

GAO

Report to the Honorable
Howard M. Metzenbaum, U.S. Senate

May 1988

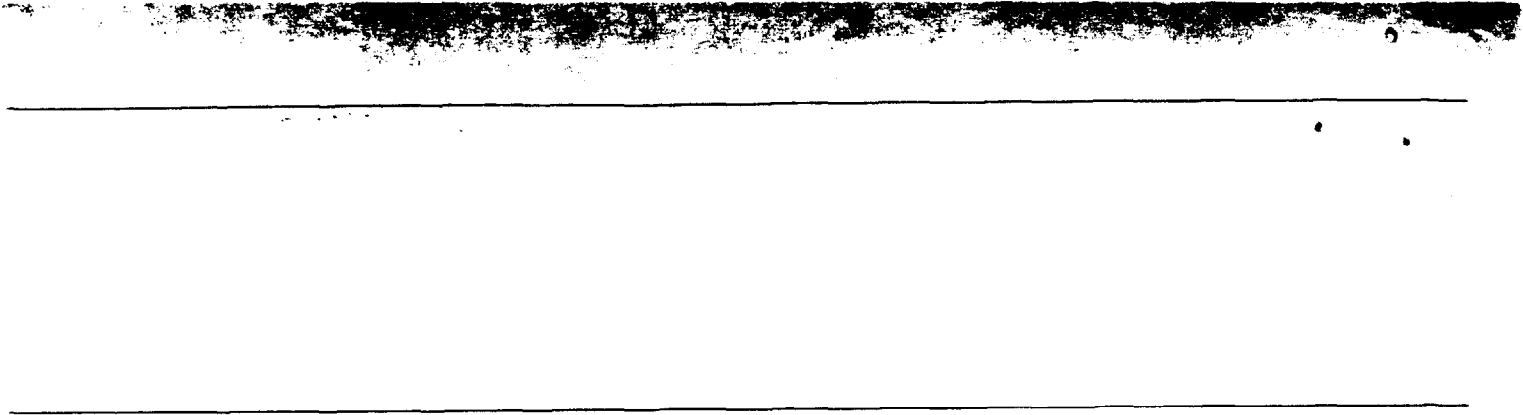
PARKS AND RECREATION

Problems With Fee System for Resorts Operating on Forest Service Lands



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Resources, Community, and
Economic Development Division

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May 16, 1988

The Honorable Howard M. Metzenbaum
United States Senate

Dear Senator Metzenbaum:

This report responds to your request that we review the Graduated Rate Fee System used by the Department of Agriculture's Forest Service to assess fees paid by summer and winter resort operators. The report addresses whether the current fee system achieves a return of fair market value and answers questions about fee system problems reported in the past. It also contains information on fee systems used by other agencies. Appendix III of the report provides information on the ownership of major resorts operating on Forest Service lands.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 20 days from the date of this letter. At that time, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

A handwritten signature in cursive script that reads 'J. Dexter Peach'.

J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

The Forest Service issues special-use permits, which allow the private sector to provide certain types of recreation activities on Service lands. Concerned about whether or not the Forest Service was receiving fair market value for its summer and winter resort permits, Senator Howard M. Metzenbaum asked GAO to review the fee system that the Service uses to calculate resort permit fees. GAO was specifically asked, among other things, to examine the Forest Service's management of the fee system to (1) determine whether fees for the use of public lands reflect fair market values, (2) evaluate actions taken to correct fee system problems previously reported by GAO and identify any other problems with the current fee system, and (3) recommend solutions to any problems.

Background

The Independent Offices Appropriations Act of 1952 (31 U.S.C. 9701) expresses the sense of the Congress that "each service or thing provided by an agency . . . is to be self-sustaining to the extent possible." Office of Management and Budget Circular A-25, which implements the act, states that when federally owned property is leased, a fair market value should be obtained to the extent it is cost-effective to do so.

Fees for commercial operations with special-use permits, such as ski resorts, lodges, and marinas, are computed using a system that was devised by the Forest Service about 20 years ago. The system, known as the Graduated Rate Fee System, sets fees based on the amount and source of the permittee's sales and the amount invested in fixed assets. According to the most recent Service-wide data available, about 640 permittees were subject to this system in 1985. The permittees' gross sales that year amounted to about \$593 million, and they paid \$12.1 million, or about 2 percent, to the government as fees for using Forest Service lands.

In a 1982 report to the Forest Service Chief, GAO pointed out problems with the fee system as it applied to ski resorts. In addition, the Department of Agriculture's Office of Inspector General has issued several reports that are critical of the Service's administration of the fee system. Moreover, internal studies performed by the Service have recommended changes to modify and simplify the current fee system.

Results in Brief

The Forest Service has no assurance that its fee system formula, as designed, calculates fair market value, and the rates used in the formula have never been updated to reflect changed economic conditions. Further, past studies by the Service, the Department of Agriculture's Office

of Inspector General, and two presidentially appointed groups have concluded that the formula has methodological defects that cause the Service to receive less than market value for its winter resort permits.

In addition, the Service has not corrected three of the four fee system problems GAO reported in 1982. As a result, the fee system continues to (1) reflect outdated economic conditions, (2) revalue a permittee's investment in fixed assets only when a sale occurs, and (3) make fee computations unnecessarily complicated.

The Service plans to study alternatives for revising or replacing the current Graduated Rate Fee System but deferred the study pending completion of this GAO review. GAO believes that it is possible to develop a fee system that captures a fee that more closely reflects the fair market value of individual resort permits, but the use of this system could be cost-effective only for the larger resort operations. For the smaller operations, the Service should revise the current fee formula to address known methodology problems and/or implement an alternative fee formula that is cost-effective to administer. Items to be considered by the Service in selecting a fee system(s) are discussed in this report.

Principal Findings

Current Fee System Does Not Calculate Market Value

The Service's current fee system uses a formula to obtain a percentage of the resort operator's profits. Although a formula or modeling approach can be used to approximate the market value of a particular permit, such an approach requires the acquisition and analysis of certain resort-specific data in order to consider the unique aspects of an individual resort's financial profile. The Service's current fee system, however, uses standardized, industrywide ratios and factors, which would not necessarily calculate a fair market value fee.

Winter Resort Fees Probably Lower Than Fair Market Value

Past studies have concluded that, on the average, the Service's winter resorts pay fees that are lower than fair market value. These studies recommended revisions that would have resulted in higher fees, but the Service did not implement the recommended revisions. GAO's comparison of the rates of return on investments of ski resorts with Service permits and those without such permits showed that the resorts with permits

had higher rates of return for 8 of the 11 years considered; this could imply that Service fees are below fair market value.

The Service Has Not Corrected Most Previously Reported Problems

In 1982 GAO reported four defects in the Service's fee system that caused inequities for either the government or the permittees. The Service changed its procedures for valuing fixed assets to correct one of these problems. However, no action has been taken regarding the three other problems.

Alternatives for Revising or Replacing the System

The Forest Service could devise a fee system designed to capture a fair market value fee. To implement this system the Service would have to (1) determine what percentage of each permittee's profit constitutes a fair market value fee and (2) obtain and review the permittees' financial data to determine the accuracy and reasonableness of reported income and costs. However, this system would require more staff time to administer than the current fee system and could be cost-effective only for the larger resort operations.

Some existing permits restrict the changes that can be made in the methodology used to calculate the permit fee. Therefore, in these instances and in instances in which it is not cost-effective to review the individual permittee's financial data, the Service could address the problems of the current fee system either by (1) revising the current fee system (e.g., updating the fee rates using current economic data, eliminating the breakout of a resort's sales income by business category, and discontinuing the revaluation of a resort's fixed assets only when it is sold) or (2) where permit terms allow, replacing the current fee system with a less complex system (e.g., a flat or graduated percentage-of-sales fee).

Recommendations

GAO recommends that the Secretary of Agriculture direct the Chief, Forest Service, to (1) develop and implement, where practical, a fee system that captures a fee that more closely reflects fair market value and (2) for those permits that do not allow the Service to use this new fee system, or for which this fee system would not be cost-effective, either revise the current fee system to address its existing problems or replace the current fee system with one that is less complex.

Agency Comments

The Forest Service said that it will continue to refine and eliminate problems with the current fee system but that it disagrees with GAO's

conclusions that the system does not calculate fair market value, that winter resort fees are probably lower than fair market value, and that the Service should implement a separate fee system for the larger resort operations. The Service, however, did not present evidence demonstrating its position that it receives fair market value. On the other hand, this report, as well as studies by others, cites data that show the Service's current fee system does not capture fair market value. In addition, GAO continues to believe that for the larger resorts it is feasible to develop and implement a cost-effective fee system that calculates fees more closely approximating the value of the permits. The Forest Service's comments and GAO's evaluation are discussed further at the end of chapter 5 and in appendix VII.

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Abbreviations

GAO General Accounting Office
GRFS Graduated Rate Fee System
OMB Office of Management and Budget

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Introduction

The 191 million acres of land managed by the Department of Agriculture's Forest Service offer the public a wide variety of recreational opportunities. In fiscal year 1986, the public spent over 226 million recreation visitor days on Service lands.¹ About 10 percent of these recreation visitor days were spent at privately operated recreation facilities, such as ski resorts, marinas, and lodges, that are located, at least in part, on Service lands.

The Service uses special-use permits to administer the activities of the operators of privately operated recreation facilities, and each operator, or permittee, is charged an annual fee for the privilege of operating on Service lands. Over the years, the Service has used several systems to calculate the fee amount. In 1968, however, the Service began implementing a nationwide fee system intended to ensure that fair market value is obtained for commercial public-service, special-use permits, as was encouraged by the Independent Offices Appropriations Act of 1952 (31 U.S.C. 9701) and Office of Management and Budget (OMB) Circular A-25, issued in September 1959. This system, known as the Graduated Rate Fee System (GRFS), was adopted for permittees, other than winter sports permittees, on July 1, 1968, and for winter sports permittees on July 1, 1972.

In 1985, the most recent year for which nationwide data was available, approximately 569 of the 640 commercial public-service operations permittees subject to GRFS had their annual fees calculated using either the GRFS formula (325 permittees) or a percentage rate applied to sales that was developed using the principles of GRFS (244 permittees). The remaining 71 permittees were either operating under leases that predated the implementation of GRFS or were permittees that were granted exemptions from GRFS—for example, temporary permittees and permittees that have no permanent facilities on Service lands. The fees for the permits were being computed under other fee systems, such as percentage of sales, percentage of land value, or flat fee systems.

¹A recreation visitor day involves the presence of one person on an area of land or water, for the purpose of engaging in one or more recreation activities, for part or all of a day.

Graduated Rate Fee System

GRFS fees are calculated by applying a selected rate or rates from an established schedule of rates to the permittee's gross sales.² The rates used for each permittee are determined by the proportioned relationship of the permittee's sales to the permittee's gross fixed assets. As sales increase in relation to gross fixed assets, a higher rate (from the schedule of graduated rates) is applied to the higher increment of sales and, as a result, the total fee increases. Conversely, if sales decrease in relation to gross fixed assets, or if gross fixed assets increase in relation to sales, lower rates apply to larger portions of sales and the total fee decreases. (A more detailed explanation of the fee calculation methodology is provided in ch. 2.)

Service procedures provide for less complex methods of calculating the annual permit fee when it is expected to be less than \$3,500. The Service's Auditing Concessions Handbook states that, generally, concessions subject to GRFS automatically require a determination and verification of gross fixed assets. However, when the annual permit fee is expected to be \$3,500 or less, either a flat fee or a graduated fee may be established. The graduated rate system to sales either estimated on the basis of the permittee's previous 3-year sales history, if possible, or an estimate of what sales will be.

Most of the Fees Collected Are From Large Winter Resorts

While the winter sports resorts (ski resorts) make up only about 24 percent of the 640 permittees subject to GRFS, they are generally much larger than the other types of operations holding permits, and they pay most of the fees the Service collects from permittees subject to GRFS. In 1985 ski resorts paid about \$10.1 million, or 83 percent, of the \$12.1 million collected by the Service. Further, when ranked by gross sales, 65 of the 80 permittees with annual gross sales of over \$1 million were ski resorts. Table 1.1 shows the number of winter and summer resort permittees in various annual gross sales categories ranging from under \$100,000 to \$5 million and over.

²For mixed business enterprises such as ski resorts and marinas, GRFS provides a schedule of rates for each of the several business categories involved. Separate rates have been established for nine business categories: grocery, merchandise, food service, liquor service, car service, lodging, rentals and services, outfitting/guiding, and lifts, tows, and ski school.

Table 1.1: Winter and Summer Resort Permittees, Categorized by Annual Gross Sales

Gross sales	Number of resorts		Total
	Winter	Summer	
\$5 million and over	27	1	28
\$1 million to \$5 million	38	14	52
\$500,000 to \$1 million	20	22	42
\$100,000 to \$500,000	31	142	173
Under \$100,000	37	308	345
Total	153	487	640

Seventy-one resort permittees subject to GRFS did not have their fees computed under GRFS. However, tables 1.2 and 1.3 show that most of the fees paid in 1985 were paid by the relatively few winter resort permittees whose fees were calculated under GRFS.

