

GAO

U.S. GOVERNMENT PRINTING OFFICE: 1991
SPECIAL REPORT
FOR THE SENATE
COMMITTEE ON ENERGY AND PUBLIC LANDS,
SUBCOMMITTEE ON OIL, COAL, AND INSULAR
AFFAIRS
HEARINGS ON THE ACTIVITIES OF
CONGRESS

April 1991

CONGRESS SERVICE

**Do Members Receive Face
Performance of the
Congressional Program**



NO. 1000

05110-2-1000



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

**Resources, Community, and
Economic Development Division**

B-242583

April 15, 1991

The Honorable Bruce F. Vento
Chairman, Subcommittee on National
Parks and Public Lands
Committee on Interior and Insular Affairs
House of Representatives

Dear Mr. Chairman:

From September 1989 through January 1991, we have issued reports on the Forest Service's recreation program that address the (1) maintenance and reconstruction backlog on national forest trails, (2) wilderness preservation problems in some national forests, (3) special recreation areas that were not meeting established development plans, and (4) maintenance and reconstruction backlogs at developed recreation sites. As you requested, this report discusses the problems common to the Forest Service's management of the recreation program, identifies corrective actions the Service has taken on our past recommendations, and provides an additional recommendation for resolving problems in the program.

We are sending copies of this report to the Secretary of Agriculture and the Chief of the Forest Service. We will also make copies available to others upon request.

This report was prepared under the direction of James Duffus III, Director, Natural Resources Management Issues, who can be reached at (202) 275-7756. Other major contributors are listed in appendix II.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

The deteriorating condition of recreational sites and areas in the national forests has resulted in health and safety hazards, resource damage, and in some cases diminished recreation experiences for the millions of visitors to these areas each year. From September 1989 through January 1991, GAO has issued four reports on the condition of the Forest Service's recreational sites and areas. GAO found that it will require at least \$644 million to eliminate the maintenance and reconstruction backlog for trails and developed recreation sites. GAO also found that millions more are required to develop and maintain, to current standards, special recreation and wilderness areas. Concerned about these findings, the Chairman, Subcommittee on National Parks and Public Lands, House Committee on Interior and Insular Affairs, asked GAO to

- identify problems common to the Forest Service's management of the recreation program,
- provide information on what the Service has done in response to GAO's previous recommendations, and
- provide additional recommendations to resolve these problems.

Background

The 191 million acres of land administered by the Forest Service provide more recreational opportunities and record more recreation visitor use—about a quarter of a billion visitor days per year—than any other federal lands. The trail system is the largest in the nation, with more than 108,000 miles of trail on which to hike, horseback ride, or cross-country ski. Forest Service lands contain about 32.5 million acres of congressionally designated wilderness, as well as 28 special recreation areas that possess various geologic, scenic, and botanic characteristics. Forest Service lands also contain nearly 13,000 developed sites, including more than 4,400 campgrounds and 1,400 picnic grounds.

Results in Brief

On the basis of GAO's four reports, two problems emerged as common to the Forest Service's management of its recreation program: insufficient resources and a need for uniform, consistent national data on the condition and resource requirements of recreational sites and areas. Despite recent increases in the Forest Service's appropriations, funding and staffing levels have not been sufficient to bring recreational sites and areas up to the condition called for by Service development plans and maintenance standards. Without uniform and consistent data on the condition of recreational sites and areas, the Service cannot effectively

manage the recreation program nor provide the Congress with the information it needs to decide the future direction of the program.

In response to GAO's previous recommendations, the Forest Service has taken or is planning to take a number of actions to gather more uniform and consistent national data on the condition of recreational sites and areas. If GAO's recommendations are fully implemented, both the Service and the Congress will have a more reliable nationwide picture of recreational site and area conditions, the severity of the conditions, and the resources needed to bring sites and areas up to Service standards.

The Forest Service could use this information to develop a strategy to guide the future direction of its recreation program. When developing its strategy, the Forest Service should consider three variables: funding levels, the number of sites and areas to be developed and maintained, and the extent to which development and maintenance standards can or should be revised. Without change, efforts to maintain the status quo at all existing sites are likely to result in further degradation and ultimately the loss of some recreational sites and areas.

Principal Findings

Insufficient Staff and Financial Resources

Despite funding increases over the past 5 years, the amount of funds appropriated and staff allocated have been insufficient to bring Forest Service sites and areas up to the established standards. Without sufficient resources, much routine maintenance work had to be deferred, resulting in a backlog of unmet needs that grew from year to year. For example, GAO estimated that as of September 30, 1989, there was a \$449 million backlog of unmet maintenance and reconstruction needs for developed recreation sites—more than double the amount the Forest Service reported in 1986. Similarly, as of September 30, 1988, GAO found that a maintenance and reconstruction backlog existed on about 59,000 miles of forest trails. It would require about \$195 million to eliminate this backlog and about \$644 million to eliminate the two backlogs.

The Forest Service has implemented a variety of cost-sharing projects that encourage public and private contributions to improve recreational sites and areas; the Service has also increased its use of volunteers. While such efforts have been helpful, they have been unable to bridge the gap between the resources needed and those available.

**Uniform and Consistent
National Data Not
Developed**

Forest Service headquarters has not developed uniform and consistent data on the condition of its recreational sites and areas or on its maintenance and reconstruction needs. Additionally, the Service has not made the Congress aware of the severity of the problem or the resources required to eliminate the problem.

Knowledge about recreational site and area conditions generally existed at the field offices; however, even at these levels the extent and type of information varied. According to officials at these levels, many recreational sites and areas are not in the condition envisioned by the Service and expected by users.

**Forest Service Actions on
GAO Recommendations**

The Forest Service has taken or is planning to take a number of actions to gather uniform and consistent data on the condition of recreational sites and areas and on the staffing and financial resources needed to bring them up to established standards. If fully implemented, these actions should assist the Service in better managing the recreation program and reporting to the Congress on program conditions and resource needs. The Service plans to gather the data and report to the Congress every 5 years on the condition of and the resources needed to improve trails, wilderness areas, and special recreation areas. As of February 28, 1991, the Forest Service had not responded to GAO's recommendations on improving Service management of developed recreation sites.

**Changes Needed in
Program Direction**

In developing a strategy to guide the future direction of its recreation program, the Service should consider three variables: funding levels, the number of sites and areas to be developed and maintained, and the extent to which development and maintenance standards can or should be revised.

