

## The RPA Program

---

RPA requires the Secretary of Agriculture to transmit a renewable resources Program to the President “to provide for periodic review of programs for management and administration of the National Forest System, for research, for cooperative State and private Forest Service programs, and for conduct of other Forest Service activities in relation to the findings of the Assessment. . .’ The RPA Program is to be developed in accordance with the Multiple-Use Sustained-Yield Act of 1960 and the National Environmental Policy Act of 1969 (NEPA). RPA specifies that the Program shall include (see appendix for the full text of the Act):

1. an inventory of needs and opportunities for public and private investments, differentiating between capital and operational activities;
2. identification of Program outputs, likely results, and benefits from investments, such that anticipated costs can be compared with total benefits and with direct and indirect returns to the Federal Government;
3. a discussion of priorities for accomplishing the inventoried opportunities, with costs, outputs, results, and benefits;
4. a study of personnel requirements for implementing and monitoring activities; and
5. recommendations which—
  - a. evaluate objectives for the major Forest Service programs to assure multiple-use and sustained-yield of the renewable resources;
  - b. explain the opportunities for private owners of forests and rangelands to participate in programs to improve and enhance the condition of the land and the renewable resources;
  - c. recognize the fundamental need to protect and improve soil, water, and air quality;
  - d. state national goals that recognize the interrelationships between and interdependence among the renewable resources; and
  - e. evaluate the impact of log exports on domestic timber supplies and prices.

Congress clearly intended the recommended RPA Program to be the agency’s strategic plan, with periodic reviews to examine whether the current

direction is the most appropriate direction. Because the Administration and Congress are the ultimate decisionmakers, however, the Program is required to include an inventory of opportunities, the identification of costs and results, and a discussion of priorities. Thus, the Program must have an adequate information base to describe opportunities and impacts of alternative directions for Forest Service programs and activities.

RPA required the first Program to be transmitted to Congress by the end of 1975, with an update by the end of March every fifth year thereafter. The 1975 RPA Program established resource output goals and budget targets beginning with fiscal year 1977, and outlined renewable resources management needs for 1977 to 2020. Because of the short time period between the signing of the law and the date the first program was required, many saw the 1975 effort largely as a trial run. The first full-scale set of recommendations under the RPA came in the 1980 Program (84).

The 1980 Program established two sets of output goals and budget targets, the high-bound and low-bound, beginning with fiscal year 1981. These two levels appeared to set quite different strategic directions, based on differing views of budget and resource priorities. The Senate Agriculture Subcommittee on Environment, Soil Conservation, and Forestry strongly criticized the 1980 Program. The 1985 program retained the high-bound/low-bound approach, and established goals and targets beginning with fiscal year 1986, although its release was delayed until early in fiscal year 1987 (85). Because of the internally inconsistent direction and the delays in release, neither the 1980 nor the 1985 Program has been an effective strategic plan for the Forest Service.

### STRUCTURE OF THE DRAFT 1990 RPA PROGRAM

The format for the Draft 1990 RPA Program differs substantially from that of previous Programs. The Draft 1990 Program defines several possible roles for the Forest Service, examines 15 issues, and defines five strategies to fulfill various selected roles. The Draft Program also examines how several

special Forest Service initiatives are affected by its choice of roles and strategies. This role-and-strategy approach contrasts with that of previous RPA Programs which were driven by goals identified during Program development (42).

### *Roles*

*The Draft 1990 RPA Program* identifies eight Forest Service roles, grouped into four categories, that provide general direction for agency interactions with the Administration, Congress, and the public:

- National Resource Management
  - Role 1: Multiple-use management
  - Role 2: Future resource opportunities
- Local Resource Management
  - Role 3: Contributions to local economies
  - Role 4: Management in mixed ownerships
- Research
  - Role 5: Scientific information
- Complementary
  - Role 6: Resource inventory and analysis
  - Role 7: Natural resources communication
  - Role 8: International forestry

Irland (48) described these eight roles as important in adding to the Program's review of Forest Service activities. He also criticized the discussion of the roles as 'not crisply set forth in clear terms,' Claiming that the Forest Service has defined the roles "indirectly, by listing activities falling into the role areas discussed" rather than defining the roles themselves (48). He concluded that the roles do not really provide the "strong common thread that ties an RPA Program together," alluded to in the Draft 1990 program. Wolf pointed out that Congress has already defined roles for the Forest Service: land management, research, and cooperative assistance (152). As the Draft 1990 Program now reads, research and cooperative activities "are treated as almost an after thought" (152). For the RPA Program to effectively address resource needs, Wolf claims that both research and assistance "should be elevated and made visible," with alternatives offered that discuss maintaining, revising, or dropping each of the three roles.

Most of the roles reflect the dominance of national forest management in Forest Service thinking. One role proposes a two-pronged approach for Forest Service research: 1) to expand the scientific information on multiresource problems, using an ecosystem

approach and emphasizing amenity resources; and 2) to increase the understanding of how natural resources are affected by broad environmental changes, including those that are global in scope. Research is a minor consideration in other proposed roles. Cooperative assistance is discussed in the two natural resource management roles **as well as in the** communications role. Increased assistance for multiple-use management of State and private lands is discussed, but cooperative assistance is proposed to **"increase technical and financial assistance to stimulate timber production"** (116). Except for the scientific information and international forestry roles, national forest management is the focus of current and proposed Forest Service actions.

### *Issues*

Decisions to include or omit policy issues in the program have varied throughout the history of the RPA process. After the General Accounting Office (GAO) and others criticized the 1975 RPA Program for not containing a discussion of policy issues, the Forest Service revised the 1980 Program format to include issues. The 1980 Assessment and Program generated positive reactions from conservationists because of the greater emphasis on issues, which they hoped would lead to greater responsiveness to their concerns (50). The 1980 RPA Program included some unconventional ideas, such as making recreation the dominant use of the eastern National Forests and making the Forest Service a government corporation. An internal Forest Service review team, however, concluded that this effort did 'not respond to what GAO apparently intended in its recommendation that there be a discussion of issues' (53). After making this determination, the Forest Service did not include a discussion of issues in the 1985 Program, and was again criticized for this omission.

Hewitt (45) examined ways to improve the effectiveness of issue identification in the RPA process. He recommended that the Forest Service develop better mechanisms to involve more people in the process, and suggested establishing an annual conference to facilitate this. Such a proposal is consistent with the scoping process required by NEPA as part of public participation, and would be more consistent with a strategic planning process for the public sector.

The Draft 1990 RPA Program identifies 15 issues that the Forest Service claims "fit into the strategic

planning nature of the RPA Program” (116). The issues selected met three criteria: a) national significance, b) impact on several Forest Service programs, and c) implications for the recommended 1990 RPA Program. The 15 issues in the Draft are:

- changing recreation needs;
- endangered, threatened, and sensitive species;
- riparian management;
- water quality;
- air quality;
- catastrophic fires;
- range condition;
- minerals development;
- below-cost timber program;
- old-growth forests;
- clearcutting;
- timber supply from nonindustrial private lands;
- international forest-products competitiveness;
- biological diversity; and
- global climate change.

These issues cover many of the current concerns of the individuals and groups interested in forest and rangeland resources. Only timber industry competitiveness is not a resource issue, while timber supply concerns are unnecessarily restricted to nonindustry private lands. A number of other important issues—e.g., grazing fees, log exports, timber taxation, wilderness management, local regulation of forest practices, and the nature of and changes in resource-dependent communities—are not included in the 1990 Draft.