Table 1.2: Fees Paid by Winter Resort Permittees (1985)

Fee category	Graduated Rate Fee System		Other fee systems	
	Number	Fees paid	Number	Fees paid
\$500,001 and above	3	\$2,465,321	0	\$0
\$250,001 - 500,000	6	2,138,569	2	801,786
\$100,001 - 250,000	15	2,141,298	2	336,016
\$ 50,001 - 100,000	13	975,879	1	92,544
\$ 3,501 - 50,000	57	1,018,988	4	71,199
\$ 3,500 and below	38	49,518	12	10,210
Total	132	\$8,789,573	21	\$1,311,755

Table 1.3: Fees Paid by Summer Resort Permittees (1985)

Fee category	Graduated Rate Fee System		Other fee systems	
	Number	Fees paid	Number	Fees paid
\$500,001 and above	0	\$0	0	\$0
\$250,001 - 500,000	0	0	0	0
\$100,001 - 250,000	1	176,814	0	0
\$ 50,001 - 100,000	5	361,672	1	50,044
\$ 3,501 - 50,000	93	954,519	6	89,640
\$ 3,500 and below	338	327,369	43	33,169
Total	437	\$1,820,374	50	\$172,853

Most of the Large Resorts Are Located in Western States

Nearly two-thirds (20 of 31) of the major winter resorts are located in the Service's Rocky Mountain and Pacific Southwest regions, and one-half (19 of 38) of the large summer resorts are located in the Pacific Southwest Region. (See app. I for a further breakout of the location of resorts by size.)

Figure 1.1 shows the number of winter and summer resorts located in each Forest Service region.

Prior Reviews by GAO and Others

Since being adopted nearly 20 years ago, GRFS has been reviewed by GAO, the Department of Agriculture's Office of Inspector General, the Property Review Board,³ and the Grace Commission.⁴ In addition, the Service has conducted its own studies of GRFS. The reports on these reviews identified a number of weaknesses or problems in GRFS and recommended that the Service either make revisions to GRFS or use a different fee system. The Service studies are discussed in chapter 2 and appendix II. Chapter 3 discusses the four problems pointed out in GAO's August 1982 report to the Chief, Forest Service.⁵

In September 1987 the Inspector General issued a report on an agency-wide review of various Service fee systems, including GRFS.⁶ On the basis of a review of 17 ski resorts located in 13 national forests, the Inspector General concluded that

- the rates used in calculating the fees under GRFS have not been updated to reflect changing business conditions in the ski industry,
- the ski resorts' gross fixed assets were not always verified by Service personnel,
- one national forest could have reduced its administrative costs if it had converted seven permittees with annual fees of less than \$3,500 to the flat fee system, and
- fees obtained under GRFS in the 1985-86 ski season were considerably lower than those that could have been derived under a negotiated rate

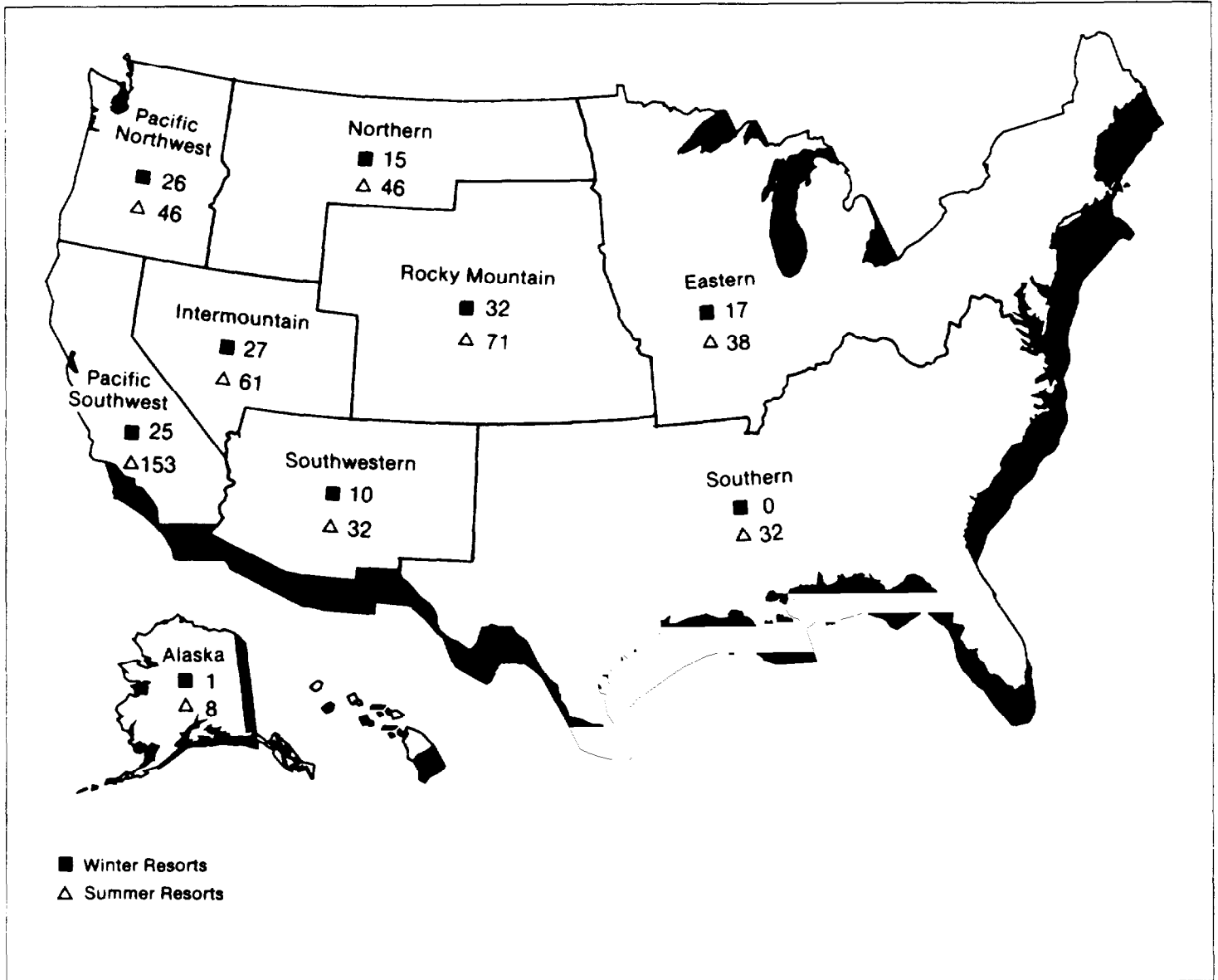
³Established by the President in 1982 to improve the management of federal real property.

⁴Established by the President in 1982 to identify opportunities for increased efficiency and reduced costs in federal government operations.

⁵Problems With the Forest Service's Graduated Rate Fee System (GAO/RCED, Aug. 18, 1982).

⁶Forest Service Assessment and Collection of Concessionaire and User Fees (Number 08634-1 Hy, Sept. 30, 1987).

Figure 1.1: Winter and Summer Resorts by Forest Service Region



obtained in a competitive environment that reflects fair market value—\$4 million versus \$8.6 million for the 17 ski resorts reviewed.

The Inspector General has also issued several audit reports on the administration of ski resort permits by individual Service regions. These reports, discussed in chapter 3, noted internal control weaknesses and

problems with fee calculations and collections at certain national forests.

A 1984 report by the Property Review Board stated that GRFS was complicated, expensive to administer, and contained methodological inaccuracies. The report also stated that because the GRFS fee is based partly on the acquisition value of gross fixed assets, which, in the Board's opinion, are financially irrelevant to the value of the land, the fees are lower than fair market value.

Objectives, Scope, and Methodology

In a November 10, 1986, letter, Senator Howard M. Metzenbaum requested that we review the Forest Service's GRFS. In accordance with the Senator's request and subsequent discussions with his staff, we agreed to

- determine whether GRFS results in a return of fair market value (see ch. 2),
- determine whether the Service has corrected the fee system problems we reported in 1982 and identify any other problems in the current fee system (see ch. 3),
- obtain information on concession fee systems used by other agencies (see ch. 4),
- recommend solutions to any problems with the current fee system (see ch. 5), and
- identify the parent companies of the permittees that operate the 50 winter and summer resorts that pay the largest fees (see app. III).

We interviewed Forest Service staff responsible for administering GRFS at Service headquarters, at three of the Service's nine regional offices, and at six national forests (two in each of the three selected regions). Within each regional office and national forest visited, we reviewed pertinent documents and records and interviewed staff who monitor and administer recreation permits. We selected the Rocky Mountain, Pacific Southwest, and Eastern regions for review because (1) they contain over half of the permitted operations subject to GRFS, (2) the Rocky Mountain and Pacific Southwest regions contain over half of the major winter and summer resort operations, and (3) the Eastern Region provides added geographical coverage. (The Service field units we visited are listed in app. IV.)

Within the six national forest offices we visited, we met with from three to five resort operators to obtain their views on the fee system. We

selected the operators on the basis of resort type and size; that is, we selected operators of small, medium, and large summer and winter resorts. In total, we interviewed 26 resort operators subject to the fee system; of these, 12 operated winter resorts. Of the 26 resorts visited, 9 reported 1985 sales in excess of \$5 million, 7 had sales between \$500,000 and \$5 million, and 10 reported sales below \$500,000. (The resort operators we visited are listed in app. V.) We also interviewed officials of the American Ski Federation, the National Ski Areas Association, and the National Forest Recreation Association.

To assess whether GRFS results in the return of a fair market value fee, we reviewed Forest Service studies and other agencies' reports on the fee system. We analyzed the data and methodologies used to compute fees under the system and compared GRFS to the systems used by other federal agencies and selected states. We also compared the profitability of ski resorts operating on Forest Service lands with that of ski resorts operating on non-Service lands. We interviewed Forest Service, other federal agency, and state officials about the concept of fair market value. We also obtained the resort operators' views on the fee system from responses to a questionnaire we sent to the 50 largest resort operators (based on fees paid in 1985) subject to GRFS and interviews with the 26 resort operators we visited.

To determine to what extent the Service had corrected the fee system problems we reported in 1982, we interviewed Service headquarters staff. To identify other problems with the fee system, we reviewed the Department of Agriculture's Inspector General audit reports and Service regional office audit reports, and we interviewed Service regional office and national forest personnel and resort operators.

To obtain information on other agencies' concession fee systems, we interviewed officials at the headquarters offices and selected field offices of the Bureau of Land Management, the Bureau of Reclamation, the Fish and Wildlife Service, and the U.S. Army Corps of Engineers. We also interviewed National Park Service headquarters officials and contacted Parks Canada⁷ staff and state personnel in Arizona, California, Colorado, Minnesota, New Hampshire, Utah, Vermont, and Wisconsin to obtain information about their concession fee systems.

⁷Parks Canada is the agency within the Canadian government responsible for operating and maintaining Canada's national parks.

Chapter 1
Introduction

To identify the names of the parent companies of the permittees that operate the 50 largest winter and summer resorts (ranked by fees paid in 1985), we sent each of these permittees a questionnaire and, when necessary, interviewed the permittee and/or Service personnel.

We conducted our review from February through October 1987 in accordance with generally accepted government auditing standards, except that we did not test the reliability of the Service's computer-generated data on the number of resorts and the fees assessed these resorts under GRFS.

Difficulties in Determining Fair Market Value and Implementing a System to Obtain It

Legislation and an OMB circular encourage, and regulations require, the Forest Service to obtain fair market value for the use of its lands. The Service concluded that the most commonly used methods of determining fair market value, which are based on actual market transactions, were not applicable to resort permits. Therefore, the Service developed the GRFS, which has a fee formula designed to recover a percentage of the estimated profits of resorts of average operating efficiency. To ensure the receipt of fair market value fees by the government as well as a normal rate of return to resort operators, in principle it is necessary that the fees be based on the economic profiles of the individual resorts. However, in developing a standard fee formula that could be used nationwide, the Service uses standard ratios rather than the unique economic profiles of the individual resorts. As a result, the fee formula does not ensure the receipt of fair market value to the government from individual resort permits. In addition, the formula's break-even points and fee rates have not been changed to reflect changes in the economic conditions of the businesses involved, and the Service has been unable to adequately define the percentage of profit that equates to the fair market value of winter resort permits.

Because of the dissimilarities of the resorts, we could not conduct a meaningful comparison of the fees paid by resorts operating on Service lands and those paid by resorts operating on state and private lands. However, our analysis of recent economic data on ski resorts indicated that ski resorts operating on Service lands generally have a higher rate of return on investment than those located on non-Service lands.¹ This suggests that the fees assessed by the Service were not sufficient to leave those ski resorts operating on Service lands with a rate of return comparable to the resorts operating on non-Service lands.