If the Service wishes to maintain the existing standards, then either funding must be increased or the number of sites and areas reduced. Funding could be increased through appropriations, although that may be difficult in this era of fiscal constraint and competing demands. Higher or additional user fees could be imposed. While higher fees could be imposed administratively, imposing additional user fees would require legislative changes. In addition, the use of cost-sharing programs and volunteers could be increased. However, the funds raised through cost-sharing programs have so far been insignificant compared to the resources needed, and the use of volunteers requires a considerable

Forest Service investment of time and money, with no assurance that volunteers will remain committed and available.

In lieu of funding increases, the current standards could still be met if the number of sites and areas requiring maintenance or development were reduced. Some sites and areas could be permanently closed—an action that could further strain the remaining sites and areas because of increased use—or construction of new sites and areas could be deferred or canceled. Both would necessitate difficult choices.

The Service could also decide to lower its development and maintenance standards to more closely match the resources available. Lowering standards would also be difficult in that it could result in providing the public with a lower quality recreational experience.

Recommendation to the Secretary of Agriculture

GAO recommends that the Secretary of Agriculture direct the Chief of the Forest Service to develop a strategy to guide the future direction of its recreation program. This strategy should contain recommendations on the funding levels and sources, the number of sites and areas to be developed and maintained, and the standards to which these sites and areas should be maintained. The strategy should also describe the benefits, drawbacks, and costs associated with each alternative.

Agency Comments

As requested, GAO did not obtain written comments from the Forest Service on this report. However, GAO discussed the report's contents with Service officials and incorporated their comments where appropriate. Forest Service officials agreed with the factual information regarding the backlog, the proposed information system, and the maintenance and development standards for recreational sites and areas.

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Abbreviations

GAO General Accounting Office

Introduction

More outdoor recreation occurs on the Department of Agriculture's Forest Service lands than on any other federal lands—about a quarter of a billion recreation visitor days a year.¹ The 191 million acres of land administered by the Forest Service provide an array of recreational opportunities. For example, the national forests contain about 13,000 developed recreational sites and areas that can accommodate about 1.7 million visitors at one time. These areas include about 4,400 campgrounds, 1,400 picnic grounds, and numerous playgrounds and parks; areas for boating, fishing, swimming, skiing, and other winter sports; and sites such as hotels, lodges, and resorts.

The national forests also contain about 108,000 miles of trails; some are located near urban areas, while others are in remote locations. The trails are used for diverse recreational activities, including hiking, horseback riding, bicycling, motorcycling, and riding all-terrain vehicles. Also, trails are designed for various types of users. For example, interpretive trails (which provide information on the surrounding forest, animals, and their habitats) are designed for forest visitors who want a short, easy, educational, recreational experience. Other trails are designed for experienced hikers who want a more difficult and challenging experience.

Additionally, the national forests contain over 350 congressionally designated wilderness areas. These areas contain about 32.5 million acres, or over one-third of the 91 million acres comprising the National Wilderness Preservation System. As defined by the Wilderness Act of 1964 (16 U.S.C. 1131-1136), a wilderness area is one where the earth and its community of life are undisturbed by people, an area where people are visitors. Under the act, a wilderness should retain its primeval character and influence, without permanent improvements or human habitation, and it should be protected and managed so as to preserve its natural condition. Wilderness areas offer the recreational visitor outstanding opportunities for solitude or a primitive and unconfined type of recreation in pristine, undeveloped lands.

In addition to the thousands of developed recreational sites, miles of trail, and acres of wilderness, the public can enjoy recreational opportunities in 28 legislatively designated special recreation areas. These areas include National Recreation Areas, National Monuments, National Scenic Areas, National Scenic Research Areas, and National Management Emphasis Areas. These special areas have been so designated because of

¹A recreational visitor day is defined as 12 hours of use by one person.

the unique or outstanding features they offer, such as scenic characteristics; cultural, historic, or geologic resources; or ecological or scientific interests. These 28 areas contain about 6.4 million acres. Forest Service recreational sites and areas represent an investment of hundreds of millions of dollars.

Maintenance of Recreational Sites and Areas

Routine maintenance of recreational sites and areas is needed to mitigate the damage done by natural forces and visitors' use. Without routine maintenance, the resource damage done by natural forces (e.g., rock slides, soil movement, blown-down trees, water erosion of ground surfaces, and growth of vegetation) goes uncorrected and can accelerate deterioration. Deferred maintenance can also result in safety and health hazards. For example, bridge timbers that are not maintained can rot and weaken, posing danger to visitors. Trees broken by wind can be caught up in other trees and, if not cut down by maintenance crews, can fall on visitors.

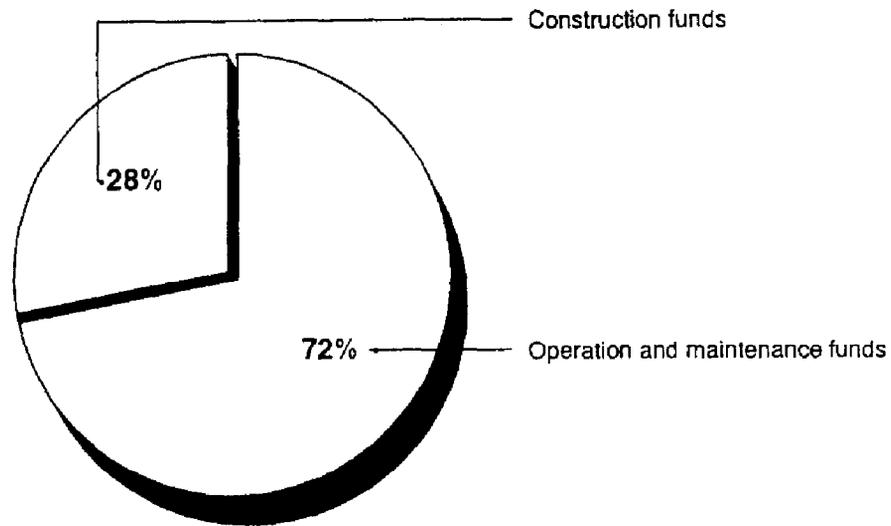
Visitor use also accelerates resource damage, and visitor use of the national forests for recreational purposes has increased substantially over the past decade. According to Forest Service data, recreation in national forests increased from 184 million visitor days in 1972 to 253 million visitor days in 1989.