The agency's issue responses in the Draft 1990 RPA Program are not very useful. Alternative responses are not explored, and some responses are simply a description of current policies. For example, below-cost timber sales continue to be a concern for many groups, but the agency's response was to describe the new timber accounting system. A strategic planning approach would consider possible responses, such as modifying sale design to enhance revenues, altering sale practices to cut costs, researching mill efficiency to improve purchaser profitability, subsidizing timber production on private lands, etc. Then, the Forest Service would have possible responses that could conform to the various strategies proposed and to the recommended Program when it is complete. This would allow the Forest Service to respond to concerns in a manner consistent with the strategic plan.

## *Strategies*

Chapter 5 of the Draft RPA 1990 Program identifies five possible long-term program strategies:

1. continue budget and relative resource emphasis of the 1980s;
2. implement local resource plans;
3. high-bound 1985 RPA Program (adjusted);
4. special emphasis on responding to the 1989 RPA Assessment; and
5. shift resource balance among private and public lands.

There is relatively little information on how these strategies were developed; the section in the Program titled “How the Forest Service Developed Strategies” lists the strategies, but does not describe their development. Irland (48) criticizes the strategies, noting that:

... the strategies identified are really output mixes, not strategies. They represent a set of incremental changes from present patterns. In a few cases, the summaries of strategy contain terms that better express a strategic sense of what is being proposed. We learn that High-Bound—a meaningless phrase to people who have not followed RPA history—is really a strong emphasis on revenues and net public benefits. And “shifting resource balance among private and public lands” is really a proposal to reduce emphasis on commodity production on national forests.

Most of the strategies are not consistent with the strategic planning intent of RPA. Strategy 1 is a simple continuation of the status quo and contains no strategic guidance for Forest Service activities; an unexamined continuation implies no strategic thinking. Strategy 2 suggests that the forest plans be implemented, implying that the agency has not really decided to implement these locally developed plans, generated with so much public attention and cost. Furthermore, an aggregation of local decisions is not strategic planning for an organization. Strategy 3 proposes following a previous recommendation, the 1985 RPA High-Bound Program, that was based on the previous Assessment (rather than on the current situation analysis) and was not really implemented. Strategy 4—“Emphasize responding to the Assessment”—likewise indicates that whether and in what ways the Assessment should drive programs remains an open question. Only Strategy 5 presents an attempt to define an alternative way of meeting

the resource problems and opportunities identified in the 1989 RPA Assessment. Furthermore, except for Strategy 1, the various strategies establish surprisingly similar direction for Forest Service activities.

### Cooperative Assistance

Strategy 1 continues the current program direction and level for cooperative assistance. A **variation**—Strategy 1A—would **eliminate** financial assistance, but no explanation is offered for why this variation is presented nor of why it might be appropriate.

Cooperative assistance programs in the other strategies are quite similar, with total costs remaining within a very narrow range (between 4 and 5 percent) of the total Forest Service budget (42). The two largest programs—pest management and fire protection—appear to be virtually the same under these strategies. Overall, under the Draft 1990 RPA Program, the direction for cooperative assistance will be quite similar—in focus and in total funding—under any of the strategies, except Strategies 1 and 1A. One might expect greatest reliance on cooperative assistance in Strategy 5 and this strategy does yield generally greater results from cooperative assistance than the other strategies. However, these results are achieved at lower costs than most other strategies, which leads one to wonder why any other strategy would ever be selected.

### National Forests

The Draft 1990 RPA Program focuses strongly on the national forests, not surprisingly, since they account for about 90 percent of total Forest Service expenditures. The Draft acknowledges that the analyses of environmental and economic effects have only been done for the National Forest System because of difficulties in extending these analyses to private lands (116). However, when one management strategy contemplates shifting commodity production toward private lands, and away from Federal lands, excluding environmental and economic effects from private land management seriously skews the results (11).

Except for Strategy 1, all strategies anticipate substantial increases in funding, outputs, and receipts for nearly all resources by 2040. Recreation shows surprisingly consistent increases under Strategies 2 through 5. By 2040, funding will increase by 164 to 187 percent over 1987 funding, accounting for 14 to 15 percent of national forest funding

(compared with 8 percent in 1987). Use is expected to increase by 85 to 111 percent, and receipts to increase within a smaller range, by 90 to 104 percent. Strategy 5 generates the greatest use and the highest receipts at the lowest cost; this probably results from *the* shift of commodity production toward private lands, although this rationale is not documented.

Funding projections for range forage and for water programs are fairly consistent across Strategies 2 through 5, but range forage shows markedly different use and receipt projections. Forage use would decline under Strategies 4 and 5, while increasing under Strategies 2 and 3. However, receipts are projected to increase by two to three times current receipts under all strategies, even for the 10 percent use decline under Strategy 1. The rationale for this implicit rise in Federal grazing fees is not presented, but is certainly contrary to the trend of the past 20 years.

Timber funding and outputs in 2040 have the smallest changes from 1987 levels for any resource, but with much variation among the strategies. Funding and sales offerings would decline by 7 percent under Strategy 5, increase by 27 percent under Strategies 2 and 4, and increase by 38 percent under Strategy 3. However, gross timber receipts in 2040 will be substantially above 1987 receipts, ranging from \$2.4 to \$2.5 billion under all strategies (including under Strategy 1).

Wildlife and fish management shows the largest increases and the largest range of increase in funding and use levels. Use and funding are projected to at least double and possibly quadruple by 2040, with Strategy 5 showing the greatest increase, followed closely by Strategy 4. Wildlife and fish funding is also projected to account for a larger share of funding, rising from 3 percent of the 1987 national forest funding to 5 percent under Strategies 2 and 3, to 8 percent under Strategy 4, and to 10 percent under Strategy 5. Thus, Strategy 5 and, to a lesser extent, Strategy 4 clearly emphasize wildlife and fish activities in the National Forest System.

Wilderness is treated as a subset of recreation, and thus the Draft 1990 RPA Program contains virtually no data on funding or on the estimated roadless acreage or extent of the Wilderness System. It was noted that “acres in the Wilderness System increase . . . about 25 percent’ under Strategies 2 through 5(1 16), but that total roadless area (and thus roadless area outside the Wilderness System) will

decline by “about one-third from the 1987 level” under Strategies 2 through 4, and by a lesser amount under Strategy 5 (116).

### Research

Some of the strategies discussed in the Draft 1990 Program, particularly Strategies 1 and 3, do not respond to the two-pronged approach to research proposed under the roles (42). Strategy 1 proposes no change in the level or mix of Forest Service research programs. This is consistent with the findings in the individual resource Assessments on the need for commodity-related research, but does not respond to Assessment findings on research needs for other resources. Strategy 3 responds to needs for timber-related research at the expense of research on recreation, wildlife, fish, and water.

The other strategies do a better job of responding to the research roles proposed in the Draft 1990 RPA Program. Strategy 2 places more emphasis on multiresource studies, non-commodity resources, and broader based issues such as biodiversity, although how this direction can be derived from local resource plan implementation is unclear. Strategy 4 emphasizes research on recreation and wildlife and fish, especially nongame wildlife and threatened and endangered species. In its attempt to focus on integrated rather than single-function concerns, support for national forest programs declines somewhat in this strategy. Strategy 5 also emphasizes research on recreation and wildlife and fish, especially habitat management in the framework of biodiversity issues. The slight decrease in timber-related research is marked by greater emphasis on holistic management strategies.