Past studies of GRFS by the Service and others have concluded that the permit fees for resorts, particularly winter resorts, have been too low. In three studies performed during the last 20 years, the Service determined that the average permit fee obtained from winter resorts subject to GRFS was lower than the average fair market value, whereas the average fee obtained from summer resorts was closer to fair market value. We estimate that had the Service implemented one of the fee structures recommended in these studies, the fees assessed winter resort operators in 1985 would have been somewhere between 30- and 94-percent higher than those actually assessed. Our August 1982 report and reports by the Department of Agriculture's Office of Inspector General, the Property

¹No similar data existed for summer resorts on public and private lands.

Review Board, and the Grace Commission also have concluded that the permit fees for winter resorts have been too low. The Service did not implement the fee rates proposed in its own studies because of strong opposition from the winter resort operators and because Service officials were not sufficiently confident in the findings of their studies to implement the studies' proposals.

Requirements for Obtaining Fair Market Value Fees

The concept of fair market value has been defined, by case law and in practice, as an asset's value when it is sold by a knowledgeable and willing seller to a knowledgeable and willing purchaser in an unencumbered and a noncolluded market transaction. However, the fair market value of an asset will change as the economic and market conditions prevailing at the time of its sale change. Many factors, such as changes in general economic variables, the supply of the asset on the market, the supply and demand for other related assets, and even the political climate can affect the market value of an asset and thus change its fair market value.

The Forest Service is required to obtain a fair market value fee for the use of national forest lands. The Independent Offices Appropriations Act of 1952 encourages agency heads to charge fees that are fair and based on the value of the service or thing provided to the recipient. Further, 36 C.F.R. 251.57 requires the Forest Service to obtain rental fees that are based on fair market value.

OMB Circular A-25, issued in September 1959, states that where federally owned resources are leased or sold a fair market value should be obtained. However, A-25 also states that this is not required if the incremental cost of collecting the fees would be an unduly large part of the receipts from the activity.

Methods Commonly Used to Determine Fair Market Value Are Not Appropriate for Resorts on Forest Service Land

In practice, only a few methods can be used, by either the government or the private sector, to establish the fair market value of an asset. Two commonly used methods involve (1) actual sales of the asset and (2) the sales of comparable assets. When these methods cannot be used, however, the market value of an asset may be estimated independent of actual market transactions by using theoretical models formulated to simulate the working of the actual market. The Service determined that neither of the first two methods was appropriate for determining the fair market value of winter and summer resort permits.

The actual sales method can be used as long as the market is competitive and free of restrictions on the buyers and sellers. When an asset is not traded frequently in an organized market, a competitive bidding auction can be used to establish the fair market value as long as there are many prospective buyers and each has the freedom to accept or reject an offer. The competitive bidding method has been used extensively by the federal government to ensure the receipt of fair market value in conveying oil and mineral lease rights. The Service did not consider the actual sales method because of the permittees' long-term tenure and their large capital investments in facilities. For example, the 640 permittees subject to the fee system in 1985 had 20- to 30-year leases and gross assets totaling nearly \$1 billion.

In the comparable sales method, the fair market value of an asset is estimated using the sale of a similar asset sold recently in an open market. However, since factors affecting the market value of similar assets are rare, the market value must be adjusted to incorporate the impact of the factors that differ. This, in turn, requires not only recognition of all the critical factors that could have an impact on the market price but also an estimate of the direction and magnitude of their impact. The Service considered the possibility of using the comparable sales method for resort permit fees but discounted it for two reasons. First, in most instances, the cost of using expert appraisers to estimate land values for each permit could exceed the income from the fees collected. Second, the number of sales of private land used for similar purposes has been insufficient to provide an acceptable minimum amount of market data for land appraisals.

Current Fee System Does Not Calculate Fair Market Value

The Service's current fee system, GRFS, uses a formula designed to capture a percentage of the resort operators' profits. In the absence of actual market transactions, a formula or modeling approach can be used to estimate the fair market value of an asset or lease. However, such an approach requires the acquisition and use of data on the assets, revenues, and costs of the individual resorts that cover a relevant period of time and requires determining what percentage of an individual operator's profit constitutes the fair market value of the permit. The Service's current fee system lacks these features.

Description of Current Fee System

GRFS was designed to compute permit fees by using a different break-even point (profitability indicator) for each of nine different business categories. Each business category's break-even point, expressed as a

ratio of gross sales to gross fixed assets, is the point at which the business begins to show a return on investment. Each category has two fee rates: a base rate (rate base) and a balance-of-sales rate. The rate base is defined as the percentage of sales that a permittee of average operating efficiency can pay as a fee when sales are equal to twice the break-even point and still realize a reasonable return on investment. The balance-of-sales rate is a means of adjusting the fee to the increasing profits that normally result from increased sales volume, and it is applied to all sales exceeding twice the break-even point. Table 2.1 shows the break-even points, rate bases, and balance-of-sales rates for each of the nine business categories.

Table 2.1: Fee System Break-Even Points and Fee Rates by Business Category

Figures in percent			
Business category	Break-even point	Rate base	Balance-of-sales rate
Grocery	70	.75	.85
Food Service	70	1.25	1.50
Car Service	70	1.30	1.60
Merchandise	70	1.50	1.80
Liquor Service	60	1.80	2.15
Outfitting/Guiding	50	2.00	2.65
Lodging	40	4.00	5.30
Rentals and Services	30	4.50	5.95
Lifts, Tows, and Ski School	20	2.00	5.00

To recognize varying levels of productivity, permit fees are calculated by a three-step method. So that less profitable concerns do not experience rate increases until costs have been recouped, the fee applied to sales up to the break-even point is 50 percent of the rate base. The fee applied to sales between the break-even point and twice the break-even point is 150 percent of the rate base. The fee applied to all sales over twice the break-even point is the balance-of-sales rate. Thus, as sales increase in proportion to the investment, so does the permit fee.

For example, assume that a ski resort's sole income is generated by sales in the business category Lifts, Tows, and Ski School. If the permittee has invested \$10 million in gross fixed assets, the break-even point is \$2 million, or 20 percent of the investment amount. As such, the permittee should start making a profit when lift ticket and ski school sales reach \$2 million. Until that point, the permittee's fee would be 1 percent of sales (i.e., 50 percent of the category's 2-percent rate base). For sales

between \$2 million and \$4 million (twice the break-even point), the permit fee would be 3 percent (i.e., 150 percent of the rate base). For sales in excess of \$4 million, the fee would be 5 percent, the category's balance-of-sales rate.

Most resorts, however, generate income from more than one of the nine business categories (e.g., from a restaurant, bar, and ski lifts and tows). The fee for such integrated resorts is calculated differently. First, each category's break-even point and its rate base are multiplied by the percentage of the resort's total sales that resulted from that business category. Second, the results for all the individual business categories are totaled to arrive at a composite break-even point and a composite rate base. The composites are then applied to the permittee's gross sales to calculate the permit fee.

The Service has conducted three major studies that relate to the current (GRFS) fee system. The results of its initial 1967 study were used to implement the GRFS for summer resorts in 1968 but, primarily because of ski resort operators' criticisms, the Service decided at that time to restudy its proposed fee formula for winter resorts. The Service's 1971 study proposed a fee formula for winter resorts that was the same as the one implemented in 1968 for summer resorts, with one exception: it added a new business category—Lifts, Tows, and Ski School. By 1976, the Service recognized that the GRFS formula did not achieve an average fair market value fee and contained fee rates that were arbitrary and outdated, and it undertook its third study of GRFS. This study, completed in 1979, proposed higher permit fees, but the Service chose not to implement the study's findings because of ski industry opposition. (See app. II for descriptions of the three studies' objectives, methodologies, analyses, and resulting fee system proposals and industry comments.)

The System Does Not Consider the Unique Aspects of Each Resort

Although GRFS recognizes that different business categories have different profit margins, it does not consider the unique aspects within a business category that affect a resort's profitability. For example, the profit margin on the Lifts, Tows, and Ski School business category can vary by resort depending on such factors as the length of the ski season, the amount and frequency of snowfall, the percentage of lift capacity used, the type and size of the ski area, and management efficiency. According to a University of Colorado economic analysis,² the most profitable ski

²"Economic Analysis of North American Ski Areas for the 1985-86 Season," University of Colorado (Dec. 1986).

areas are the larger areas with a greater number of equivalent days/nights of operation. In addition, these areas normally have the highest average revenue per skier visit and operate at a relatively high capacity.

Realistically, no standardized formula could be developed that would consider each resort's unique operational aspects and the effect of economic variables on the resort's profitability necessary to calculate fair market value fees. However, the National Park Service does have a fee system, implemented in December 1986, that involves the analysis of economic and financial data obtained from individual resorts. (Ch. 4 further explains the Park Service system.)

Formula Not Updated to Reflect Changes in Economic Conditions

GRFS was designed so that the break-even points and fee rates could be adjusted periodically to reflect changes in the economic conditions of the resort industries involved, and the Service's special use permits are supposed to contain a clause allowing periodic examination and revision of break-even points and rates. However, the current formula was devised on the basis of studies of the resort operators' break-even points and profitability factors relevant in the 1960s. Therefore, it is unlikely that the formula reflects current economic conditions.

The formula's break-even points would remain valid only if revenues and fixed and variable costs have maintained the same proportional relationships they had in the 1960s. However, this is unlikely. For example, the current formula does not reflect the fact that, in recent years, large increases have occurred in the cost of the liability insurance resort operators must carry and in the lift ticket prices charged by ski resort operators. The formula also does not recognize new businesses, such as houseboat rentals.

The cost of general liability insurance has risen as much as sixfold in the past few years. Permittees are required to carry such insurance, but they have no control over its cost. Table 2.2 shows the escalating general liability insurance costs of two of the permittees we visited.

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Table 2.2: General Liability Insurance Cost Increases for Two Permittees

Resort type	Year	Insurance cost
Marina	1984-85	^a
	1985-86	\$24,644
	1986-87	70,248
Ski resort	1984	32,077
	1985	63,283
	1986	150,073
	1987	209,325

^aData not available.

The fee formula also does not recognize significant increases in lift ticket prices and the resulting revenues to the permittee. Table 2.3 shows how lift ticket prices increased at selected ski resorts (one in each of the three regions shown) between 1981 and 1988.

Table 2.3: Lift Ticket Price Increases at Selected Ski Resorts

Resort location	Lift ticket prices		Net increase	Percentage increase
	1981	1988		
West	\$19	\$27	\$8	42
Rocky Mountains	20	32	12	60
East	17	30	13	76

In addition, the current fee formula does not consider new business categories that could alter break-even points and rates. The Service has placed new businesses in existing categories. For example, the Service placed houseboat rentals (a relatively new but major business for marinas) in the Rental and Services category, which includes equipment rentals and services such as the rental of skis and fishing boats and dock mooring services. Houseboat rentals, however, may alter break-even points within this category. For example, houseboat rentals at one marina in California during 1986 accounted for about 71 percent of the permittee's gross sales. Thus, houseboat rentals could change the ratio of gross sales to gross fixed assets value for the Rentals and Services category enough to affect the permit fee computation.

Fair Market Value of Winter Resort Leases Not Adequately Defined

Standardized formulas, such as GRFS, cannot calculate the fair market value of an individual permit. To calculate a fair market value fee using a formula based on operator profit requires determining the percentage of an operator's profit that equals the fair market value of the operator's permit, and this percentage will vary from resort to resort. Further, the Service has not adequately defined what percentage of profit equals the fair market value of an average winter resort. The Service's three studies of GRFS made determinations as to what this percentage should be. However, on each occasion the ski industry opposed the fee rates that the Service had developed to capture the studies' stipulated percentage of profit, and the Service decided that it would not implement the proposed fee rates.

The three GRFS studies made three different determinations as to what percentage of the operators' profit should be captured. In its 1967 study, the Service proposed fee rates that would allow a permittee to realize a 15-percent return on investment. According to its 1971 study, the fee rates proposed would have resulted in fees equal to 13.8 percent of the average winter resort operator's profit. Whereas the 1979 study recommended that the fee capture 10 percent of the operators' net profit.

The problems the Service has had in defining, and therefore defending, its proposed fee rates are illustrated by the 1979 study. In this study, Service officials determined that the value of developed land is typically about 10 to 30 percent of the total value of the land and improvements, regardless of who added the improvements. As a result, they concluded that a landlord should receive as rent 10 to 30 percent of the estimated productivity of the business. The Service officials' conclusions were supported by a real estate consultant's analysis of the rent-to-profit relationships of commercial and industrial enterprises. The consultant suggested that 10 to 24 percent of an operator's estimated profit would represent a reasonable rental fee.