Forest Service Organization and Funding

The Forest Service is composed of a headquarters office, located in Washington, D.C.; 9 regions; 121 forest supervisor offices; and over 600 ranger districts. The Forest Service manages 149 national forests in the United States and Puerto Rico. Because the Forest Service is decentralized, most data and knowledge about forest conditions exist at the field office level.

For fiscal year 1991, the Forest Service received about \$253 million in recreation program appropriations. As shown in figure 1.1, the bulk of the appropriations is for operations and maintenance; the remainder is for construction.

Figure 1.1: Forest Service Recreation Program Appropriations, Fiscal Year 1991



Source: Forest Service.

Recreational Sites and Areas Are Not Developed or Maintained to Desired Standards

In four recent reports on the Forest Service's recreation program, we found that the condition of many recreational sites and areas was not up to Service standards and, in many cases, had deteriorated over the years. Our reports addressed the (1) maintenance and reconstruction backlog on national forest trails, (2) wilderness preservation problems in some national forests, (3) special recreation areas that were not meeting established standards, and (4) maintenance and reconstruction backlog for developed recreation sites.

Trail Conditions Have Worsened Over the Years

According to our September 1989 report,² necessary trail maintenance and reconstruction work has been deferred year after year, resulting in a backlog of unmet needs that affected about 59,000 miles of trail. The effects of deferred maintenance are serious. When maintenance is deferred, trails can become difficult to traverse, impassable, or even completely lost. They can also pose safety and health hazards. We estimated that, as of September 30, 1988, the amount required to eliminate the backlog was about \$195 million—nearly double the \$100 million backlog the Forest Service reported in 1987—to bring the nearly 59,000 miles of trail up to design standards (i.e., the optimal trail condition).

²Parks and Recreation: Maintenance and Reconstruction Backlog on National Forest Trails (GAO/RCED-89-182, Sept. 22, 1989).

According to Forest Service officials, they have generally been able to take care of safety and health hazards, but they have not been able to eliminate or minimize all unacceptable resource damage or keep up with routine maintenance tasks. At the 15 forests we visited, we saw few examples of safety and health hazards but many examples of resource damage and unmet routine maintenance. The conditions we observed ranged from trails that had been deeply trenched by erosion to those that needed trimming of vegetation.

Many Wilderness Areas Not in Pristine Condition

According to our September 1989 report,³ conditions in wilderness areas vary widely. While some areas appeared to be in relatively good condition, many others showed signs of adverse impact, especially on trails and bridges and around popular camping areas. In addition, the presence of Forest Service administrative sites, outfitter/guide camps, and litter have created an atmosphere that detracts from visitors' sense of solitude and primitive recreational experience. Further, unauthorized and conflicting activities in wilderness areas, such as noise from low-level military training flights, are adversely affecting visitors' opportunity to enjoy the areas.

Special Recreation Areas Have Not Been Developed as Planned

According to our February 1990 report,⁴ many of the special recreation areas have not been developed, operated, and maintained up to the "showcase" levels called for by Forest Service policy and the individual area plans. Forest Service officials interpret "showcase" to mean that these areas should be developed and managed to noticeably higher standards than other recreation units. At 10 of the 20 areas we reviewed, planned projects had been either delayed or dropped. At 15 of the 20 areas, visitor information services were inadequate and/or maintenance levels had been reduced. Among the projects that had been dropped or delayed were the construction of campgrounds, picnic areas, scenic drives, information stations, visitor centers, boat ramps, parking improvements, foot trails, roads, and interpretive sites.

³Wilderness Preservation: Problems in Some National Forests Should Be Addressed (GAO/RCED-89-202, Sept. 26, 1989).

⁴National Forests: Special Recreation Areas Not Meeting Established Objectives (GAO/RCED-90-27, Feb. 5, 1990).

Developed Facilities Have Deteriorated Over the Years

According to our January 1991 report,⁵ necessary maintenance and reconstruction work on developed recreation sites has also been deferred year after year, resulting in a backlog of unmet needs that totaled about \$449 million as of September 30, 1989. This amount is more than twice the \$212 million backlog reported to the Congress by the Forest Service in 1986. As with trails, the effects of deferred maintenance on developed recreation sites are serious. Deferred maintenance can result in safety and health hazards, natural resource damage, and diminished recreational experiences. Ultimately, deferred maintenance can result in the loss of a developed site.

The Forest Service's developed recreation sites are subject to deterioration caused by the weather, visitor use, and vandalism. In addition, when a site requires major renovation, the Service also considers upgrading it to meet current demands for more modern facilities, such as showers, electrical hookups, or to meet the needs of people with disabilities.

Aging sites also contribute to the backlog because they deteriorate faster and are more difficult and expensive to repair than are newer facilities. Additionally, health and safety standards sometimes necessitate upgrading or replacing older facilities such as showers and restrooms.

Objectives, Scope, and Methodology

Concerned about the problems cited in our four recent reports on the Forest Service's recreation program, the Chairman, Subcommittee on National Parks and Public Lands, House Committee on Interior and Insular Affairs, asked us to (1) identify problems common to the Forest Service's management of the recreation program, (2) provide information on what the Service has done in response to our recommendations, and (3) provide additional recommendations to resolve these problems.

To accomplish these objectives, we used the information in our four reports and supporting documentation and gathered current budgetary data on the recreation program. We interviewed Forest Service headquarters officials about actions taken or planned in response to our previous recommendations, and we reviewed recreation program documents that incorporated such actions. We also identified variables

⁵Parks and Recreation: Resource Limitations Affect the Condition of Forest Service Recreation Sites (GAO/RCED-91-48, Jan. 15, 1991).

the Forest Service needs to consider in developing a strategy to guide the future direction of its recreation program.

Our earlier reports showed that information on the condition of recreational sites and areas was not available from Service headquarters. Accordingly, we had to gather such information from the Service's field office levels (regions, forests, and districts) through interviews and questionnaires. During all four reviews, we interviewed Service personnel at the field office levels, where the greatest knowledge of recreational sites and areas exists, and gathered statistically valid information through questionnaires. This information enabled us to project our results to all Forest Service sites and areas nationwide. We also observed many examples of deteriorating recreational sites and areas, resource damage, reduced levels of service and maintenance, and project deferments.

We conducted this review from November 1990 through January 1991 in accordance with generally accepted government auditing standards. We obtained the views of Forest Service officials responsible for the recreation program and incorporated them where appropriate. Forest Service officials agreed with the factual information regarding the backlog, their proposed information system, and their development and maintenance standards for recreational sites and areas. As requested, however, we did not obtain official written agency comments on this report.