By 2040, research gains an increased share of the Forest Service budget under all of the strategies except Strategy 1. The research share of total Forest Service expenditures rises from 7 percent in 1987 to 11.5 percent by 2040. Even with the proportionate increases in funding for research in Strategies 2 through 5, however, the array of research needs identified in the several individual resource Assessments cannot be addressed adequately (42).

### International Forestry

Except for Strategy 1, all strategies propose shifting International Forestry to relatively more technical assistance and cooperation with international organizations. The implications for research and scientific exchange are unclear, because there

are no cost data for International Forestry, and thus no information on whether research and scientific exchange will have fewer dollars or simply less emphasis. Further, “the rationale for these proposed changes is not apparent, nor is the way in which they respond to the ‘increased challenge’ of international issues” (42).

### Initiatives

Following the presentations of the five strategies, the Draft 1990 RPA Program identifies several Forest Service initiatives, defined as “special, short-term strategies designed to eliminate or prevent backlogs of work or to accelerate work that has become high priority” (116). Six initiatives were analyzed in the 1990 Draft Program:

1. threatened and endangered species recovery;
2. restoration of anadromous fish habitat;
3. facilities maintenance and equipment purchase;
4. national recreation strategy;
5. healthy and diversified local economies; and
6. strengthened intergovernmental relationships.

No information is provided on what system or process was used to designate the initiatives as the six most important short-term strategies. Furthermore, the discussion of the initiatives and how they relate to the strategies is sketchy and difficult to follow. The justification for the initiatives and their connection with the strategies need further clarification to aid in comparing strategies. Although the intent behind the development of the initiatives was to reduce the number of Program alternatives, two of the initiatives are not affected by choice of strategy and could easily have been incorporated into all strategies.

Thus, while the idea of including initiatives in the Program is probably a good one, their presentation in the Program is ineffective. They fall short of their potential to set goals to eliminate backlogs of Forest Service tasks, such as reforestation, stand improvement, watershed treatment, and soil conservation. Rather than driving strategies, they are viewed as separate exercises with activities and costs added to those of the strategies.

## INFORMATION CONTENT

Congress clearly intended that the Program be derived from the Assessment. RPA specifically states: “In order to provide for periodic review

of. . . Forest Service programs. . . in relation to the findings of the Assessment, the Secretary of Agriculture. . . shall prepare and transmit to the President a recommended Renewable Resource Program.” Based on this intent, part of the analysis in the following sections examines the relationship between the documents and the presentation of new, unexplained data in the Program.

### *Resource and Activity Data*

#### **Recreation Activities**

Recreation is discussed in 1 of the 8 roles, 1 of the 15 issues, and 1 of the 6 initiatives in the Draft 1990 RPA Program. The recreation-related role of the Forest Service in multiple-use management has been to provide 40 percent of the recreation on Federal lands, and to provide various facilities, including campgrounds; picnic, boating and interpretive sites; ski areas; lodges and resorts; and trailheads and scenic trails. The recreation-related issue identified in the Program is the American public’s changing preferences in recreation. The Forest Service responded to this issue with an initiative—the National Recreation Strategy. The primary objectives of the National Recreation Strategy are: 1) to implement fully the challenge cost-sharing program designed to create partnerships with recreation users; and 2) to eliminate all deferred maintenance on recreation facilities and trails by 2000.

Measures used to evaluate recreation within the five strategies include recreation use (measured in recreation visitor days [RVDs]), condition of facilities and trails, below-standard use, miles of trail built, and backlog of facility and trail maintenance. The discussion of these measures in the Program is generally brief and the relationship between the measures and the quantity and quality of recreation provided is not always clear. Some of the measures, notably below-standard use and the maintenance backlogs, were not included in the Recreation Assessment. The discussion of the National Recreation Strategy is much more useful and presents a good description of how the Forest Service defines customer satisfaction in recreation. Specific examples for improving recreation experience are listed and include anticipating changing needs; having flexibility to provide new experiences; and providing physical improvements such as new and better interpretive and informational signs and improved maps showing recreation opportunities.

#### **Range Forage Resources**

Alternative strategies, in terms of range forage resources, are compared using animal unit months (AUMs) of permitted grazing; the resource value rating (proportion of rangelands in satisfactory condition); and the level of noxious weed infestations.

The key output for rangeland is AUMs of permitted grazing. In the Assessment, this unit of output was said to be a conservative estimate for forage produced, because not all land is grazed, and no estimate is made of forage consumed by wildlife. AUMs, however, do not measure the quantity or quality of, or trends in, the range forage resource.

The only measure of resource conditions presented in the Assessment and carried forward to the Program is the resource value rating. The expected change in percentage of rangeland with a satisfactory rating is shown for the five strategies. This measure is of limited value, however, because a satisfactory rating implies no need or opportunity to improve the quantity or quality of forage produced.

Using the level of noxious weed infestation as a measure for comparing strategies is problematic. The definitions of noxious weeds are usually set by State agricultural agencies, and the considerable variation among State definitions makes consolidating the data difficult and of questionable reliability. Control of undesirable plants is discussed in the Assessment, but there are no nationwide data presented for noxious weed infestations on national forests or other lands. Thus, this variable measure is of limited use in evaluating alternative Draft Program strategies.

No clear relationship exists between the data presented in the Range Assessment and the estimated effects of alternative strategies on the rangeland resource. While the scientific rationale for defining the resource value rating for range condition class is described and overall percentages are reported in the Draft Program, it is not clear how much, where, and why a portion of the resource is rated as unsatisfactory; what can be done about it; and at what cost. Data on number of acres in a specified class, location of these lands, and rationale for designating them as satisfactory or unsatisfactory would seem well-suited for discussion in the Assessment. Furthermore, ecological status of

rangelands presented in the Assessment is not used for comparing strategies in the Draft Program.

Public concern over range condition is recognized and was included as 1 of the 15 contemporary resource issues discussed in the Program. It would again be appropriate to draw on data from the Assessment to address this concern in the Program. For example, it seems likely that policymakers and members of the public are interested in how many acres of rangeland in the southwestern shrubsteppe ecosystem are rated in unsatisfactory condition, but such information is not presented in the Assessment. Budget requests might generate increased support if activities were related to the needs of specific ecosystems and regions. It would be beneficial, for example, if the Forest Service could show improvements in rangeland condition resulting from its efforts. Conversely, lack of improvement could be supported with evidence explaining why the problems remain intractable and a case made for continued efforts and perhaps for more research.

### Timber Resources

Several measures are used to compare the outputs and environmental effects of alternative timber management strategies for the national forests. These include volume of timber offered for sale; acres of timber cutting; miles of road construction; volume of long-term sustained yield; acres of reforestation; and acres of old-growth forests. The flow of data from the 1989 Assessment to the 1990 Draft Program is not clear. In some cases, the source of data for estimating future outputs and effects may be the Assessment, but such information is not identified in the Draft Program. For example, the volume of timber offered for sale is presumably calculated using the national forest portion of the Assessment database, but this is never stated. The volume offered for sale is the key output for the timber resource, but was not used as a measure of timber resource status in the Assessment.

The volume of long-term sustained yield is used in two ways—to estimate forest land productivity and to assess soil disturbance and water quality. As with timber offerings, this is presumably calculated from the Assessment database, but this measure was not in the Assessment. It seems likely that long-term sustained yield provides the base for the other timber-related measures used in the Draft Program, but one cannot be certain because no information sources are identified.