In deciding what percentage of operator profit the fee system should capture, Service officials reasoned that resort operators' productivity will typically vary among geographic locations (e.g., ski resort operations are often influenced by uncontrollable events such as poor snowfall). Taking into account such varying productivity, Service officials proposed that fee rates for Service resort permittees be set at the lower end of the recommended fee range—10 percent of estimated net profit.

Although the Service's recommendation of setting fees at 10 percent of estimated profit appeared conservative on the basis of the economic data presented, the ski industry objected. Much of the industry's opposition to the Service's proposed rates has been due to the resort operators' belief that their fee should be minimal because they have assumed all the investment risk and developed the land, whereas the government assumed no risk. As one permittee said: "I took over sheep pasture and should, at the most, have to pay only a sheep pasture rent."

The Service's 1967 study pointed out, however, that the economics of land value do not support the ski industry's position. The study stated that the economics of the real estate market recognize that land value rises as productivity and income potential rise. Increases in land value would be reflected in land sale prices if the land were privately owned. Even though publicly owned land is not for sale, the public is similarly entitled, as landowner, to a fair return reflecting the land's increased market value.

Winter Resort Fees Probably Lower Than Fair Market Value

The Service's 1979 GRFS study report states that the Service believed it was receiving close to fair market value for its nonwinter resort permits but less than fair market value for its winter resort permits. The Service's two prior studies and reviews performed by the Department of Agriculture's Inspector General, the Property Review Board, and the Grace Commission also concluded that the fees obtained for winter resort permits were too low. Furthermore, our analysis of ski industry data indicates that winter resorts located on Service lands generally have a higher rate of return on their investment than those located on private lands.³ One of the possible reasons for this difference is that the Service's fee did not capture the entire fair market value portion of the resort operator's profit.

Service Studies Proposed Fees Higher Than Those Collected

Fees the Service collected under GRFS have been lower than those it would have collected if the Service had implemented the fee rates proposed in its 1967, 1971, and 1979 reports on studies of GRFS. For example, our comparison of the fees actually paid by ski resort permittees and those that would have been paid under the 1967 and 1979 study report proposals indicated that in 1985 the fees would have been more

³We were unable to compare summer resorts on federal and private lands because no similar data could be found for summer resorts.

than 30-percent higher under the 1967 proposal⁴ and somewhat less than 94-percent higher under the 1979 proposal.⁵

Table 2.4 compares the fees collected in 1985 under the current fee system to fees that would have been collected (in 1985 dollars) under the 1967 and the 1979 fee rate proposals.

Table 2.4: Fees Paid by Ski Resorts Under the Current Fee System and Under the 1967 and 1979 Fee Rate Proposals

System	Gross fixed assets	Sales	Fees paid	Increase over current system (percent)
Current	\$709,341,520	\$401,625,588	\$9,134,668	
1967	709,341,520	401,625,588	11,879,492	
Fee difference			2,744,824	30
Current	709,341,520	401,625,588	9,134,668	
1979	1,134,946,432	401,625,588	17,715,527	
Fee difference			\$8,580,859	94

The 1971 study report also proposed rates that would have resulted in higher fees than are currently obtained. The Service's Deputy Chief accepted the study's recommended break-even point of 20 percent for the new category (Lifts, Tows, and Ski School) but, instead of accepting the recommended 3- and 8-percent fee rates, he lowered the rates to 2 and 5 percent (where they have remained).

Although we did not have the data necessary to compute fee differences for all ski resorts nationwide, we did obtain the data for some of the resorts we visited. Table 2.5 compares, for two ski resorts of different sizes, the fees obtained in 1985 under the current system and those that would have been collected had the higher fee rates proposed in 1971 been implemented.

⁴The 1967 proposal did not provide for the revaluation of gross fixed assets when resorts are sold, as occurs under the current system. Consequently, the 1985 gross fixed asset values we used are overstated to the extent that these values had increased as a result of resort sales, with a corollary understatement in the 30-percent fee increase. When Service officials tested the 1979 fee proposal, they concluded that the value of the winter resorts' gross fixed assets had increased an average 60 percent since 1967. We applied the 60-percent increase to the value of winter resorts' 1985 gross fixed assets. However, we did not have the data necessary to index asset value changes between 1979 and 1985, so the 94-percent increase is overstated.

⁵The 1979 study report proposal would have resulted in higher fees than the 1967 proposal because it included a minimum occupancy fee (0.25 percent of the resort's fixed assets' value) and higher fee rates. For example, under the 1967 proposal, a winter resort with a sales to gross fixed assets ratio of 50 percent would have paid a fee equal to 2 percent of sales; whereas, under the 1979 proposal the fee would have amounted to 4.35 percent of sales plus 0.25 percent of gross fixed assets.

Table 2.5: Fees Paid by Ski Resorts Under the Current Fee System and Under the 1971 Fee Rate Proposal

Permit fee	Ski resort A	Ski resort B
Projected (based on 1971 recommended rates)	\$1,375,207	\$107,824
Actual (based on current rates)	970,108	76,309
Fee difference	\$405,099	\$31,515
Percentage of change	42	41

Other Studies Have Concluded That Winter Resort Fees Are Too Low

Three non-Service studies also have concluded that winter resort permit fees are too low. The first of these studies, the 1983 Grace Commission report,⁶ stated that the \$5 million in total fees charged Service ski resorts seemed small, given the \$330 million in resort sales and the average 1981 permit fee of \$30,000. The report also stated that (1) the median return for ski resorts on Forest Service land is 20-percent higher than for resorts not on Service land and (2) the after-tax profits of resorts on Service land are almost double that of the others: 7 percent versus 4 percent. The report suggested changing the fee system to one based on appraised land value and flat-rate rental fees, thereby increasing total fees by \$5 million.

The second non-Service study, a February 1984 report by the Property Review Board, stated that the Service's fee system fails to collect a fair value fee. The report recognized, however, that ski resort operators would probably vigorously oppose a fee increase. Therefore, to make fee increases more acceptable to the industry, the report suggested that the Service couple fee increases with a loosening of restrictions on the types of facilities the resorts can operate. Commenting on the Board's findings in an internal memorandum, Service officials stated that while they subjectively agreed that fees should have been somewhat higher than what was being collected, neither the Property Review Board nor the Service had persuasive evidence on what constitutes fair market value. The limited Service evidence that was available, however, indicated that fees should be 50- to 100-percent higher than they were at that time.

The third and most recent study, a September 1987 report by the Department of Agriculture's Inspector General,⁷ estimated that a fee equaling 5 percent of sales would more closely approximate fair market

⁶Report on User Charges, The President's Private Sector Survey on Cost Control (Spring-Fall 1983).

⁷Audit of the Forest Service Assessment and Collection of Concessionaire and User Fees, U.S. Department of Agriculture, Office of Inspector General-Audit, Northeast Region, 08634-1 Hy (Sept. 30, 1987).

value than current fees, which average 2.3 percent. Using a 5-percent fee rate for the 1982-1983 operating year, the report projected that fees for about 105 Service ski resorts would have increased from about \$6 million to \$14 million. Service officials commented that the report's fee projections were invalid because they were based on rates paid by a unique ski area. The Inspector General's report recognized the difficulty in defining fair market value for Service resort leases, given that resorts are not readily sold and do not often have their ownership transferred, but defended the 5-percent fee as reasonable and consistent with the fees obtained in instances in which the Service had used open competition.

Returns on Investment
Generally Higher for
Resorts Operating on
Service Lands

Our review of ski industry data showed that, in aggregate, resorts operating on Service lands were more profitable than those operating on non-Service lands (e.g., private and state lands) in 8 of the 11 years between 1975 and 1986. From the data one could infer that the fees paid by resorts on Service land did not capture enough of the operators' profit to leave these resorts with a rate of return on investment similar to that of resorts that operate on non-Service land. Table 2.6 compares the profitability of ski resorts on Service land and non-Service land, as indicated by their percentage of return on investment before interest and taxes.

Table 2.6: Profitability of Ski Resorts on Service Land and on Non-Service Land

Year	Number of Service resorts	Percentage of return	Number of non-Service resorts	Percentage of return	Difference in percentages of return
1985-1986	65	3.90	59	6.59	-2.69
1984-1985	62	9.20	55	4.73	4.47
1983-1984	55	8.40	58	7.04	1.36
1982-1983	59	7.70	59	3.80	3.90
1981-1982	61	15.65	54	13.46	2.19
1980-1981	61	5.48	60	5.60	-0.12
1979-1980	66	16.60	65	7.53	9.07
1978-1979	63	16.70	61	10.81	5.99
1977-1978	54	18.00	60	14.58	3.42
1976-1977	62	-3.30	65	6.31	-9.61
1975-1976	60	11.70	55	9.44	2.26
Average	61	10.00	59	8.18	1.84

Note: Analysis is based on data provided by the Business Research Division, Graduate School of Business Administration and College of Business, University of Colorado, Boulder.

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Comparing the return on investment of ski resorts operating on Service land with that of ski resorts operating on non-Service land does not provide conclusive evidence that the Service was not obtaining fair market value for the use of its lands, as would a comparison of the permit fees paid by resorts operating on Service land and the land-use fees paid by resorts operating on non-Service lands. However, the Associate Dean of the University of Colorado's Business Research Division, which maintains the most comprehensive data available on ski resorts, advised us that a meaningful comparison of fees paid could not be made from the division's data base because some ski resort operators pay fees to both private and public land owners (and the fees are not reported separately), and other operators pay no fees because they own the land they operate on.

Problems With the Graduated Rate Fee System

During our limited review of ski resort fees reported in 1982, we noted four problems with the GRFS fee formula that caused inequities for either the government or the permittees. The Service has corrected one of the problems but has taken no action regarding the other three. The Service continues to (1) update the value of gross fixed assets only at the time a resort is sold (thus, since a resort's fixed assets generally appreciate in value over time, the buyer pays a lower permit fee than the previous owner), (2) separate a resort's income into up to nine business categories (this disregards the integrated nature of resorts and makes the fee calculation unnecessarily complicated), and (3) use fee rates that may not be sufficiently progressive.

The Service's regional office auditors and the Department of Agriculture's Office of Inspector General have reported a number of other problems with the Service's administration of GRFS. These include three problems noted during our current review.

- The Service has never updated the fee formula's break-even points and fee rates to reflect changes in economic conditions. (We discussed this problem in ch. 2.)
- Service field offices have scheduled permittee fee payments on a quarterly basis instead of on a monthly basis as prescribed in the Service instructions on GRFS. (Service officials told us that they would correct this problem.)
- The Service field offices have been inconsistent in their implementation and enforcement of the Service's gratuity policy, that is, its policy on how discounted or free services provided to employees, disadvantaged persons, and others should be treated when calculating sales revenues. (As of January 1988, the Service was in the process of revising its gratuity policy.)

Most Previously Reported Problems Have Not Been Corrected

The Service has since corrected one of the problems: for permits issued since December 1986, the value of rented equipment is excluded in the calculation of gross fixed assets. The Service did not, however, take action on the other three problems we reported. First, the Service continues to update the value of gross fixed assets at the time a business is sold. As a result, the buyer (new permittee) pays a lower permit fee than the previous permittee paid. Second, the Service separates a resort's income into up to nine business categories, thus not recognizing the integrated nature of the typical resort, but it does not correspondingly separate the resort's gross fixed assets by business category. According to a Property Review Board report, this causes fees to be

lower than they would be if gross fixed assets were allocated by category. Third, the Service calculates permit fees using a schedule of rates that may not be sufficiently progressive when resort sales exceed twice the break-even point.

Rental Equipment Is No Longer Included in Asset Valuations

In response to our 1982 report recommendation, the Service changed its GRFS procedures to exclude rented equipment (e.g., rented ski lifts and snowmaking equipment) from fixed asset valuations. Our 1982 report concluded that the Service's inclusion of rental equipment as part of gross fixed assets artificially raised the assets' value and thereby lowered the permit fees. By including rented equipment in the resorts' gross fixed assets, the Service in effect circumvented the fee structure's intent of recognizing only the permittee's actual investment in assets. The Service agreed with our conclusion and in December 1986 amended its special-use permit regulations to disallow inclusion of rental equipment in fixed asset valuations.

Although the revised procedures took effect in December 1986, they apply only to those permits that have been renegotiated or issued since that time, as prescribed by the special-use permit regulations. Thus, by September 9, 1987 (9 months after the procedures took effect), only 23 of the Service's 640 permits subject to GRFS included the revised asset valuation procedure. Service officials explained that existing special-use permits have either a 20- or 30-year term, and permit renegotiation can occur only with the consent of both the Forest Service and the permittee. According to a recreation management staff official at Service headquarters, all new permits will contain the provision excluding rental equipment in fixed asset valuations.

Updating Fixed Assets' Value When Resorts Are Sold Lowers Permit Fees

The Service continues to revalue a resort's fixed assets, such as buildings, only when a resort is sold. When a resort is sold, the fixed assets are revalued at their current market value, whereas prior to the sale, the assets were valued at their acquisition cost. Because the permit fee is based on the proportion of gross sales to gross fixed assets, the revaluation of fixed assets at the time of a sale results in the purchaser paying a lower permit fee to the Service.