Problems Common to Forest Service Management of the Recreation Program

Despite recent increases in appropriations, funding and staffing levels have not been sufficient to bring recreational sites and areas up to Forest Service plans and standards. All four of our previous reports noted that funding and staffing shortages were the primary cause of deferred maintenance, reconstruction, and new construction, as well as unmet program management plans. To compensate for insufficient resources, the Service has made extensive use of cost-sharing programs and volunteers to assist with maintenance and reconstruction work. However, such efforts, while helpful, have been unable to bridge the gap between available resources and needed work.

In addition, Forest Service headquarters does not gather uniform and consistent data on the condition of recreational sites and areas nationwide or on the resources needed to bring them up to Service standards. While the best knowledge about the general condition of the recreational sites and areas exists at the field office levels, even at these levels the extent and type of information varies. Without sufficient information on the condition of recreational sites and areas, Service headquarters cannot effectively manage the recreation program or provide the Congress with the information it needs to determine the future direction of the program.

In response to our previous recommendations, the Forest Service has implemented or begun actions to gather better data on the extent and severity of recreational site and area conditions. If our recommendations are fully implemented, the Service should be better able to manage the program and to inform the Congress of recreation program conditions and resource needs.

Resources Have Been Insufficient to Maintain Sites and Areas to Desired Standards

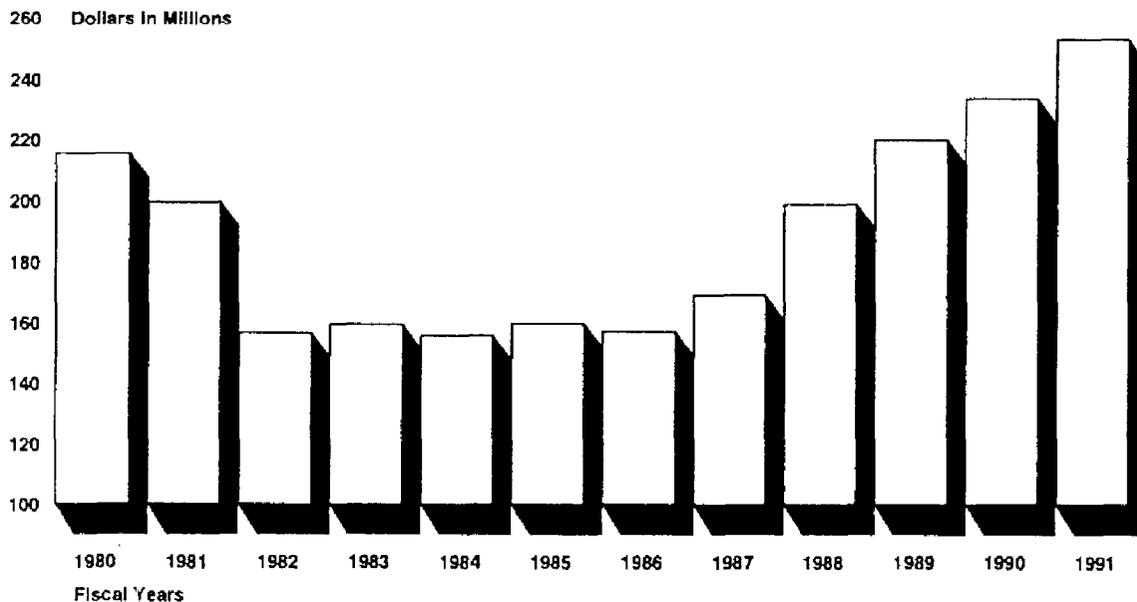
Through much of the 1980s, because of limited resources the Forest Service could not maintain recreational sites and areas to established standards. Accordingly, it had to defer much maintenance, reconstruction, and new construction work from year to year. In response to our questionnaires and interviews in our four previous reports, Service officials told us that insufficient funding and staffing were the primary causes of their backlogs of unmet needs.

According to Service personnel, for example, funding and staffing levels over the past decade have consistently been less than needed to keep forest trails to the conditions called for by established standards. Similarly, special recreation area managers told us that shortfalls in funding and staffing were often the reason for the delays in construction

projects, the inadequacy of visitor information services, and the decreased levels of cleanup and maintenance. Funding and staffing have also been insufficient to attain wilderness management initiatives such as educating the public, cleaning up campsites, taking inventories of wildlife and plants, and monitoring resources. Finally, district officials who manage developed recreational sites and areas told us that funding and staffing levels have not been sufficient to keep up with day-to-day operations, much less to apply to the \$449 million backlog of deferred maintenance and reconstruction work.

From fiscal year 1980 through fiscal year 1982, recreation program funding and staffing declined sharply and did not increase until fiscal year 1987. Beginning in 1987, after the Service reported severe maintenance and reconstruction backlogs, the Congress increased recreation program funding. However, the funding and staffing levels did not exceed the 1980 levels until 1989. (App. I shows the recreation program's budget history for fiscal years 1980 through 1991, in constant 1991 dollars.) Figures 2.1 and 2.2 show funding and staffing levels through the 1980s for the recreation program.

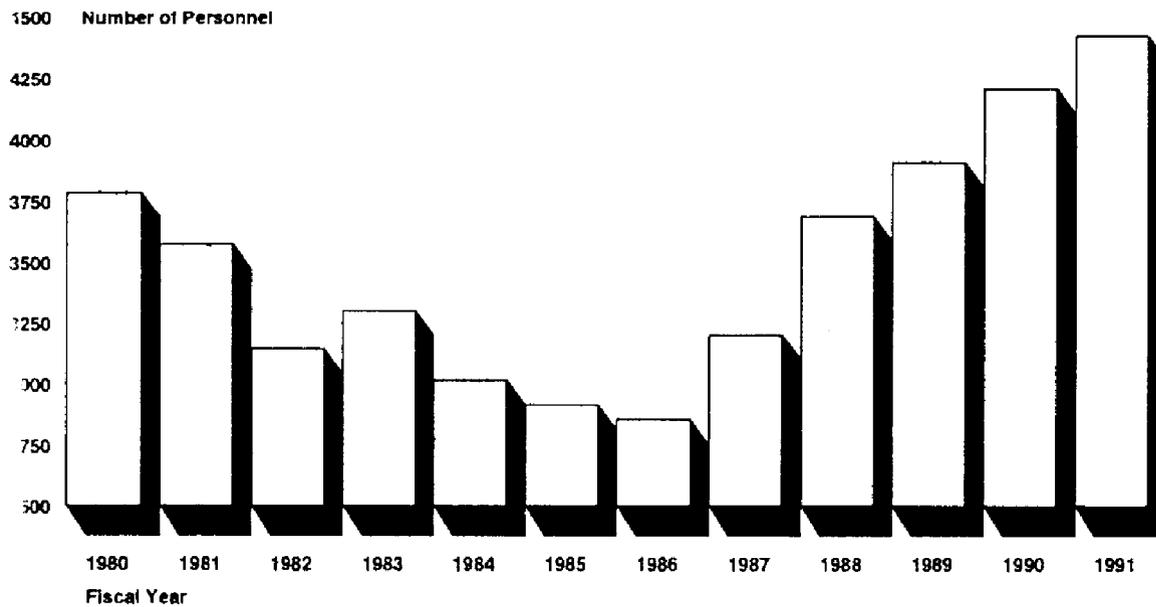
Figure 2.1: Forest Service Recreation Program Appropriations—Fiscal Years 1980 Through 1991 (In Constant 1991 Dollars)