Several measures—acres of timber to be cut; miles of road construction; acres of reforestation; and acres of old-growth forests—cannot be derived from the database described in the Assessment. It is difficult to classify these measures without knowing how they were generated. They cannot be measured until the volume offered for sale has been allocated to specific harvest locations and preliminary timber harvest planning completed. The extent to which this process has been completed was not described anywhere in the Program. If they were developed by field measurements or by remote sensing techniques, they would be direct measures. If, however, they were developed from other sources, including judgments based on experience, they are variable measures with uncertain validity. The estimate of road construction mileage, for example, may have been developed by measuring proposed roads to expected timber harvest locations, or as seems more likely, by a rule-of-thumb estimate of miles of road per acre or per thousand board feet of proposed timber sales.

Information presented in the Draft 1990 RPA Program on timber resources sometimes mixes description with data. The narrative description of alternative strategies, for example, makes a distinction between new road construction and reconditioned roads, and the percentage of each is given in the description of the strategies. Miles of new road construction, however, is the only measure given in the analysis of environmental effects.

The treatment of old-growth forests in the Draft 1990 Program is especially poor. The importance of old-growth forests as habitat for wildlife species is only described, without data on its extent and location. Acres of old-growth forests (total and in Forest Service Regions 3, 6, and 10) are presented in appendix C of the Draft Program to indicate wildlife and fish habitat capabilities, but it is not possible to determine the validity of this measure, because the Forest Service acknowledges that it is still proceeding with its efforts to inventory old-growth forests (126). The Forest Service discusses the difficulty of obtaining agreement on a definition of old-growth forests in the Draft Program, and notes the public's concern over old-growth forests. Nonetheless, without reliable baseline data on quantity, quality, and distribution of old-growth forests, it is difficult to address their relation to such issues as threatened and endangered species, biodiversity, esthetics, and community stability. More appropriate—and of

greater use to the public and to policymakers—would be a presentation of the acres of old-growth forests for various ownerships in the Assessment, with the projected impact of the alternative strategies then described in the Draft Program.

### Water Resources

Water resource information presented in the Draft 1990 RPA Program is not always supported by data presented in the Water Assessment. For example, one of the measures used to compare the alternative strategies is watershed acres in “improved condition.” There are few data in the Assessment to arrive at this measure: the number of watersheds (not acres) in each condition class was in the Assessment, but national forest lands are not distinguished from other lands. Furthermore, the inventory of watershed condition class derived from field measurements is not yet complete. Thus, professional judgments rather than field measurements were apparently used to broadly classify watersheds by condition in the Draft Program.

There are further discrepancies in water resource data between the Assessment and the Draft Program. The 1990 Draft evaluates how well various management alternatives would meet the needs for such goals as: a) enhancing soil productivity and water quality; b) maintaining instream flows for wildlife and fish habitat and recreation; c) improving timing of runoff; and d) reversing the trend of wetland loss. None of these goals meet the definition of a reliable measure, because none were expressed in identifiable units of measurement that can be used to assess performance. Some of the goals are predicted effects of “if-then” propositions associated with different management strategies and arrived at by a series of professional judgments. For example, increased timber harvests are assumed to improve the timing of runoff, because: 1) increased timber harvest will create more openings in the forest, which 2) with proper orientation and size will increase snow deposition, thereby 3) prolonging the snow melt, and thus 4) improving the timing of runoff. These aggregations of professional judgments are not predictions of change in measures developed and described in the 1989 Assessment, but instead are often new and partially independent estimates about some of the measures presented in the Assessment.

The lack of established databases for measures of resource conditions is disturbing. Periodic estimates based in large part on the professional judgment of

planners are not equivalent to periodic repetitive inventories developed from field measurements. The Water Assessment states that “One of the most important tools for solving complex ecological problems, such as determining the effect of acid deposition and ozone on forests and rangelands, is having long-term trend data available” (120). With inadequate or incomplete databases, it is impossible to assess these effects or to monitor the cumulative effects of local management activities on an entire watershed or region.

### Wildlife and Fish Resources

Three measures of the quality and quantity of the wildlife and fish resources are used to compare the predicted outcomes of alternative strategies in the Draft 1990 RPA Program: commercial salmon and steelhead harvest; acres of big game winter range; and acres of old-growth forests (examined under timber resources, above).

Commercial salmon and steelhead harvest is an output measure used to estimate the status of salmon and steelhead populations. Although this estimate is replicable and available annually, it is conceptually weak as an estimate of population size, because harvests are not a fixed proportion of the total population. Also, because these species spawn in streams outside as well as inside the national forests, it is difficult to justify the use of their status to compare predicted outcomes of Forest Service programs under alternative strategies.

Acres of big game winter range is classed as a variable measure, although the development of this measure is not described in either the Assessment or the Draft Program. It seems likely that the inventory of big game winter range is conducted in conjunction with range allotment analysis, and thus consists of both field measurements and professional judgments. There is no way, however, to assess the replicability of the estimates and no attempt is made to estimate the quality of the winter range.

Several descriptive terms are used to compare the predicted outcomes of alternative strategies in the Draft 1990 program, but none calibrate quantity or quality of the resource. These include: wildlife and fish user-days; backlogs in maintenance of wildlife and fish habitat; funding for wildlife and fish habitat management programs; Knutson-Vandenberg (K-V) funding for mitigation and direct habitat improvement; and capability for trout and warm-water fish.



The key output for wildlife and fish resources is expressed in terms of predicted wildlife and fish user-days, and is based on demand and habitat capability. The Forest Service defines capability as:

The potential of an area of land to produce resources, supply goods, and services, and allow resource uses under an assumed set of management intensity. Capability depends upon current site conditions such as climate, slope, landform, soils and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease (121).

Habitat capabilities for all big game species and for trout and warm-water fish are thus not measures of the resource, but rather predictions of changes that could occur depending on funding levels available under alternative strategies. Although “elimination of backlog in maintenance of wildlife and fish habitat” is not a measure of status, somewhere an inventory of the backlog must exist, and would probably be a direct or variable measure of wildlife habitat conditions. A description in the Assessment or Program would have been helpful. Funding for management, mitigation, and habitat improvement describes anticipated levels of management activity for the alternative strategies, but does not measure the quantity or quality of the wildlife and fish resources.

Acres of old-growth forests, acres of big game winter range, and riparian capability are used as measures for evaluating effects on wildlife and fish habitat capability in the Draft program. There are two problems with this. One is the uncertain quality of the first two measures, as described above; neither measure was included in the Assessment. Second, the acres of riparian area, improved or otherwise, are not reported in either the Assessment or Draft Program. The Forest Service proposes completing its comprehensive inventory of riparian areas and their ecological condition by 1995. It seems premature to speculate on changes in the potential of this resource category when the initial inventory of resource condition has not been conducted.

It is surprising how few direct measures are available to evaluate the status of wildlife and fish resources. Although the lack of information on habitat condition and population levels is identified by Forest Service and BLM biologists as high-priority issues, existing population inventory techniques are of questionable reliability or too costly to

be used in a comprehensive, systematic survey (121). Therefore, very little discussion is possible regarding anticipated effects of the various strategies on wildlife and fish resource quantity and quality.

### Wilderness Resources

The Draft 1990 RPA Program devotes limited space to the discussion of wilderness. Wilderness is mentioned in only one of the eight roles developed for the Program, the multiple-use management role. The wilderness “outputs” provided by the national forests include more than 3,300 miles of wild and scenic rivers and designated wilderness areas that account for 1 out of every 6 acres of Forest Service land. Wilderness is mentioned briefly in 1 of the 15 issues identified in the Program: under changing recreation needs, the Forest Service has placed strong emphasis on recreation management on the national forest wilderness areas and on wild and scenic rivers.