The fee system's method of valuing fixed assets recognizes the assets' acquisition cost (permittee investment), but not depreciation or appreciation in the assets' value. Each year the Service reviews the permittees' list of fixed assets and updates the resorts' aggregate asset value to

reflect any deletions or additions of assets during the previous year. Each asset, however, retains its acquisition value. As a result, the aggregate value of a permittee's gross fixed assets changes only when assets are deleted or added.

Only on the sale of a resort does the Service revalue fixed assets to reflect their current market value. The fixed assets of most resorts appreciate in value. Therefore, the buyer (new permittee) usually pays considerably more than the previous permittee did for the fixed assets. This changes the proportion of gross fixed assets to gross sales. Thus, the buyer's permit fee, which is based partly on this proportional relationship, will be lower than that paid by the seller (the previous permittee) for the same use of the federal land. For the buyer, the resort's gross fixed assets are valued at current market value, whereas the seller's fixed assets had been calculated annually on the basis of their original acquisition value.

Tables 3.1 and 3.2 illustrate how the revaluation of gross fixed assets upon the sale of a resort in 1981 reduced the buyer's permit fee. Table 3.1 shows that the permit fee paid by the buyer was actually lower than the fee paid by the seller the previous year, even though the buyer reported much higher sales. Table 3.2 isolates the effect that asset revaluation had on the resort's permit fees. To isolate the effect of asset revaluation, independent of a change in sales, we adjusted the seller's sales figures to make them the same as the buyer's but did not adjust the asset values.

Table 3.1: Actual Reduction in a Resort's Permit Fees as a Result of Its Sale

Resort sale (1981)	Sales	Gross fixed assets	Fee paid
Previous owner	\$585,910	\$526,436	\$15,655
New owner	766,613	1,067,540	14,200
Fee reduction			\$1,455

Table 3.2: Estimated Reduction in a Resort's Permit Fees as a Result of Its Sale, Assuming Identical Sales Amounts

Resort sale (1981)	Sales	Gross fixed assets	Fee paid
Previous owner	\$766,613	\$526,436	\$21,796
New owner	766,613	1,067,540	14,200
Fee reduction			\$7,596

Forest Service officials recognize the problem inherent in the current asset revaluation practice and are considering two options that would

eliminate this problem. One option involves maintaining a resort's fixed assets' value at original acquisition cost when the resort is sold rather than revaluing the assets; the other option involves annually indexing the fixed assets' value to the Department of Commerce's Construction Cost Index so that the assets' value would reflect inflationary increases. The Service's 1979 study proposed annual indexing of fixed assets' value; the 1967 and 1971 studies did not consider updating asset values either annually or at the point of sale.

The first option, retaining the assets' acquisition value with no point-of-sale update, would eliminate the disparity between the seller's and buyer's permit fees. However, this would necessitate frequent updating of the fee formula's break-even points so as to maintain an accurate reflection of the sales to gross fixed assets ratio. That is, because sales would be expressed in current-year dollars and asset values would be expressed in acquisition-year dollars, distortions in the ratio of sales to fixed assets would become greater year by year. These distortions, which occur over time because of any disproportionate increases in either sales or fixed asset values, could be eliminated only by adjusting break-even points and fee rates so that the desired percentage of profit would be obtained.

The second option, annually updating the value of gross fixed assets according to the Construction Cost Index, would eliminate the disparity between the seller's and buyer's fees and would also reduce distortions in the break-even points by expressing both fixed asset values and sales in current-year dollars. Although updating asset values can reduce distortions in the break-even points, it cannot eliminate them. Again, the distortions can be eliminated only through periodic updates of the break-even points and fee rates. Without such periodic updating, fees would be reduced as the asset base increased as a result of inflation.

**Allocating Sales by
Business Category
Disregards Integrated
Nature of Resorts**

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Although winter resorts generally operate as integrated businesses, the Service separates resort sales into nine different business categories for fee calculation purposes. The Service assigns each business category its own break-even point (the point at which a business begins to show a return on investment, expressed as a ratio of gross sales to gross fixed assets), rather than calculating the permit fee on the basis of a single break-even point for the entire resort. Yet, as we reported in 1982, the distinction between the nine different categories' break-even points is difficult to make and unnecessarily complicates the fee calculation process.

The Service's 1967 study noted that no proper basis exists for using separate break-even points for different ski resort business categories because many fixed and variable costs apply to all business categories. Further, according to the study, it would be difficult to equitably allocate those costs so as to establish justifiable break-even points for each category.

GRFS' fee calculation process allocates gross sales by business category, but does not also allocate gross fixed assets' value. According to the 1984 Property Review Board study of the fee computation method, this inconsistency forces the unrealistic assumption that the proportion of fixed asset value to sales is equal within each business category. Not only would this proportional relationship rarely, if ever, occur, but another feature of the structure, different break-even points for each business category, recognizes the opposite—that sales are not generated evenly by assets.

The unrealistic assumption that fixed asset value is exactly proportional to sales in each business category stems from the fee calculation process. The Service's permit fee calculation form requires that the percentage of sales attributable to each of the business categories be multiplied by their respective break-even points, and the results added. The result is the "composite break-even point," which is then multiplied by the aggregate value of the resort's gross fixed assets to arrive at the permit fee. However, according to the Property Review Board, the composite break-even point is an artificial number because it is not derived from the allocation of actual gross fixed asset values by business category. In other words, this composite ignores the premise inherent in the structure's having different break-even points for different business categories—the premise that sales are not generated evenly by assets.

The 1984 Property Review Board study concluded that because the Service does not allocate gross fixed assets' value by business category as it does gross sales, the resulting permit fee is generally lower than it would be were assets and sales treated consistently. According to the study, the Service's use of the composite break-even point reduced fees by 25 to 33 percent, causing the government to lose about \$20 million in fees over a 5-year period.

The Fee Rates the Service
 Uses to Calculate Permit
 Fees May Not Be
 Sufficiently Progressive

As recommended by OMB, average fees calculated under GRFS rise progressively as sales increase in proportion to the permittee's investment. However, as we reported in 1982, when sales exceed twice the break-even point, the fee rates applied to additional sales generally are lower than the rates for sales between the break-even point and twice the break-even point, and this reduces the progressiveness of the fee structure.

The Service's fee structure is based partly on a schedule of fee rates. For each of the nine various business categories, the schedule indicates the fee rate that a permittee of "average operating efficiency" can appropriately pay and still receive a reasonable return on investment when sales are equal to twice the break-even point.

Table 3.3 shows that, with one exception, the rates applied to compute the business categories' fees are lower for sales exceeding twice the break-even point than for sales under that amount but above the break-even point. The one business category in which the rate applied does increase incrementally (i.e., is highest for sales exceeding twice the break-even point) is the Lifts, Tows, and Ski School category.

Table 3.3: Schedule of Rates Used to
 Compute Permit Fees

Figures in percent

Business class	Rate base	Percentage of sales		
		Below the break-even point ^a	Between the break-even point and twice the break-even point ^b	Above twice the break-even point ^c
Grocery	.75	.38	1.13	.85
Food Service	1.25	.63	1.88	1.50
Car Service	1.30	.65	1.95	1.60
Merchandise	1.50	.75	2.25	1.80
Liquor Service	1.80	.90	2.70	2.15
Outfitting/Guiding	2.00	1.00	3.00	2.65
Lodging	4.00	2.00	6.00	5.30
Rentals and Services	4.50	2.25	6.75	5.95
Lifts, Tows, and Ski School	2.00	1.00	3.00	5.00

^aThis fee rate, set at 50 percent of the rate base, is applied to all sales up to the break-even point

^bThis fee rate, set at 150 percent of the rate base, is applied to all sales between the break-even point and twice the break-even point

^cThis fee rate is applied to all sales above twice the break-even point

The Property Review Board's 1984 report cited concern that the balance of sales rate (i.e., the rate used for sales above twice the break-even point) for most categories is less than 150 percent of the rate base and, therefore, below the rate applied to sales between the break-even point and twice the break-even point. According to the Board's study, "This has the effect of reducing the fee percentage if the [permittee] does more than twice break-even. This seems inconsistent with the GRFS philosophy . . ."

With the current fee structure, the average fee percentage that permittees pay continues to rise as sales increase beyond twice the break-even point because the rate applied to these sales exceeds the average rate applied to all sales below twice the break-even point. Nonetheless, the application of the graduated rate schedule results in lower revenues to the government than would accrue if the rates showed more progressiveness by continuing to increase incrementally. The rates applied to sales above twice the break-even point are lower than the rates applied to sales from the break-even point to twice the break-even point. As a result, a permittee who has sales above twice the break-even point pays a fee that is less than it would be if the rates had continued to increase.

Of the 26 permittees we visited and whose files we reviewed, 8 had sales during at least one 1-year period that were greater than twice the break-even point. Additionally, while reviewing regional office auditors' files at the three regional offices we visited, we identified three resort permittees located in national forests that we did not visit whose sales were greater than twice the break-even point.¹ Of the 11 permittees who had sales that were greater than twice the break-even point, 8 were winter resorts and 3 were summer resorts.

To estimate the minimum loss to the government resulting from the fee rates not increasing incrementally, we projected what these 11 permittees' fees would have been had the fee rates for sales beyond twice the break-even point merely remained constant (i.e., at 150 percent of the rate base) instead of falling. (We did not believe it appropriate to arbitrarily assign higher rates for sales beyond twice the break-even point.) We then compared the fee we projected using constant rates to the actual fee calculated using fee rates from the current rate schedule. For

¹We reviewed permittee records maintained by the Service for the period 1979 through 1987 and selected all records that indicated, for any one year, sales exceeding twice the break-even point. As a result, while each of the 11 permittees' records cover a year's sales, not all are from the same year. When a permittee's sales exceeded twice the break-even point for more than 1 year, we selected only 1 year's records for that permittee.

the 11 permittees, total revenues lost over 1 year amounted to at least \$14,706, or about 2 percent of the \$797,678 that was actually collected using the rate schedule's current rates. The lost revenues ranged from a high of \$3,707 to a low of \$343 among the winter resorts for the 1-year period, while for summer resorts, the lost revenues ranged from a high of \$2,614 to a low of \$24 for the 1-year period.

Other Problems With the Graduated Rate Fee System

Reviews by Service regional auditors and the Department of Agriculture's Inspector General have disclosed a number of problems with the Service's internal controls over the current fee system and the enforcement of its gratuity policy. For example, the Inspector General's September 1987 report cited the following internal control weaknesses: the resorts' gross fixed assets were not always verified; some low-fee permits were not converted from GRFS to a flat fee system or a graduated fee based on estimated sales in order to reduce Service administrative costs; some permits did not contain a required clause that allows monthly rather than quarterly payments when estimated annual fees exceed \$10,000; and permit fee billings were not always timely. Forest Service officials generally agreed with the findings of this audit and said that they would take corrective actions.

Although we limited our review of internal controls because of the reviews by the Inspector General and the Service's regional auditors, we did note further examples of two of the reported problems. First, the Service did not have adequate internal controls to ensure that field offices complied with the scheduling requirements for permit fee payments. Second, the Service field offices did not establish and enforce consistent policies governing gratuities.

Incorrect Scheduling of Fee Payments Results in Revenue Losses

In two of the three regions we visited, fee payments were incorrectly scheduled on a quarterly basis rather than on a monthly basis, resulting in lost revenue for the government. In one region, a forest supervisor said he had not been aware of the problem but would take action to correct it. In another region, the regional auditor said that scheduling payments quarterly had become standard practice because it required less paperwork, but the Assistant Regional Forester for Fiscal, Accounting, and Law Enforcement said the problem would be corrected.

According to Forest Service Manual, "Title 2700-Land Uses Management," permit fee payments are to be scheduled on the basis of the size of the estimated annual fee. Monthly payments are required when the

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estimated annual fee exceeds \$10,000; quarterly payments are required when the estimated annual fee is between \$3,500 and \$10,000; and annual payments are required when the estimated annual fee is \$3,500 or less.

In two regions, payments had been incorrectly scheduled on a quarterly rather than a monthly basis in 4 of the 10 permittee case files we reviewed. In one region, a Service clerk said that he had been aware of the scheduling problem for some time and had advised his supervisors that corrections were needed. The forest supervisor, however, said he had not known about the problem but would correct the payment schedules immediately. In the other region, the Service's regional auditor said that no corrective action had been taken or was planned because quarterly schedules are more efficient than monthly schedules (i.e., they require less paperwork and are easier to maintain). However, the Assistant Regional Forester for Fiscal, Accounting, and Law Enforcement said the region would comply immediately with Service manual directives and begin to bill on a monthly basis.

