
Charles T. Egan
Elizabeth R. Eisenstadt
Chester M. Joy

Office of the General Counsel

Doreen Stolzenberg Feldman
Alan R. Kasdan

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066, or TDD (301) 413-0006.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

United States
General Accounting Office
Washington, D.C. 20548-0001

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Official Business
Penalty for Private Use $300

Address Correction Requested