The information provided on wilderness within the strategy and initiative discussions is not only limited but also unclear. Four measures are mentioned in the comparison of Draft Program strategies: acres in the wilderness system, use of the wilderness system, quality of the wilderness experience, and total roadless acres. These measures are never defined and are alluded to only briefly in a short paragraph comparing recreation management among the five strategies. Some of these measures are also used in the Recreation Assessment, but no reference is given to previous Assessment discussions of what the terms mean and of how conclusions about increases and decreases were derived.

The indirect measure for determining the quality of the recreation experience—the amount of deferred maintenance of recreation facilities and trails—may also have been used to evaluate the quality of the wilderness experience, but the Draft Program never explains how the latter was defined or measured.

The Forest Service stated in the Draft Program that it has placed strong emphasis on national forest wilderness areas and wild and scenic rivers in response to the 1989 RPA Assessment findings related to wilderness. Judging from the meager attention given to wilderness in the Assessment and Draft Program, and from the sketchy descriptions of measures of the quantity and quality of the wilderness resource, especially in the 1990 Draft Program,

this strong emphasis on the wilderness system lands and wild and scenic rivers is not apparent.

### *Economic Analysis*

RPA virtually dictates the use of economic analysis in calling for an analysis of investment needs and opportunities and of the costs, benefits, and returns to the Federal Government from Program outputs and priorities. These requirements essentially express a concern over the economic efficiency of Forest Service programs—having the right level of total funding and having the right mix of funding among the resource programs—as well as the desire for useful benefit and cost information.

In addition to concerns about economic efficiency, many groups have expressed concern about the economic impacts of Forest Service programs on communities and on society. Congress has only indirectly expressed these concerns in legislation for the Forest Service; the definition of sustained yield—a high level of annual or regular periodic output—in the Multiple-Use Sustained-Yield Act reflects such concerns. In the 1976 Senate floor debate over economic standards for timber management, Senators on all sides expressed concern over employment in the timber industry (145). Yet, despite Congress' concern, the Forest Service has never been directed to consider employment impacts or community stability (78). Nevertheless, measures of economic impacts are examined.

### **Economic Efficiency**

Congress makes two decisions that bear on the economic efficiency of Forest Service programs: the total funding level and the funding mix among programs. (See box 7-A for methods of evaluating economic efficiency.) With RPA, Congress clearly intended that the Forest Service provide information that would help in making such decisions.

The Forest Service claims that “For each Strategy, economic efficiency has been maximized given the Strategy’s particular constraints” (116). However, for decisions at the broadest scale—whether to invest in research or in cooperative programs or in the national forests—economic efficiency is not considered, because of the noted difficulty in quantifying and valuing the benefits of the research and cooperative assistance programs. Quantifying the benefits and costs of research and of cooperative programs is admittedly very difficult, but ignoring

them necessarily precludes economic efficiency from two of the three congressionally defined Forest Service roles. Furthermore, even for the National Forest System, the Draft 1990 RPA Program does not provide enough information to evaluate the claim of maximum economic efficiency (11).

Some evidence discredits the agency's claim. The standard for economic efficiency is responsiveness to price (market value) signals, but the Forest Service “sets targets regardless of market prices or consumer demand” (75). One study found that “the Forest Service appears to have been able to meet the output targets with less funding than anticipated in the 1980 RPA Program” (140). Binkley and Hagenstein (14) evaluated the 1985 RPA Program, and found that the recommended Program did not begin to approach an efficient mix of funding among the resources.

Finally, the revenue data in the Draft 1990 RPA Program probably distort any analyses of Federal fiscal efficiency. One can argue about the likelihood of the long-term price projections, but the near-term (1995) revenue estimates for range and timber overstate the likely receipts. Range receipts were estimated to exceed \$20 million in 1995 for all strategies (116), but Forest Service range receipts were only \$9 million in 1989 (126), and have been declining since 1980. For timber, the projected revenues apparently include the value of timber purchaser road credits, even though these credits are non-cash transactions (timber is exchanged for road construction) which have no effect on the U.S. Treasury. (See box 9-A.) If all receipts were equally inflated, the efficiency of the funding mix might not be distorted. However, the 1995 estimates for recreation receipts, \$31 to \$39 million, are no higher than the 1989 receipts of \$38 million. Thus, the overblown revenue projections for some resources probably distort any analyses of efficiency based on revenues.

### **Benefit and Cost Information**

Congress clearly requested information on benefits and costs of the recommended Program, and the Programs (including the 1990 Draft) have included much information. However, Congress also distinguished benefits from direct and indirect Federal returns. Thus, Congress at least implicitly desired an analysis of the fiscal effect on the U.S. Treasury as well as the analysis of social benefits and costs.

### Box 7-A—Measuring Economic Efficiency

In theory, economic efficiency is determined by comparing the marginal benefits of an activity with the marginal costs. This is *not* total benefits and total costs, but rather the *additional* benefits generated by *additional* expenditures. Additional investments are warranted as long as the additional benefits are greater than the additional costs. Thus, assuming that the most rewarding investments are made first, the optimal funding level occurs when the additional benefits exactly match the additional costs.

This type of marginal analysis also determines the optimal mix among programs. For example, if an additional investment in watershed protection yields more benefits than an equal investment in forage production, the watershed investment is a 'better' (more rewarding) investment. In natural resources, such an analysis can be quite complicated, because an investment in one resource can generate benefits for another resource; the investment in forage production, for example, might also yield some watershed benefits. In theory, all such benefits and any environmental damages would be included, but in practice, it is difficult to measure all such effects for each investment opportunity.

**Measuring Benefits**—There are many ways to measure the benefits that result from investments. One measure is revenues generated. In tight fiscal times, revenue is an important consideration. However, Federal revenue shouldn't be the sole criterion, because many resources are subsidized or provided free. As discussed earlier, there are ways of measuring the social value of nonpriced goods and services (see box 6-B). The Forest Service calculated *market-clearing prices in the Draft 1990 RPA Program*; in essence, this measures total producer revenues at the output level which would occur if the resources were marketed. Thus, market-clearing price data define the producer benefits that would result from private ownership and marketing of the resources. The Forest Service also estimated *consumer's surplus*, a measure of benefits received by consumers in excess of the payments they make. By adding consumer's surplus to the market-clearing price, the Forest Service has generated a reasonable estimate of benefits to society from providing resources and uses in the national forests.

**Measuring Costs**—Measuring costs is deceptively simple. Again, one key is to measure the additional costs, both investment and operating costs. In addition, the costs measured must be comparable to the benefits measured. For example, Federal costs should be compared with Federal revenues, to measure the impacts of the investment on the U.S. Treasury. producer costs, including the profit needed to keep the firm in business, would be compared to the Forest Service's market-clearing prices. Finally, societal costs would be compared with societal benefits; these costs should include additional financial and environmental costs imposed on others (public and private) by the investment decision.

The Draft 1990 RPA Program is the first RPA document to include such fiscal information. However, as noted above, the near-term revenue projections for some resources are probably overestimated. In addition, the Draft Program contains inaccurate cost data. The total 1987 cost for the National Forest System was reported as \$1,691 million in the Draft RPA Program (116), but the actual expenditures were \$2,027 million (123). Furthermore, the Draft Program estimates that 42 percent of the costs were capital investments (116), but less than 10 percent of actual expenditures were identified as capital outlays in the 1988 Report of the Forest Service (123).