Source: Basic data provided by the Forest Service.

Chapter 2
Problems Common to Forest Service
Management of the Recreation Program

Figure 2.2: Recreation Program Personnel, Fiscal Years 1980 Through 1991 (Full-Time Equivalent Personnel)



Source: Forest Service.

Use of Cost-Sharing Programs and Volunteers Has Not Been Able to Bridge the Gap

Although the Service has made extensive use of cost-sharing programs and volunteers, under the umbrella of the National Recreation Strategy, such efforts have been unable to bridge the gap between the work needed and the resources available to accomplish it. Although it is too soon to determine the extent to which programs undertaken under the strategy will enhance the development and operation of recreational sites and areas, Forest Service employees have voiced concerns about the strategy's effectiveness. Additionally, while volunteer assistance is helpful in maintaining and operating recreational sites and areas, it too has its drawbacks.

The National Recreation Strategy, issued by the Forest Service in April 1988, calls for stretching available federal dollars by seeking out public and private groups to share the expense of developing, repairing, and operating recreational sites and areas. Under the strategy, the Service implemented the Recreation Challenge Cost Share Program, through which the Service matches outside organizations' dollar or in-kind contributions (e.g., materials, equipment use, and labor) for recreation

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projects. Contributions pledged by public and private groups and individuals since the Recreation Challenge Cost Share Program's inception in 1988 are shown in table 2.1.

Table 2.1: Forest Service Contributions and Pledged Contributions for the Recreation Challenge Cost Share Program

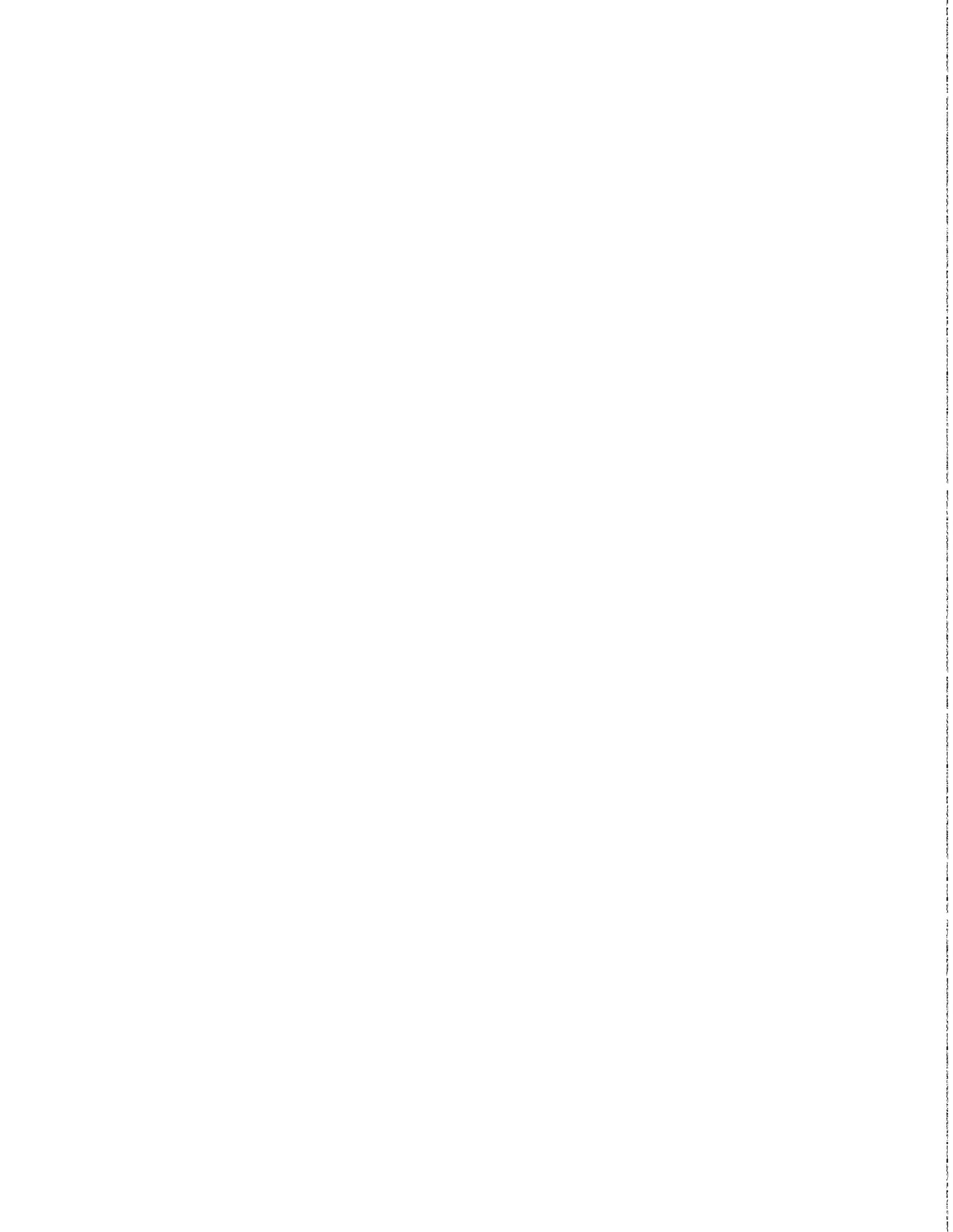
Dollars in millions		
Fiscal year	Service contributions	Pledged contributions
1988	\$0.5	\$0.9
1989	3.0	6.7
1990	5.5	11.0
1991	7.8	^a

^aAmount of fiscal year 1991 contributions not known.