By scheduling quarterly rather than monthly payments for estimated annual fees over \$10,000, the Service lost revenue for the government (i.e., the fees were not available to reduce government borrowing). We did not estimate losses incurred for the resorts we reviewed, but the effect of incorrect scheduling can be significant. For example, an October 1985 Inspector General audit report concluded that the same scheduling problem at one large ski resort had resulted in losses of \$32,000 for the 3-year period of 1982 through 1984 (i.e., interest payments on government borrowings that could have been avoided).²

Except for the fee payment scheduling problem, we found that internal controls over the fee collection process were generally adequate in all three regions we reviewed. For example, Service personnel responsible for fee calculation and processing used tickler files and follow-up correspondence to initiate and monitor processes such as notifying permittees that financial data needed to support fee calculations were due, requesting fee calculation worksheets, ensuring receipt of the required data, and billing for and receiving fee payments. To verify fee calculations and review internal controls over fee collection, the Service regions conduct periodic audits of the national forests' and permittees' operations. The frequency of these regional office audits ranges from twice a year

²Forest Service Concessionaire Fee—Mammoth Mountain Ski Area, U.S. Department of Agriculture, Office of Inspector General-Audit, Western Region, 08099-63-SF (Oct. 1985).

for large resorts in the Pacific Southwest Region to once every 3 years for small resorts in the Eastern and Rocky Mountain regions. The forest supervisor is responsible for resolving audit findings within 60 days of receiving the audit report. Service headquarters also periodically conducts oversight reviews.

Inconsistent Enforcement of Gratuity Policies

Resort operators provide gratuities³ to certain individuals (e.g., handicapped skiers, area school children, and stockholders), and the Service's treatment of gratuities has been a source of long-standing concern and disagreement between the Forest Service and resort operators. Forest Service regional office audits, Department of Agriculture Office of Inspector General audits, and our current review noted instances in which gratuity policies were not enforced or in which permittees did not have an approved gratuity policy. As of January 1988, the Service was in the process of revising its gratuity policy.

Section 2715.14c of Forest Service Manual, "Title 2700-Land Uses Management" requires that each resort permittee have a Service-approved gratuity policy stipulating how it is to value those goods and services that are provided to certain individuals at prices not usually available to the general public. These policies directly affect fees by either reducing or increasing the sales revenues upon which permit fee calculations are based. For example, disallowed gratuities are to be reported as sales, whereas allowed gratuities can be excluded.

During our visit to the Arapahoe National Forest in September 1987, we noted that one permittee was still conducting operations under a gratuity policy issued in 1980. A Service audit report issued in July 1985 noted that the permittee had been advised that he needed a current policy. The permittee did not sign a gratuity policy prepared by the Service region, however, stating that he did not want to update the policy until the Service revises its gratuity policy. As of January 5, 1988, the Service was still in the process of finalizing its agencywide policy.

³Gratuities include goods, services, and privileges such as discounts, gifts, dividends, or benefits that are furnished to such individuals as stockholders, owners, creditors, officers, and employees or their families, at rates or under conditions not available to the general public. Certain gratuities may be excluded from income upon Service approval (e.g., those furnished to safety personnel, permittee officials responsible for resort inspection and administration, or judges of organized competitive or exhibition events).

A 1986 Office of Inspector General audit report cited various problems relating to gratuities.⁴ For example, it found that only 104 of 130 winter resorts had gratuity policies on file with the Service, and only 91 of the policies had been approved by the Service. Of the 91 policies, 63 authorized permittees to exclude gratuities that the Inspector General determined should not be excluded.

Most of the resort operators we contacted believed that the Service's current treatment of gratuities was unfair. Of the 43 resort operators that responded to the question on our questionnaire relating to gratuities, 20 said the Service's gratuity policy was unfair, 12 said it was fair, and 11 said it was neither fair nor unfair. Operators that believed the Service's policy was unfair generally stated that they should not be penalized for providing services that benefit communities or charities, or for performing marketing functions. Some operators also noted that maintaining gratuity records is a problem.

Resort Operators' Views on the Graduated Rate Fee System

The 50 largest operators (ranked by fees paid) were assessed 1985 fees ranging from .7 to 4.2 percent with the average fee equaling 2.2 percent of gross sales. Most of the operators we contacted were satisfied with the Service's GRFS and considered the fees they paid to be fair.⁵ Although most operators reported having little or no difficulty gathering and maintaining the data required by the fee system, several said they did not understand the system's fee calculation methodology or thought it was too complex.

Of the 50 largest operators, 26 believed that a fee system that considers both investments and sales best provides a fair return to the government and is equitable to permittees. Most also reported general satisfaction with GRFS: 16 were "very satisfied," and 13 were "somewhat satisfied."

Of the 26 resort operators we interviewed (12 from winter resorts and 14 from marinas, lodges, and other summer resorts), most said that the fees they pay to the Forest Service are fair and reasonable. In commenting on the GRFS data requirements and fee calculations, the 26 operators generally believed that the data they are required to maintain under

⁴Forest Service Winter Sports Gratuity Policies - Nationwide. U.S. Department of Agriculture, Office of Inspector General-Audit, Western Region, 08099-68-SF (Feb. 3, 1986).

⁵We received questionnaire responses from all 50 resorts, and we interviewed 26 operators: 8 of those interviewed also responded to our questionnaire.

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GRFS did not pose a problem for them. Six operators, however, found the system's fee calculations difficult or complex. For example, several operators said they did not understand the system's formulas or how the value of gross fixed assets influenced fees. The Forest Service performs the actual fee calculations for 8 of the 26 resort operators.

Representatives of the National Ski Areas Association and National Forest Recreation Association said they favor GRFS because it considers the value of the investment that is needed to generate sales.

Fee System Alternatives

After it receives our report, the Forest Service plans to undertake another study to consider alternatives for improving or replacing GRFS. Service headquarters officials said that the Service would consider either revising GRFS to eliminate or address known problems, or replacing GRFS with another fee system, such as a flat percentage-of-sales fee system or a graduated percentage-of-sales fee system. The Service should be aware of and consider a number of things during this study, including the types of fee systems being used by states and other federal agencies, legislative and OMB requirements, the cost-effectiveness of administering the fee systems, and whether the Service will be able to establish defensible fee rates.

Other federal agencies, states, and the Canadian government have privately operated resorts located on their lands. We obtained information on the fee systems used by some of these entities—five federal land management agencies, eight states, and Parks Canada. The U.S. Army Corps of Engineers' fee system is a graduated fee system similar to the Forest Service's and results in the same average fee (based on a percentage of gross sales). Under the National Park Service's fee system, a fee rate is negotiated after the Park Service has examined the permittee's financial records and nationwide industry financial data. The other entities have less complex procedures for determining fees and many obtain competitive bids that result in a fee that captures a higher percentage of gross sales than GRFS does. In most instances, however, the other entities' fees are not comparable to the Service's fees because the permittees do not own the resorts' major facilities.

Forest Service Plans for Improving or Replacing Its Current Fee System

Forest Service headquarters officials acknowledge the problems with the current fee system, and in January 1988 told us that after it receives our report, the Service plans to undertake another study to consider an alternative fee system. The Service's decision to consider changes to the fee system at this time was also influenced by the National Forest Ski Area Permit Act of 1986. This act provides for 40-year leases and the Service would like to include the terms of any new or revised fee system in any permits issued or renewed pursuant to the act.

Three of the fee system alternatives that the study will probably consider are the following:

- Revise the current fee system to eliminate existing problems (e.g., those discussed in ch. 3) and update the fee formula's break-even points and fee rates to reflect current economic conditions.

-
- Replace the current fee system with a flat percentage-of-sales fee system having a fee formula that would neither use separate business categories nor consider investments in gross fixed assets.
 - Replace the current fee system with a graduated percentage-of-sales fee system plus a minimum annual fee. Under this system, two or more graduated rates could be applied as sales reach certain dollar thresholds. This system's fee formula also would neither have separate business categories nor consider investments in gross fixed assets.

If either of the latter two alternatives are chosen, Service officials said they would also consider allowing permittees a capital investment deduction to encourage investments in capital improvements. The deduction's effect on fees would depend on the amount of investment credit the Service determines applicable. Similarly, under any of the three alternatives, how fees would compare to those currently obtained would depend on the fee rates or percentages established.

Fee Systems Used by Other Entities

We contacted 14 other entities during this review (five federal agencies, eight states, and Parks Canada). Most of these entities have fee systems that are similar to the Service's in that the permit fee is based on a percentage of gross sales. Unlike the Service's complex fee calculation process, however, most of the other entities' either calculate the fee using a predetermined percentage of sales or negotiate a percentage-of-sales fee after receiving competitive bids for the permit. These fee systems are generally less complex to administer than the Service's GRFS. Some also result in higher permit fees, but these fees cannot be readily compared with the Service's fees because the permittees generally do not own the major facilities.

Other Federal Agency Fee Systems

We obtained information on the fee systems used by five other federal agencies that have privately operated resorts on their lands—the U.S. Army Corps of Engineers and the Department of the Interior's National Park Service, Fish and Wildlife Service, Bureau of Land Management, and Bureau of Reclamation. These agencies' lands have only one small downhill ski resort (National Park Service), but their summer resort operations are similar to those of the Forest Service. While the five systems differed in certain aspects, the fee (often negotiated) was generally based on a percentage of gross sales.

Corps of Engineers

The Corps of Engineers modeled its graduated fee system after the Forest Service's GRFS. Like GRFS, the Corps' fee system considers a permittee's gross fixed assets and uses composite break-even points and composite base rates. The Corps also uses a technique the Service is considering: it annually updates the value of gross fixed assets according to the Construction Cost Index. However, the Corps' system breaks out gross income into just two business categories—sales of goods and rents and services—instead of the nine categories used by the Service.

The Corps' graduated fee system applies only to its major concessions, that is, those permittees whose actual or projected gross fixed assets or annual gross sales exceed \$150,000. Concessions that do not meet the \$150,000 threshold are assessed a fixed annual rental fee. In fiscal year 1986, according to Corps data, the 265 major Corps concessions paid fees averaging about 2.2 percent of their gross sales. This is the same percentage as that paid by Service permittees whose gross sales exceeded \$150,000 in 1985.

According to a Corps headquarters official, the nationwide application of the Corps' graduated fee formula results in the same issue about fair market value as does the Service's fee system. That is, the Corps' fee system strives for an average fair market value rather than considering the unique aspects of each individual resort. For example, fees for several marinas at a Corps project in Georgia ranged from 1.9 to 3.7 percent of gross income, whereas two county-administered marinas at the same lake pay negotiated fees that escalate from 4 percent to 8 percent of gross sales over the life of the permit. According to the resource manager at the Corps' Lake Lanier Resource Management Office, the Corps' fees do not reflect the fair market value because they do not accurately reflect the marinas' profitability. He also said that an 8-percent fee would more closely reflect the fair market value of the Corps' permits at this location.

National Park Service

The National Park Service's current fee system was implemented in December 1986 in response to GAO and Department of the Interior Inspector General reports that concluded the prior fee system was not objective and resulted in low fees.¹ Under its new fee system, the Park Service negotiates a permittee's fee after analyzing extensive financial

¹Better Management of National Park Concessions Can Improve Services Provided to the Public (GAO/CEID-80-102, July 31, 1980) and Audit of Concessions Management, National Park Service, Department of the Interior Office of Inspector General, No. E-FWS-NPS-16-84, (Mar. 31, 1986).

data (submitted annually by the permittee) and comparing this data with nationwide industry profitability data obtained from Dun and Bradstreet. Among the data analyzed are the permittee's balance sheets, income statements, listings of depreciable assets, and other supplemental financial schedules that, taken together, indicate the operation's profitability.

The negotiated fee is normally set for a 5-year period. Because of the time and cost involved in the data analysis, the Park Service applies this fee system only to permittees with annual gross sales over \$100,000; permittees with lower sales pay a fee of 2 percent of their gross sales.

Fish and Wildlife Service

The Fish and Wildlife Service's fee system generally bases fees on a percentage of gross sales using competitive bids. After receiving responses to an invitation for bids, the Fish and Wildlife Service regions negotiate with the most responsive bidder. We obtained information on 13 leases for concessions located on wildlife refuges in the agency's southeast region. For the two marina concessions, the fees were 1 and 3 percent of gross sales. For the 11 Fish and Wildlife Service concessions (e.g., canoe rentals and boat tours), fees ranged from 5 to 12 percent of gross sales.

Bureau of Land Management

The Bureau of Land Management's (BLM) current fee system calculates concession lease fees using a predetermined percentage of sales. All concessions are assessed a \$500 annual fee plus a progressive fee based on gross sales. The progressive fee ranges from 2 percent on sales between \$25,000 and \$750,000 to 4 percent on sales over \$1 million.

Most of the concession leases administered by BLM, generally for marinas and trailer parks, are managed by BLM's Yuma District Office in Arizona. The Bureau of Reclamation turned over the administration of 13 of these concession leases, located along the Colorado River, to BLM in 1968. Most of the other concessions located on BLM lands are administered by states or by third parties (through states).