Finally, environmental costs of producing resources on private lands have been excluded from the economic analysis in the RPA Programs, including the Draft 1990 Program. This is not a problem if all strategies have similar roles for the public and

private sectors in resource production (11). However, Strategy 5 in the Draft contemplates shifting more commodity production to private lands. Excluding private land environmental costs allows the Federal Government to transfer environmental costs to the private sector with no consequence to the government. From a social standpoint, however, the environment is still affected, regardless of where the commodity production occurs. In fact, if Federal production occurs under stricter environmental protection, then shifting commodity production to private lands might increase environmental costs, a condition clearly not reflected in the analysis in the Draft 1990 RPA Program.

### Economic Impacts

The Forest Service has no statutory mandate to consider employment or other economic impacts of its programs (78). Nonetheless, Congress and many

individuals and groups are concerned about the economic consequences of Forest Service activities. This concern is often expressed in terms of “community stability,” but this phrase is not clearly defined, either in law or by academia (52, 78). Historically, Congress and the Forest Service have thought that a stable, sustainable supply of timber resources could lead to stable communities (87). However, recent research has shown that stable timber supplies are, at best, ineffective at providing stable employment levels (37, 148).

Measuring community stability is not a simple task. Stable timber industry employment and Federal payments to counties are measures of concern to Congress (74). However, communities may also depend on other industries, such as commercial fishing and recreation and tourism, that can be affected by Forest Service activities (39, 86). Thus, community stability depends on more than just timber industry employment.

The Draft 1990 RPA program projected total employment and county payments resulting from Forest Service activities under each strategy (116). By law, county payments are 25 percent of gross Forest Service receipts,<sup>1</sup> and the projections are consistent with this requirement. However, the methods for making the employment projections were not described, and thus their accuracy cannot be assessed. Furthermore, the Draft Program contains no disaggregations by region or by industry. Because there were no data on resource industry employment, except in the Timber Assessment, or of the local importance of Forest Service county payments in the Assessment, the relative magnitude and importance of the information in the Draft Program cannot be evaluated.

Other measures of the economic and social impacts of Forest Service activities are excluded entirely. Employment can be subdivided into permanent and temporary, full-time and part-time. Local income and State and local taxes are also useful measure of economic impacts. Furthermore, the mix of jobs in a community, and changes in the mix, are useful measures of the social setting. The Forest Service needs to develop a spectrum of relevant measures to accurately report on the economic and social impacts of the recommended RPA program.

## THE RPA PROGRAM AND THE BUDGET

As discussed earlier, Congress intended the RPA process to help frame Forest Service budget requests. Many interest groups viewed RPA as a means of raising the importance of Forest Service budget needs, relative to other agencies within and outside the Department of Agriculture. In congressional testimony on the 1980 Program, the National Wildlife Federation observed that insufficient funding would make RPA planning ‘fruitless’ (95). The implicit commitment to future budget targets, based on the Program and Statement of Policy, were a major objection from OMB during the enactment of RPA (84).

These hopes and concerns probably overstate Congress’ expectations for budget direction from the RPA process. Wolf succinctly summarized Congress’ views (150):

Neither the President nor the Congress would be required to implement the program at full funding, and the program would not be in the nature of an authorization. Thus, [Senator Hubert] Humphrey sought to create something that could best be defined as a guide to budget directions and levels.

Thus, Congress never expected the RPA Program and Statement of Policy to be a straitjacket for or even a commitment by the President. The Forest Service concurred in this view; ex-Chief John McGuire identified one reason for long-range planning as the need to “establish a multi-year framework for evaluating budget alternatives (emphasis added)” (60). The provisions requiring an explanation for budgets that deviated from the *direction* set forth in the Program and Statement of Policy, however, illustrated that Congress wanted to know when short-term decisions, to reduce the Federal deficit or whatever, were constraining long-run renewable resource management.

### Past Performance

The Forest Service asserts that the RPA Program should not be constrained by budget limitations, because: 1) it should present the agency’s professional opinion of ideal renewable resource management, and 2) it should display the opportunities foregone because of insufficient funding (85). While

<sup>1</sup>The Department of the Interior collects receipts from mineral activities in the national forests, and makes required payments to States from those receipts.

foregone because of insufficient funding (85). While this concept has merit, others have noted that the Forest Service has attempted to resolve conflicts by essentially throwing money at the problems (53). The approach has been described as the old “good news/bad news” pitch—the bad news is demand is rising, but the good news is that all problems can be solved with another billion dollars or so (84).

Congress apparently thought reasonably well of the Forest Service’s 1975 RPA program, but because of overall budget constraints, Congress only funded 85 percent of that Program’s budget proposal for 1978 (83). However, the Administration and some interest groups argued that the mix among programs needed to be adjusted if the budget level was reduced—that the interactions among resource activities didn’t allow for equal reductions in all programs—and Congress has not tried such a fried-mix approach again.

In 1980, and again in 1985, instead of the single recommendation required by RPA, the Program contained two levels of budget and output targets, known as the high-bound and the low-bound. The high-bound essentially reflected the agency’s goals for improving renewable resource management. The low-bound responded to OMB’s concern for reducing the Federal budget deficit. In addition, OMB believed that the Forest Service budget proposals were generally excessive, and that most of additional benefits could have been obtained with much lower additional expenditures (84).

Congress explicitly rejected OMB low-bound in the 1980 RPA Program by revising the Presidential Statement of Policy to proclaim that the high-bound was the 1980 RPA Program. (The Statement of Policy and the 1980 revision by Congress are described more fully in the next chapter of this report.) However, the subsequent appropriations have actually followed the low-bound targets quite closely (85). Furthermore, OMB’s contention of inflated Forest Service budget targets is supported by an analysis that found that the Forest Service actually achieved more than 100 percent of low-bound targets for nearly all Program activities (and 100 percent of high-bound targets for some activities) with less than two-thirds of the low-bound budget level from 1982 through 1985 (140). That report notes that “this might have occurred because the location and/or quality of the outputs differs from those anticipated in the 1980 RPA Program”

but no information was presented to verify such possibilities (140).

### *Draft 1990 RPA Program*

The Draft 1990 RPA Program presents 1987 cost data for the National Forest System, with projections for 1995, 2000, 2005, and 2040. Appendix E of the Draft Program contains several tables with costs and cost projections by strategy and by Forest Service region, including proportional costs by resource category (figure 7-1). These tables are labeled as the costs for RPA strategies by region and for the Nation, but do not include any data on research or cooperative assistance.

The tables in the Draft 1990 RPA Program, both in the appendix and in the text, are not consistent with 1987 Forest Service costs shown in the 1988 Report of the Forest Service (123). That Report shows higher costs for each branch of the Forest Service than does the Draft 1990 Program, as well as identifying several costs apparently not included in the Draft (table 7-1).