During our reviews of trails, national recreation areas, and developed recreation sites, Service personnel voiced varying opinions about the effectiveness of the Recreation Challenge Cost Share Program. Some officials said their districts had benefited considerably from the program. For example, developed recreation sites such as picnic shelters, warming huts, and fishing piers had been constructed through the program, and other facilities had been repaired or rehabilitated. In contrast, some officials said they have not realized benefits from the program because (1) they are so pressed by day-to-day tasks and existing priorities that they do not have time to adequately plan and implement new projects or (2) their challenge cost-share proposals were rejected.

The Service relies heavily on volunteers. Volunteers help to maintain and reconstruct trails, operate and maintain developed recreational sites and areas, provide ranger or host services in wilderness areas, and develop and maintain sites in national recreation areas. For trail maintenance alone, volunteers worked about 926,000 hours on over 17,600 miles of forest trail in fiscal year 1988, according to our questionnaire respondents.

While of great assistance in maintaining and developing recreational sites and areas, volunteers carry associated costs and disadvantages. For instance, recruiting, training, and supervising volunteers require a considerable investment of time and money on the Service's part, with no assurance that volunteers will remain committed and available. Additionally, the quality of work done by volunteers varies.





Service Headquarters Does Not Gather Uniform and Consistent Data on Recreational Sites and Areas

Forest Service headquarters does not routinely gather information on the overall condition of recreational sites and areas, nor does it gather and report data on unmet maintenance and reconstruction needs and associated costs. However, we found that this information was generally available at the field office levels although its accuracy and completeness varied.

In the past, Service headquarters has not gathered and reported to the Congress information on the condition of recreational sites and areas. Rather, the information obtained and reported to the Congress has been general in nature. For example, under the trails program, headquarters gathers and reports, by state, the total number of forest trail miles, as well as the number of miles maintained to standard and constructed during the year. However, headquarters has not obtained information on the severity of problems with existing trails, the corollary maintenance and reconstruction needs, or the resources required—by severity—to meet such needs. Similarly, for wilderness areas, headquarters simply gathers and reports, by state, the number of acres included in the National Wilderness Preservation System. However, headquarters has not obtained information on wilderness conditions, use, or trends in condition. For special recreation areas, headquarters has not gathered or reported any type of information on the status of the areas. It has not obtained data on progress made, project deferments, or resources needed to develop, operate, and maintain the areas up to the showcase levels called for by Forest Service policy and area plans.

Forest Service headquarters has delegated program management to the regional offices. The regional offices, in turn, delegate many management functions to the forest supervisor offices. However, day-to-day program activities are generally conducted by the district offices, where the best knowledge of conditions exists.

Regional, forest, and district offices vary in the type and specificity of information they gather and maintain on the status of recreational sites and areas. For example, at each of the 20 districts we visited during our review of developed recreation sites, we found some form of inventory documentation on site condition and backlog. However, the documentation varied widely among the districts; some maintained extensive inventory data, while others relied on “cuff records” and memory to track facility conditions. Similarly, in our review of special recreation areas, only 10 of the 20 areas had sufficient information to provide us a list of delays in completing projects contained in area plans. As a result,

we were unable to quantify the number of projects delayed or the average length of the delays.

The Service Plans to Gather Better Information on the Condition of Recreational Sites and Areas

In response to our recommendations, the Forest Service has taken or is planning to take a number of actions to gather more uniform and consistent data on the condition of recreational sites and areas. To enable the Service and the Congress to monitor the trail maintenance and reconstruction backlog, we recommended that the Forest Service gather and make available to the Congress, on a periodic basis, nationwide data on (1) the trail maintenance and reconstruction work that needs to be done, (2) the severity of problems with the trails, and (3) the associated costs. In response to our recommendations, the Service plans to gather the recommended data, including a measure of the severity of conditions, and report the data to the Congress every 5 years.

To improve administration of Forest Service's wilderness areas we recommended that it take several actions, including (1) developing baseline inventory information on the condition of each designated wilderness and monitoring changes in the condition and extent of visitor use of wilderness areas; (2) evaluating present Forest Service administrative sites to determine whether the structures are the minimum needed to protect the resource; (3) establishing a uniform national policy for dealing with outfitter and guide structures and facilities within wilderness areas; and (4) compiling information on the total funding and staffing needed to effectively manage wilderness areas.

In response to our recommendations, Service headquarters instructed regional foresters to obtain baseline inventory information on wilderness conditions. To assist in this effort, the Service developed and issued to wilderness managers guidelines for assessing and monitoring changes in wilderness conditions. The Service is also encouraging nationwide use of a consistent method of assessing changes in wilderness conditions and is providing training to wilderness managers on the use of that method. Service headquarters instructed wilderness managers to review and evaluate all administrative sites by the end of fiscal year 1993 and to address the management of administrative sites in their forest management plans.

As for dealing with outfitter and guide structures and facilities, the Service did not believe that a new national policy was required. Rather, it plans to enforce the existing policy; by doing so, Service officials believe that they will eliminate the concerns we identified about the detrimental

effect of such structures and facilities on the wilderness experience. Finally, Service headquarters instructed wilderness managers to address funding and staffing needs as part of the wilderness area work plans which all wilderness managers are to prepare. Because all work plans will not be completed until the end of 1993, detailed information on individual wildernesses' funding and staffing needs will not be available until that time.

To improve the management of special recreation areas, we recommended that the Forest Service develop information on and periodically report to the Congress the status of development, operations, and maintenance at each area. We recommended that such information include, as a minimum, (1) aspects of each area's plan that have been completed, (2) aspects of the plan that have yet to be completed, (3) the proposed time frame for completing the work necessary to fulfill the plan, and (4) an assessment of the resources needed to operate and maintain these areas at showcase levels.

In response to our recommendations, the Service plans to gather, by April 1991, data on the status of each special recreation area, including data on aspects of the area's plan that have and have not been completed and time frames for completion. On the basis of these data, the Service plans to report to the Congress every 5 years on the status of all areas' management plans. The Service also plans to identify the level of resources needed to operate and maintain the areas at optimal levels.