BLM plans to replace its current fee system with one that is based on a negotiated percentage of sales. According to BLM personnel in the Yuma District Office who are planning the new system, a reasonable fee would be about 6 percent of gross sales.

Bureau of Reclamation

The Bureau of Reclamation administers few concession leases because it has transferred most recreation area leases to other federal agencies or to state or local governments. For those leases it does administer, the cognizant Bureau project office negotiates the fee, with oversight by a regional office. In the Missouri Basin region, for example, fees are negotiated on the basis of responses to a Bureau invitation for bids. Three of the four Bureau-administered concessions in this region pay negotiated annual fees of \$150, \$250, and \$1,000. The fourth concession pays an annual fee of \$250, or 10 percent of net profit, whichever is greater.

States' Fee Systems

All of the eight states we contacted obtain bids before awarding concession leases, and seven of them negotiate fees that are based on a percentage of gross sales.² Because the concession leases are normally awarded to the bidder offering the highest percentage-of-sales fee, the state fees are less complex to compute and the system is less costly to administer than the Service's system.

The state-operated concessions include both winter and summer resorts, but many are not directly comparable to the major Forest Service resorts in terms of size, ownership of facilities, or range of services. In several cases, for example, the state owns and furnishes the facilities and some of the equipment to the concession operator. In such cases, the state can periodically readvertise the concession permit to ensure that fair market value fees are being obtained.

The states' negotiated concessions fees are higher than the Service's resort fees. For example, Vermont requires concession operators to pay a minimum fee of 8 percent of gross sales. In California, concession fees averaged 9.7 percent of gross sales in 1985-1986. In Colorado, the state and a marina operator negotiated an annual fee of \$10,000, plus an annual administrative fee of \$1,500, plus a fee of 7 percent of gross sales.

According to a July 1987 survey of state concessions,³ over 80 percent of the states' concession operations are privately operated, and most pay a fee based on a percentage of gross sales. Generally, the states pay for concession facility construction, repairs, and renovations, while the

²Arizona, California, Colorado, Minnesota, New Hampshire, Utah, Vermont, and Wisconsin.

³The survey, conducted by the Wisconsin Department of Natural Resources, solicited concession information from all 50 states; 41 responded.

operators pay for routine maintenance and utilities. The average concession fee was 12 percent of gross sales.

Fee System Used by Parks Canada

The fee system used by Parks Canada bases concession fees on market rates. Although most park facilities (e.g., hotels, restaurants, ski areas, and gas stations) located on Canadian government lands are privately owned and operated, Parks Canada administers the concession leases. The leases generally require an annual fee that is either 6 percent of the appraised land value or a negotiated percentage of gross sales plus 25 percent of rents paid by sublessees.

According to a May 1981 Forest Service document, Parks Canada's fees were about double those of the Service. For example, the percentage of gross sales for three Canadian ski resorts sampled were 5.2, 5.4, and 6.4 percent, whereas the percentage of gross sales for the Service ski resort permittees sampled ranged from 2.5 percent to 3.8 percent.

Factors to Be Considered When Revising or Replacing Fee System

The following four factors are important considerations in the Service's decision on whether to revise its existing fee system or change to a new system: (1) Does the system comply with legislative and OMB requirements? (2) Is the system cost-effective to administer? (3) Does the system offer the Service the best opportunity for establishing defensible fee rates? (4) Do existing permits allow the Service to use the system?

1. Existing legislation and OMB Circular A-25 encourage that, when it is cost-effective to do so, the Service obtain fair market value for the use of its land (see ch. 2), and OMB has recommended that fee rates be progressive (see ch. 3). The fee system(s) chosen by the Service should adhere to these suggestions to the extent possible.

2. The cost-effectiveness of the fee calculation methods depends on the size of the permittee's resort operation and the cost of administering the fee system. Table 1.1 shows that 345 of the 640 permittees had annual gross sales of less than \$100,000 and 518 had sales of less than \$500,000. For many of these smaller operations, it may not be cost-effective to use a fee system that requires an extensive review of the permittees' financial records.

3. Determining what type of fee system would result in the most defensible fee rates is another major consideration. As discussed in chapter 3, the history of the GRFS fee formula for winter resorts demonstrates the

difficulty the Service has had in defending the break-even points and fee rates that its past studies determined would result in an average fair market value fee. However, if the Service were able to defensibly determine the percentage of profit that would reflect the fair market value of resort permits, it would be able to more readily implement a fee system, at least for the larger resorts, that would result in fair market value fees and still be cost-effective to administer.

4. Because existing permits were issued to cover a 20- to 30-year period, the Service should consider its flexibility within these permits for making changes to its fee system. A Service Deputy Assistant General Counsel advised the Forest Service Chief in 1982 that whenever the Service includes a rate revision clause in a special use permit, the Service becomes bound by the terms of the clause itself. Therefore, the Service's authority to revise rates or change the method of rate determination depends on what clauses are contained in each permit.

According to the Service's Special Uses Handbook, all permits should contain a clause that allows (1) the Chief of the Forest Service to revise GRFS break-even points and fee rates, if economically justified, and (2) the Service to change the method of fee determination when the Service determines a change is necessary to place the fees on a basis commensurate with the value of the use authorized. At our request, Service headquarters staff determined which clauses the Service's field office staff had included in the existing permits of the 26 resorts we visited. As of October 1987, 24 resorts had permits with clauses that authorized rate adjustments (of which 5 also had clauses that authorized a change in the fee determination method), 1 resort's permit had only the clause that authorized a change in the fee determination method, and 1 resort's permit did not contain either clause.

Service officials expect that many ski resort operators will want to revise their permits to take advantage of the 1986 National Forest Ski Area Permit Act's provision that allows 40-year permits covering as large an area as the Secretary of Agriculture determines to be sufficient and appropriate, as opposed to the previous 30-year and 80-acre limitations. If permittees want to revise their permits for these or other reasons, the Service will have the opportunity to negotiate revisions in fee determination methods and rates.

Each of the three alternatives being considered by the Service has certain advantages and disadvantages. The following is a discussion of each alternative and some of its advantages and disadvantages.

Revising GRFS

Revising GRFS to eliminate previously reported flaws would involve (1) updating its break-even points and fee rates to reflect current economic conditions, (2) either annually updating the gross fixed assets' value according to the Construction Cost Index or maintaining the assets' value at acquisition cost instead of revaluing assets when a resort is sold, and (3) either discontinuing the breaking out of the resorts' income by business category or beginning the breaking out of the gross fixed assets' value by business category.

This alternative presents both advantages and disadvantages in comparison with the two alternative percentage-of-sales fee methods. The primary advantages to making these revisions are that the system is already in place and it is accepted and understood by Service personnel and many resort operators. In addition, existing permits authorize the Service to update break-even points and fee rates, and during the updating the Service could make the rate structure more progressive by setting the rates so that they increase incrementally through all sales ranges. Further, an updated system would continue to recognize permit-tee investments through the fee computation formula by adjusting fee rates on the basis of resort profitability (i.e., the ratio of sales to gross fixed asset value).

Revising the current system also poses certain disadvantages. It still would not ensure the receipt of fair market value. Updating the information needed to periodically adjust the formula's break-even points and fee rates would be costly and time consuming. Further, even though the revisions would simplify the system somewhat (e.g., by eliminating the nine business categories), the fee calculation process would remain administratively complex. According to Forest Service personnel, for example, they spend a lot of time verifying and updating the gross fixed asset lists. Similarly, permittees have to spend considerable time maintaining these lists. Many permittees said they did not understand the graduated fee system's methodology or basis and were confused about the system's break-even points, composite rates, and different business categories.

Replacing GRFS With a Flat Percentage-Of-Sales Fee System

A fee system based on a flat percentage of gross sales has both advantages and disadvantages. In contrast to the administrative complexity of GRFS, the concept and elements of a percentage-of-sales fee system are more straightforward and easy to comprehend. Once determined, a flat percentage fee is easy to calculate and easy to verify against audited financial statements and tax returns. For example, if the fee rate were 4

percent, a resort with annual sales of \$525,000 would be assessed a fee of \$21,000. A flat percentage-of-sales fee system's simplicity thus reduces the administrative burden for both landlord and permittee. Another advantage is that a percentage-of-sales fee system is widely used by other entities. Other federal and state agencies use fee systems based on a percentage of gross sales, as do some commercial landlords, such as those who lease shopping centers and malls. In addition, several of the ski resorts we reviewed use a percentage-of-sales method to assess sublessees' rent.

On the other hand, a flat percentage-of-sales fee would not achieve OMB's recommendation that fees rise progressively as sales increase, nor would it necessarily result in a fair market value fee (i.e., it would not be based on competitive market transactions or the individual resort's profitability). In addition, many existing permits do not authorize the Service to revise the fee computation method without permittee agreement.

Replacing GRFS With a Graduated Percentage-Of-Sales Fee

A fee system based on a graduated percentage of gross sales has the same advantages and disadvantages of a flat percentage fee system, except that it complies with OMB's recommendation that fees be progressive. Calculating the fee using progressive rates is also simple. For instance, given the progressive fee rates in table 4.1, the total fee for a resort with annual gross sales of \$525,000 would be \$17,750.

Table 4.1: Progressive Fee Rates for a Resort With Sales of \$525,000

Rate	Sales volume	Fee
2 percent	Under \$100,000	\$2,000
3 percent	\$100,000 to \$249,999	4,500
4 percent	\$250,000 to \$499,999	10,000
5 percent	Over \$500,000	1,250
Total		\$17,750

Conclusions and Recommendations

The GRFS fee formula does not ascertain, when economically feasible, the fair market value of a resort's special-use permit, as encouraged by existing legislation and OMB Circular A-25. The Service designed the GRFS fee formula to capture a percentage of operator profit, an accepted method of obtaining fair market value. However, because the formula was developed for use agencywide with a minimum amount of review of the permittees' records, the formula that resulted is designed to approximate the fair market value of an average resort, rather than the fair market value of each individual resort. There are also two problems with the data used in the formula. First, the formula's break-even points and fee rates have not been changed to reflect changes in the economic conditions of the business involved. Second, the use of a formula designed to capture a percentage of operator profit requires a determination as to what percentage of each operator's profit equates to fair market value. In the past, however, the Service has implemented fee rates that were lower than those its studies had recommended because it was unable to defend its studies' findings.

Internal Forest Service studies have concluded that the Service has, on the average, received approximate fair market value for its summer resort permits. However, both internal and external studies have concluded that the Service has received less than fair market value for its winter resort permits. Our comparison of the profits of ski resorts with Service permits and those without permits also indicate that the Service may be receiving less than fair market value for its winter resort permits. The permit fees are thought to be too low because the Service (1) has not updated the GRFS formula fee rates, which are based on data about 20 years old, (2) has not implemented changes to the fee formula recommended in its own studies or studies by others—e.g., the handling of gross fixed assets, and (3) has been unable to defensibly determine the percentage of profit that constitutes a fair market value for winter resort permits.

The Service has not corrected three of the four problems with GRFS that we reported in 1982. As a result, (1) a resort's buyer generally pays a lower permit fee than the resort's previous owner, (2) the permit fee calculation is unnecessarily complicated, and (3) the GRFS formula's fee rates may not be sufficiently progressive. Other problems with the Service's administration of GRFS include permittee fee payments that have been improperly scheduled, permittees' gross fixed assets that have not always been verified, and permittees who have not had a Service-approved gratuity policy. The Service generally agreed with the findings relative to the administration of GRFS and agreed to take corrective

actions. As of January 5, 1988, the Service also was in the process of developing a new gratuity policy.

Forest Service headquarters officials said that the Service plans to undertake a study of alternatives for improving or replacing GRFS after receiving our report. Important factors in making a decision on whether to revise GRFS or replace GRFS with a different fee system include (1) whether the resultant fee system(s) complies with legislative and OMB suggestions relating to fair market value and progressive fee rates, (2) whether the fee system(s) is cost-effective to administer, (3) which fee system(s) offers the Service the best opportunity for establishing defensible fee rates, and (4) whether existing permits allow the Service to use the fee system(s) selected. For example, were the Service to implement a fee system that incorporates an analysis of the income and costs reported by individual resorts, similar to that of the National Park Service, it would be possible to determine a fair market value fee. However, this system could be cost-effective for only the larger resort operations because of the time and cost required to analyze a resort's financial records. In addition, existing permits may not allow the use of such a fee system. Therefore, it may be desirable to establish more than one fee system—for different sized permittee operations and/or to incorporate interim changes to GRFS for those permits that do not allow the use of the fee system(s) being established.