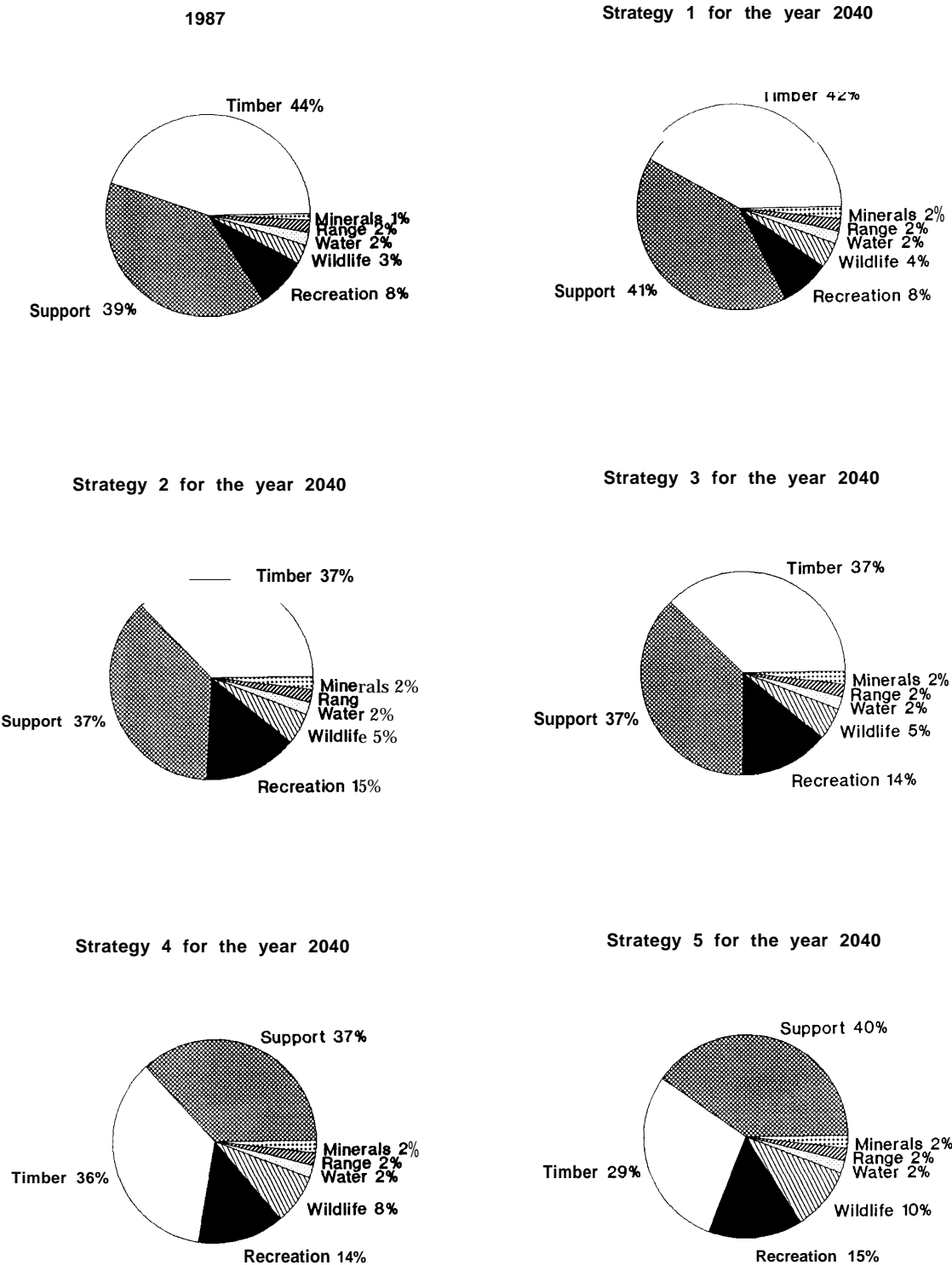
It is unclear whether these inconsistent cost data imply a smaller increase in Forest Service funding to achieve the 1995 through 2040 cost projections, or whether the cost projections underestimate the fiscal requirements because the base was understated. It seems much more likely that the projections were made from the understated 1987 cost base, and thus the *percentage* increases would be accurate and the funding requirements in the Draft Program are underestimated by nearly 38 percent.

**Table 7-1—1987 Forest Service Cost Data**  
(In millions of dollars)

	Draft Program	Annual Report
<b>National Forest System:</b>		
Capital outlays . . . . .	\$ 715	\$ 197.4
Operating costs . . . . .	976	1,829.6
Subtotal . . . . .	\$1,691	\$2,027.0
Research . . . . .	140	147.4
State and Private Forestry . . .	60	73.3
Human resources . . . . .	—	80.5
Payments to States and counties . . . . .	—	278.3
<b>Forest Service total. . . . .</b>	<b>\$1,891</b>	<b>\$2,606.5</b>

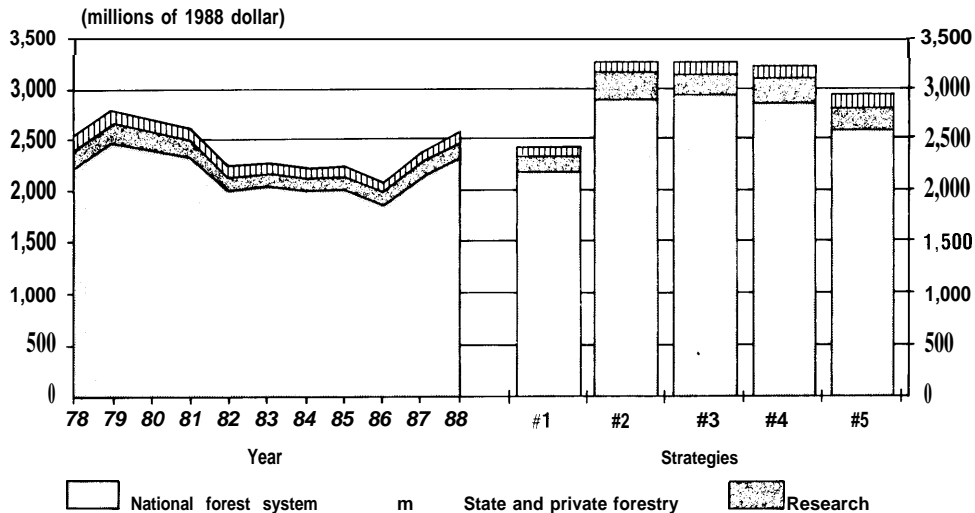
SOURCE: U.S. Department of Agriculture, Forest Service, *Draft 1990 RPA Program* (Washington, DC: U.S. Government Printing Office, 1989); U.S. Department of Agriculture, Forest Service, *Report of the Forest Service, Fiscal Year 1988* (Washington, DC: U.S. Government Printing Office, 1989).

Figure 7-1—National Forest System Funding in 1987 and 2040



SOURCE: U.S. Department of Agriculture, Forest Service, *Draft 7990 RPA Program* (Washington, DC: U.S. Government Printing Office, June 1989).

Figure 7-2—Forest Service Expenditures



SOURCE: U.S. Department of Agriculture, Forest Service, *Draft 1990 RPA Program* (Washington, DC: U.S. Government Printing Office, June 1989), adjusted by OTA (see table 7-1); U.S. Department of Agriculture, Forest Service, *Report of the Forest Service* (Washington, DC: U.S. Government Printing Office), annual series, 1978-1988.

For the National Forest System, all strategies are shown to require an increase in funds. Even under Strategy I—continuation of the current budget—the budget would increase by nearly 3 percent. This strategy is not very useful to Congress, because it simply extends the current congressional budget decisions, rather than providing the agency's concept of the proper funding mix. Furthermore, it may be inconsistent with the Multiple-Use Sustained-Yield Act, unless the current budget mix provides for managing the resources 'in the combination that will best meet the needs of the American people.'