To ensure that information is available to make informed decisions concerning the maintenance and reconstruction of developed recreation sites, we recommended that the Forest Service develop and implement a Service-wide system to accurately gather and record maintenance and reconstruction needs, including the backlog. To accomplish this, we recommended that the Service (1) establish a requirement to collect and record, at the district level, site condition information, which when aggregated will yield reliable nationwide figures on maintenance and reconstruction needs; (2) install internal controls and develop guidelines on how to ensure the accuracy of reported backlog data; (3) establish firm dates for completing the planned management information system under development by the regions; (4) require all its regions, forests, and districts to implement the system being developed by the regions once it is completed; and (5) group or rank the deferred maintenance and reconstruction backlog by defined categories, so that funds can be

allocated for those needs deemed to be of higher priority. As of February 1991, the Service had not formally responded to these recommendations.

Conclusions

Insufficient financial resources and staff have not allowed the Forest Service to bring recreational sites and areas up to the condition called for by its plans and standards. Funding and staffing shortages were the primary causes of deferred maintenance, reconstruction and construction work, as well as unmet program management plans. Although the Service has made extensive use of cost-sharing programs and volunteers, under the umbrella of the National Recreation Strategy, such efforts have been unable to bridge the gap between the work needed and the resources available to accomplish it. Coupled with the lack of resources, the Service has not obtained and used information on the nationwide condition of recreational sites and areas in managing the recreation program. Without such information, neither Service headquarters nor the Congress can monitor the nationwide severity of existing conditions; trends in conditions; unmet maintenance, reconstruction, or development needs and the resources needed to meet them; or progress made in improving recreational sites and areas.

In the past, Forest Service headquarters officials have not believed it necessary to gather detailed information on the conditions of recreational sites and areas. However, in response to our recommendations, the Service has or is planning to take several actions to gather better data on the extent and severity of recreational site and area conditions. If fully implemented, these recommendations should assist the Service in better managing the recreation program and in reporting to the Congress on program conditions and future resource needs.

Strategy Needed to Address the Future Direction of the Recreation Program

Over the years, the Forest Service's recreational resources have become expansive—about 108,000 miles of trails; 350 wilderness areas encompassing 32.5 million acres; 28 special recreation areas; and 13,000 developed sites, including 5,800 camping and picnicking areas. These sites and areas, representing hundreds of millions of dollars in investment, have been developed and maintained primarily through congressional appropriations. The Service generally does not charge for the public use of these sites and areas. Although user fees are charged for selected activities, these fees have done little to supplement the recreation program appropriations.

Over the past decade, program appropriations have not been sufficient to develop or maintain Forest Service recreational sites and areas to established standards and many have deteriorated. To maintain the status quo will result in further degradation, continued safety and health hazards, and ultimately the loss of some of these recreational sites and areas. Because of the possibility of further degradation of recreational sites and areas and the loss of resources, the Forest Service now faces tough decisions concerning the future direction of its recreation program.

Information to assist the Service in addressing these decisions has been absent. As shown by our work, the Service has not gathered uniform and consistent national information on the conditions of recreational sites and areas, the severity of the conditions, or the resources needed to maintain sites and areas to standards. As a result, information to make difficult budget and policy decisions has not been available. If the Service fully implements our recommendations, it will have a more reliable nationwide picture of recreational site and area conditions, the severity of such conditions, and the resources needed to bring them to standard.

With such information, the Service will be in a better position to develop a strategy to guide the future direction of its recreation program. In developing its strategy, the Service needs to consider three variables: funding levels; the number of sites and areas to be developed and maintained; and the extent to which development and maintenance standards can or should be revised.

Increase Revenues

Substantial increases in appropriations could bring all existing and planned recreational sites and areas up to standard. However, in these times of fiscal constraint and competing demands, such increases in appropriations may not be practical. Although the recreation program's

appropriations have been increased each of the last 5 fiscal years, these increases have not been enough to enable the Service to make a significant dent in the backlog of deferred maintenance and reconstruction work. On the basis of our previous estimates, it would require at least \$644 million to eliminate the Service's maintenance and reconstruction backlog for trails and developed sites. And millions more are required to develop and maintain special recreation and wilderness areas to planned levels and current standards.

The Service could also choose to charge the public for the use of additional recreational sites and areas. However, such a choice would represent a change in the long-standing philosophy of free access to public lands and would require legislative changes. The Service is currently prohibited by law from charging fees for the use of most recreational sites and areas. According to the Land and Water Conservation Fund Act of 1964 (Public Law 88-578), the Service can charge fees only for the use of (1) boat launching facilities that offer services such as mechanical or hydraulic boat lifts and (2) campgrounds that offer certain amenities such as toilet facilities, drinking water, refuse containers, and tent or trailer spaces. In fiscal year 1990, the Service collected about \$11 million in user fees. If the Forest Service gathers data on use and resource needs, it could better assess the impact on users and decide whether to seek changes in legislation that limits the charging of user fees.

The Service could also increase its use of cost-sharing programs and volunteers. However, its ability to do so is questionable. Cost-sharing efforts, while generating public and private contributions, have associated costs. The Recreation Challenge Cost Share Program, for example, is funded out of the overall recreation program appropriations. Although the program has generated public and private contributions that doubled or tripled the amount appropriated, the amounts raised have been insignificant compared with the hundreds of millions of dollars needed to develop, maintain, and reconstruct recreational sites and areas to standard. Over the past 4 fiscal years, the Forest Service's share of Recreation Challenge Cost Share Program contributions totaled \$9 million, generating public and private contributions valued at \$18.6 million.

As for volunteer efforts, they have aided the Service in developing and maintaining recreational sites and areas. In fiscal year 1988, for

example, volunteers worked about 926,000 hours to maintain and reconstruct over 17,600 miles of trail, according to the Forest Service. Nevertheless, volunteers carry associated costs and disadvantages. Volunteers require training and supervision. Also, the quality of their work varies, it is difficult to attract them to work in remote areas, and their continued availability and commitment cannot be guaranteed.

Reduce the Number of Sites and Areas

In lieu of or in conjunction with increased funding, but still keeping the current standards, the Forest Service could reduce the number of sites and areas to be developed and maintained. Reductions could be accomplished in two ways. First, the Service could permanently close some sites and areas. Second, the Service could seek to limit the number of new sites and areas to be developed or constructed, as each new site or area increases the maintenance burden. For example, the Service plans to construct about 8,400 miles of new trails by 1993, including about 400 miles designated by the Congress as national scenic or national historic trails. Also, since 1985, the Congress has designated six new special recreation areas, containing over 380,000 acres, with plans to develop a variety of facilities that will require subsequent maintenance.

Reducing the number of sites and areas could have associated drawbacks. For example, closing sites and areas would mean accepting the loss of federal investments and creating dissatisfaction among the various user groups. This reduction may also place a further strain on the existing sites and areas since they may become overused, overcrowded, and subject to more rapid deterioration. Similarly, reducing the number of new sites and areas would interfere with the Service's objectives of meeting public demands for modern sites and for access by those with physical disabilities. Both would necessitate difficult choices; for example, which sites to close and which not to build.

Lower Standards

If it is not feasible or acceptable to increase revenues or to reduce the number of sites and areas, then another alternative would be to lower Forest Service development and maintenance standards to match the level of work that can realistically be achieved with available resources. This alternative would mean changing the Forest Service's objective of developing and maintaining recreational sites and areas to standards. For example, the Service could lower its standard for national recreation areas, thus reducing the public's enjoyment of these showcase scenic, cultural, or wildlife resources. Or the Service could lower its standard for wilderness areas, thus offering something less than the outstanding

opportunities for solitude or primitive and unconfined types of recreational experience that these areas now provide. The Service could also lower its standard of providing recreational opportunities to those with physical disabilities by reducing such things as interpretive services for the blind and the deaf and/or ramps for those in wheelchairs.

Conclusions

If long-standing development, maintenance, and reconstruction problems relating to the Forest Service's recreation program continue, further degradation and possible loss of some of these recreational sites and areas will result. Developing a strategy to address the problems will not be easy; nevertheless, a change is needed.

The resources allocated to the recreation program have not been sufficient to meet the Service's development and maintenance standards. Consequently, several questions need to be addressed. Should revenues be increased through congressional appropriations or public user fees? Or should the Forest Service maintain its current standards but reduce the number of recreational sites and areas? Or should the Service lower its development and maintenance standards? Or is some combination of these alternatives the most feasible and acceptable?

We believe that an acceptable strategy will come only through deliberate and informed debate. To make the difficult decisions, that such a strategy will require, the Forest Service must first provide reliable information and then work closely with the Congress in determining how to address the current condition of the national forests' recreational sites and areas.

Recommendation to the Secretary of Agriculture

We recommend that the Secretary of Agriculture direct the Chief of the Forest Service to develop a strategy to guide the future direction of its recreation program. This strategy should contain recommendations on funding levels and sources, the number of sites and areas to be developed and maintained, and the standards to which these sites and areas should be maintained. The strategy should also describe the benefits, drawbacks, and costs associated with each alternative.

Total Forest Service, Recreation Use, Trail Maintenance, Recreation and Trail Construction, Fiscal Years 1980-91 (In Thousands of Constant 1991 Dollars)

National Forest Service Total	Fiscal years			
	1980	1981	1982	1983
Agency request	\$1,736,084	\$1,631,530	\$1,492,899	\$1,486,436
Dept. Allowance ^a	1,295,413	1,229,529	1,432,493	1,460,571
President's budget	1,217,050	1,273,113	1,158,022	1,363,907
Appropriations	1,335,812	1,295,455	1,326,188	1,329,521
Recreation Use				
Agency request	199,838	225,483	190,676	141,711
Dept. Allowance	142,638	153,461	185,303	141,711
President's budget	149,537	159,719	143,198	128,928
Appropriations	168,011	164,240	125,075	127,164
Trail Maintenance				
Agency request	36,893	28,100	24,898	15,111
Dept. Allowance	17,770	18,704	21,059	15,111
President's budget	18,487	20,161	12,228	10,243
Appropriations	18,487	20,161	18,767	12,875
Recreation Construction				
Agency request	99,676	60,689	14,878	0
Dept. Allowance	13,311	12,371	10,433	0
President's budget	13,693	7,119	7,974	5,926
Appropriations	15,464	9,829	6,554	12,842
Trail Construction				
Agency request	25,312	35,645	26,874	6,400
Dept. Allowance	12,785	8,689	7,778	6,400
President's budget	13,214	5,194	2,743	6,400
Appropriations	13,188	5,194	6,213	6,400

Appendix I
Total Forest Service, Recreation Use, Trail
Maintenance, Recreation and Trail
Construction, Fiscal Years 1980-91 (In
Thousands of Constant 1991 Dollars)

Fiscal years							
1984	1985	1986	1987	1988	1989	1990	1991
\$1,466,355	\$1,372,492	\$1,361,319	\$1,374,581	\$1,378,088	\$1,401,650	\$1,468,710	\$1,947,587
1,365,193	1,306,295	1,337,362	1,222,516	1,335,037	1,339,152	1,485,095	1,807,862
1,216,545	1,275,472	1,281,580	1,038,894	1,145,904	1,255,038	1,380,943	1,968,405
1,236,399	1,286,199	1,291,378	1,345,289	1,401,794	1,438,840	1,794,504	1,929,637
135,550	121,651	126,393	145,390	147,117	183,301	180,478	173,241
118,871	111,151	118,364	124,753	137,911	156,261	149,094	179,147
118,871	119,975	120,407	59,396	72,479	132,210	140,173	193,308
126,475	125,073	123,721	128,016	139,506	153,955	159,484	152,724
12,417	12,121	12,317	16,551	17,264	24,649	24,248	25,184
11,150	10,317	10,339	11,417	17,264	16,922	25,220	23,814
10,345	10,304	11,277	9,715	12,994	16,922	18,052	23,854
11,612	11,303	11,938	12,776	22,577	22,508	25,266	28,228
8,700	6,284	18,978	40,653	30,042	22,593	22,482	22,502
7,559	2,379	3,314	23,229	10,663	22,593	20,813	9,979
0	2,375	2,738	5,691	8,771	20,733	16,008	12,551
10,900	14,589	13,051	19,639	20,282	26,021	28,958	50,205
6,568	6,776	7,630	8,988	17,166	14,910	16,736	20,605
6,568	6,483	7,630	8,217	15,475	14,910	18,978	15,525
6,568	6,475	4,162	5,779	7,919	13,683	18,711	15,489
6,568	8,756	8,423	8,480	16,540	17,259	19,346	21,480

^aDepartment of Agriculture Allowance.

Source: Basic data provided by the Forest Service.

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