Strategies 2 through 5 all propose substantial increases in funding—more than 40 percent for Strategy 5, more than 50 percent for Strategies 2 and 4, and more than 60 percent for Strategy 3. The Draft 1990 Program asserts that these increases are really not that large—"less than 1 percent per year for each Strategy" (116). This is true, but the majority of the increases are concentrated in the first 5 years. Strategy 5 requires a 25 percent budget increase by 1995 (only 4.5 percent per year for 5 years), while Strategies 2, 3, and 4 require about 40 percent budget increases by 1995 (nearly 7 percent per year). These increases are even bigger than they may seem, because they are in addition to inflation. From 1978 through 1988, Forest Service expenditures have not

exceeded \$2.8 billion annually (in 1988 dollars), and have been less than \$2.5 billion since 1982, but three of the five strategies in the Draft Program would require more than \$3.0 billion (after adjusting for the cost understatement described above). (See figure 7-2.) This departure from recent expenditures clearly illustrates that the Draft 1990 RPA program is based on a radically different trend in future budgets than has been seen in the past few years.

The Draft 1990 RPA Program also presents total 1987 cost data for State and Private Forestry (S&PF) and for Research, with cost projections for 2040. The strategies contain descriptions of the proportional emphasis of S&PF and of Research, but without cost data. Except under Strategy 1 (and 1A), the budgets for both S&PF and Research are projected to more than double by 2040. However, because only cost projections for 2040 are included, it is unknown whether the proposed budget increases are slow and steady or are substantially concentrated in the first few years (as they are for the National Forest System). Such substantial proposed increases are unlikely to be funded, although they may be more feasible than the proposed increases for the National Forest System because fewer total dollars are involved.

### *Current Needs and Opportunities*

What can the RPA process offer to the agency, the Administration, Congress, and the public for the annual budget process? According to two congressional staffers, Congress seeks information on what needs to be done, and what it will cost in the short term to achieve the long-run forest management goals (58). Further, Congress also needs “a clear, professional recommendation for how the forests should be managed” (58).

In addition to the professional recommendation, Congress and the public also need information to determine priorities. If the entire recommended course of action cannot be funded, Congress needs information on priorities, with benefits and costs of alternative actions spelled out. The persistent, high Federal budget deficits and rising interest payments suggest that a substantial increase in Federal renewable resource funding is unlikely in the foreseeable future (56). The RPA Assessment and Program could provide information to help establish priorities; in fact, RPA requires such information. As Jim Giltmier, a congressional staffer who worked on RPA, noted, “RPA has provided the best tool in government for dealing with budget examiners who insist that agencies operate in the most cost-effective manner” (36).

While many have complained about the budget ranges presented in the 1980 and 1985 Programs—the high-bound/low-bound approach—a range of budget levels can be useful (53). One method, consistent with economic efficiency theory (44), is to present a schedule for displaying the efficient funding mix (and relevant resource output and condition data) for a variety of budgets under each alternative or strategy. This would assist Congress and the public in understanding feasible funding combinations, and what can be bought with additional funds. Unfortunately, this approach would substantially increase the analytical requirements, as well as add to the complexity of an already bulky document. The next best option, a discussion of priorities, is required by RPA. This could include economic efficiency criteria, identifying the investments needed first to achieve the goals of each alternative or strategy.

One additional aspect of the budget is also important for decisionmakers to understand. The Appropriations Committees, and Congress as a whole, do not address all Forest Service funds, because some funds are permanently appropriated (i.e., the money is available without congressional action). (See box 7-B.) The nature of the funds is not particularly important when funds are unlimited. However, when total funds are limited, the funding balance can become skewed, because some funds are permanently available while others must compete against other Federal priorities annually. Furthermore, because some funds generated by Forest Service actions (notably the K-V Funds resulting from timber harvesting) are available to the Forest Service, the agency is highly likely to continue such actions (and arguably to focus on expanding them), regardless of their efficiency or desirability. (See *Reforming the Forest Service* (75) for a lengthy discussion of this concern.) In discussing opportunities and priorities, the Forest Service needs to be explicit about the sources and uses of permanent appropriations that might influence the decisions.<sup>2</sup>

## CONCLUSIONS

Congress intended the RPA Program to be a strategic plan for Forest Service activities, providing essential resource management and budget information. The Program has been criticized for not providing strategic direction, for inadequately responding to projected resource demands, and for poorly establishing resource goals and budget targets. The Forest Service has improved the Draft 1990 Program over previous efforts, but there are still problems that make this document of questionable use to the agency, the Administration, Congress, and the public.

The Draft 1990 RPA Program’s revised structure is closer to a strategic planning model for forest and rangeland resources than previous RPA Programs, but still fails to set clear goals and priorities. Agency roles are not clearly defined, issues are not used to set the stage for recommended strategies, strategies do not set direction, and initiatives are not presented as integral components of the strategies. In addition to these structural problems, the strategies present unbalanced funding levels among international forestry, cooperative assistance, research, and the

---

<sup>2</sup>A thorough analysis of factors which influence agency decisions is beyond the scope of this OTA special report. Such factors, including budgets and personnel evaluation will be explored in more detail in the full OTA Assessment of Forest Service planning.



### **Box 7-B—Forest Service Trust Funds and Special Accounts**

The Forest Service has six special accounts and trust funds which require annual appropriations and 15 with permanent appropriations. (For a description of budget terms and these Forest Service accounts, see *The Forest Service Budget: Trust Funds and Special Accounts* (141).) The 15 permanent appropriations accounted for more than a third of total Forest Service appropriations in 1989. The 10 major permanent appropriations (more than \$10 million annually) include:

- . Payments to States (\$371 million in 1989);
- The Knutson-Vandenberg (K-V) Fund (\$237 million in 1989);
- The Timber Salvage Sale Fund (\$132 million in 1989);
- The Working Capital Fund (\$118 million in 1989);
- National Forest Roads and Trails (\$96 million in 1989, but since 1982, these funds have been transferred to the U.S. Treasury to offset annual appropriations for road and trail construction and maintenance);
- . Other Cooperative Work (\$57 million in 1989);
- . Brush Disposal (\$54 million in 1989);
- The Tongass Timber Supply Fund (\$36 million of annual appropriations in 1989, but which will again be permanently appropriated in 1990 unless Congress repeals the permanent appropriation);
- . The Reforestation Trust Fund (\$31 million in 1989); and
- . Timber Roads, Purchaser Election (\$10 million in 1989).

It is interesting to note that all 10 of these major permanent appropriations are largely or entirely tied to the timber sale program. The only major special account or trust fund not tied to timber—the Land and Water Conservation Fund (\$64 million for the Forest Service in 1989)—requires annual appropriations.

national forests, and do not follow-through with concerns for diversified resource studies and program appropriations.

RPA requires the Program to review management and administrative programs of the Forest Service in relation to Assessment findings. Incomplete inventories in the Assessment make it difficult to present complete resource and economic analyses in the Program. The presentation of new data in the Draft program disregards the importance of presenting the best scientific evidence in the Assessment and then

integrating it with the Program. The Draft 1990 Program also proclaims that economic efficiency has been maximized within each strategy, but there is insufficient evidence to evaluate this claim. The Forest Service has failed to document sources, to describe analytical methods, and to provide realistic near-term revenue estimates and accurate cost information. The failure to identify budget priorities and to provide benefit/cost information on proposed actions makes it difficult for Congress and the public to arrive at intelligent budget choices.