Recommendations

We recommend that the Secretary of Agriculture direct the Chief, Forest Service, to take the following actions:

- Develop a fee system that calculates fees that more closely approximate the fair market value of resort permits. Such a system should consider the economic profile and profitability of individual resorts as well as the percentage of their profit that would constitute a fair market value fee. In developing this system, the Service should consider the feasibility of including a procedure for reviewing sufficiently the financial records of individual permittees to verify their reported income, cost, and profits.
- Determine a threshold (e.g., annual gross receipts) above which it would be cost-effective to use the new fee system, and implement the fee system for those permits.
- For permits below the threshold, either revise the existing fee system (as described in the following recommendation) to address the problems discussed in chapters 2 and 3, or develop and implement a new fee system. In selecting this system(s), the Service should consider legislative

and OMB suggestions, the cost-effectiveness of the alternative fee systems, and the defensibility of the method used to establish the fee rate(s).

- For existing permits having a provision that does not allow the use of the fee systems implemented in accordance with the preceding two recommendations, take actions necessary to correct problems with the existing GRFS, that is, (1) update fee rates and break-even points, (2) discontinue the revaluation of a resort's fixed assets only at the time the resort is sold and either use the Commerce Department's Construction Cost Index to annually update the valuation of resorts' gross fixed assets or retain the fixed assets' valuation at acquisition cost when a resort is sold, (3) discontinue breaking out a resort's income by business category or allocate the resort's gross fixed assets by business category, and (4) adjust the fee rates for sales above twice the break-even point so that they are all incrementally progressive.

Agency Comments and Our Response

The Forest Service said that, by its nature and application, GRFS collects market value and that fees for winter resorts have not been lower than fair market value. The Forest Service further said that (1) studies of GRFS have not, to any significant extent, considered either the restrictions placed on the permits or the fact that the resort owners assume all the risks and furnish most of the capital and labor and (2) the average return on gross fixed assets for the 1986-87 ski season was 4.9 percent nationally compared with 4.3 percent in the Central Rockies, where most of the ski areas are on National Forests.

Placing restrictions on leases and requiring lessees to assume the risk and provide the venture capital and labor are not unique to Forest Service ski resort permits. Further, in order to include factors in a fee formula such as GRFS, the factors would have to be quantifiable and, thus far, neither the ski industry nor the Forest Service have quantified these factors. Further, the use of data from only one ski season, which has not been broken out between resorts that operate on National Forests and those that do not, is not a valid indication of whether resorts operating on National Forests are more or less profitable. Our report shows that during 8 of the 11 preceding ski seasons, resorts operating on Forest Service lands were more profitable.

The Forest Service said that it will continue to refine and eliminate problems with GRFS. However, it did not say which of the problems identified in this report, in reports issued by the Department of Agriculture's Office of the Inspector General, or in studies performed by the Forest

Service, would be corrected. We believe that if the Service is going to continue to use GRFS, it is particularly important that the fee rates and break-even points be updated periodically using current economic data for the applicable resort industry.

The Forest Service also said that the amount of additional fees that might be collected, the number of permits, and the size of the auditor workforce do not warrant a separate fee system for the larger resort operations. This decision was apparently made, however, without benefit of a study to determine what such a system would entail or what the system's costs and benefits would be. As stated in our report, the National Park Service currently has a fee system that includes an analysis of the income and costs reported by individual resorts and a comparison of this information with industry averages. Therefore, we continue to believe that for the larger resorts it is feasible to develop and implement a cost-effective fee system that calculates fees more closely approximating the value of the permits.

Location of Forest Service Resorts, by Type and Size

Forest Service region	Winter resorts				Summer resorts				Total
	Large	Medium	Small	Total	Large	Medium	Small	Total	
Northern	0	3	12	15	2	8	36	46	61
Rocky Mountain	13	7	12	32	1	17	53	71	103
Southwestern	0	6	4	10	7	10	15	32	42
Intermountain	2	8	17	27	3	18	40	61	88
Pacific Southwest	7	8	10	25	19	58	76	153	178
Pacific Northwest	5	7	14	26	3	23	20	46	72
Southern	0	0	0	0	2	4	26	32	32
Eastern	4	3	10	17	0	5	33	38	55
Alaska	0	1	0	1	1	1	6	8	9
Total	31	43	79	153	38	144	305	487	640

Note: Size of resorts is based on 1985 gross receipts:

Winter resorts:

- Large (over \$5 million)
- Medium (\$1 million to \$5 million)
- Small (under \$1 million)

Summer resorts:

- Large (over \$500,000)
- Medium (\$100,000 to \$500,000)
- Small (under \$100,000)

Source: Data for table taken from a Forest Service computer printout of data on permits subject to GRFS.

Descriptions of the Three Forest Service Studies

Over the past 20 years, the Forest Service has conducted three different studies of GRFS. The first study, completed in 1967, resulted in the implementation of the GRFS for summer resorts. The second study, completed in 1971, modified the fee system by adding a business category for winter resorts. The third and most recent study, completed in 1979, recommended several changes to the fee system. Because of ski industry opposition, however, the Service did not implement any of the recommended changes. The following are descriptions of the three studies' objectives, methodologies, analyses, and resulting fee system proposals and industry comments.

The 1967 Study

The first major Service study, which established the basic structure of the current GRFS, drew ski industry criticisms of the fee rates proposed for winter resorts. However, the system's premise—that of basing the permit fee on a percentage of sales and recognizing the permittee's capital investment—was accepted and the system was implemented for summer resorts on July 1, 1968. Because of the ski industry's opposition, the Service agreed not to implement the proposed fee system for winter resort permits and to restudy its applicability to winter resorts.

Data Collection and Analysis

In November 1965 the Service awarded contracts to two former Service employees to review fee-setting methods, compare fee systems used by other agencies and private industry, and recommend a fee system appropriate for summer and winter resorts operating on Service lands. During their study, the contractors reviewed Forest Service fee policies and methods throughout the country. They selected representative case studies of businesses operating with Forest Service permits nationwide. In addition, they reviewed and compared fee-setting methods used by other government agencies and other industries with businesses similar to those operating on Service lands.

The contractors then analyzed the performance records of Service permittees and comparable business operators on private land. On the basis of financial data obtained from 20 summer resort permittees and 21 winter resort permittees, they then devised financial rate schedules.

Description of the 1967 Proposed Fee System

After analyzing the contractors' data, Service personnel developed the GRFS. Service officials believed that the system not only met federal requirements and guidelines but also was

**Appendix II
Descriptions of the Three Forest
Service Studies**

- flexible enough to adjust to wide swings in sales due to weather conditions and
- equitable for both the government and the permittee, as it allowed the government to share in increased profits generated by increased public use of the resort and allowed the permittee to achieve a reasonable return on investment.

Essentially, the system determined permit fees by applying a prescribed rate from a graduated rate schedule to the permittee's gross sales. The basis of the applied rate was the ratio of the permittee's gross sales to its gross fixed assets' value. As sales increased in proportion to the assets' value, a higher fee rate was applied from the schedule. In designing the rate schedule, Service officials intended that, on the average, a permittee would realize a 15-percent return on the capital investment (before interest charges).

The system proposed in the study report not only included different rate schedules for summer and winter resorts but also established rates (based on the ratio of sales to asset value) for several different business categories. As a result, the system was tailored to each resort. Table II.1 shows the summer resort fee schedule and table II.2 shows the winter resort fee rates proposed in a draft Service instruction dated July 1967.

Table II.1: Graduated Rate Fee Schedule for Summer Resorts

Figures in percent			
Business category	Break-even point	Rate base	Balance-of-sales rate
Groceries	70	.75	85
Food Service	70	1.25	1.50
Car Service	70	1.30	1.60
General Merchandise	70	1.50	1.80
Liquor Service	60	1.80	2.15
Guides, Outfitting	50	2.00	2.65
Room Service	40	4.00	5.30
Cabin Rentals	30	4.50	5.95
Other Rentals	30	4.50	5.95

**Appendix II
Descriptions of the Three Forest
Service Studies**

**Table II.2: Graduated Rate Fee Schedule
for Winter Resorts**

Figures in percent	
Sales to assets	Applicable fee rate (percent) ^a
First 25 percent of assets	1
Second 25 percent of assets	3
Third 25 percent of assets	6
Fourth 25 percent of assets	8
Sales over 100 percent of assets	12

^aThis rate represents the minimum fee.

**Industry Criticisms of the
1967 Study Proposal**

Although some industry responses criticized the 1967 study's proposed fee system, Service officials received far fewer responses than they anticipated and therefore assumed that the nonrespondents were not opposed to the system. Service officials expected to receive well over a thousand responses, but received only 40, including responses from two industry organizations: the National Forest Recreation Association and the National Ski Areas Association. In summary, responding permittees (especially ski areas) criticized the concept of a graduated fee system and pointed to numerous examples of inaccurate data and faulty theory on which the proposal was based. The concept of a graduated fee system, according to the permittees, was unfair because it limited their profits and did not take into account factors such as adverse weather conditions that can affect productivity. As for data inaccuracies, respondents said that the study's sample size (one year's data on winter resorts) was too small to draw conclusions about the entire industry.

Other permittees commented that they should pay a minimal fee or none at all because they assumed all the investment risk and developed the land, while the government assumed no risk. As one permittee said: "I took over sheep pasture and should, at the most, have to pay only a sheep pasture rent."

The Service's rationale for the fee system, on the other hand, is that the permittee ventures risk capital in the potential productivity of the site (the land), while the Service, looking forward to the permittee's managerial effectiveness, assesses only token fees until the permittee has succeeded. Then and only then does the Service assess a fee commensurate with the site's proven productivity.

The Service implemented the summer resort fee system in 1968 but, at the request of a number of U.S. Senators, agreed to restudy elements of

the winter resort fee system. The Senators' requests were spurred by industry criticisms that the 1967 study lacked sufficiently detailed information on winter sports operations.

The 1971 Study

Having agreed to restudy the winter sports fee system before implementing it, Service officials collected and reviewed additional case data to develop a method for determining winter resort fees. After analyzing the data, Service officials established fee rates that they believed would obtain average fair market value fees. However, when ski industry representatives objected to the fee rates, the Service acquiesced and reduced the rates.

Data Collection and Analysis

The Service sent financial questionnaires to all 184 winter resort permittees. It analyzed the 79 questionnaires that permittees completed and returned, but disallowed 10 questionnaires that were completed inaccurately. Partly because of criticisms about its contracting with two former Service officials for the previous study, in performing this study the Service obtained assistance from the National Ski Areas Association and the National Forest Recreation Association. The National Ski Areas Association retained a consulting firm to obtain financial information and information on the business activities and site characteristics of the ski industry. The consulting firm and the Forest Service jointly developed the questionnaire sent to the winter resorts.

On the basis of the questionnaire responses, Service analysts determined the average break-even points for the Lifts, Tows, and Ski School and Other Business Activity categories. These points had to be determined because the fee calculation acknowledges that some activities require greater permittee investment than others and provides for a lower fee rate until sufficient sales have been generated to begin making a profit. Using financial data from the 30 operators who had experienced an overall profit from their operations, the analysts determined the break-even point for the category Lifts, Tows, and Ski School to be 20.

For the Lifts, Tows, and Ski School category, the analysts suggested a rate base of 3 percent and a balance-of-sales rate of 8 percent. Again, they established these rates on the basis of the 30 profitable operators' data. Service analysts divided the 30 operators into three groups according to sales volume, and then analyzed the effects of sales volume on operating results. For example, they observed that the more profitable

operators received a larger percentage of their total sales from sources other than Lifts, Tows, and Ski School.

In addition, the analysts compared the average profit of the 30 operators to businesses comparable to winter resorts. They concluded that the Service's fee system would allow winter resort operators to realize profits that would compare favorably with similar businesses, would reflect the business mix of the individual operation, and would yield a land occupancy fee commensurate with the productivity of the site.

Description of the 1971 Proposed Fee System

On the basis of the data analysis, the Service proposed a fee system for winter resorts that was the same as the one implemented in 1968 for summer resorts, with one exception: it added a new business category—Lifts, Tows, and Ski School. The new category's recommended break-even point was 20 (that is, when the ratio of sales to gross fixed assets' value reaches 20 percent), the recommended rate for sales up to twice the break-even point was 3 percent, and the recommended rate for sales beyond twice the break-even point (that is, the balance-of-sales rate) was 8 percent.

The Service's Deputy Chief accepted the study's recommended break-even point of 20 percent but, instead of accepting the recommended 3- and 8-percent fee rates, set the rates at 2 and 5 percent because of industry opposition to the recommended rates.

Industry Criticisms of the 1971 Winter Resort Study Proposal

Representatives from the ski industry met with Service officials to discuss the new winter resort category's recommended break-even point and fee rates. Representatives from the ski industry had a number of objections, which generally fell into three categories: (1) they objected to the study's using data of only profitable operators, (2) they disagreed over which items should be included in fixed costs (the more liberal the definition of fixed-cost items, the higher the break-even point will be and the lower the fee will be), and (3) they believed the proposed balance-of-sales rate was too high.

Service officials acknowledged that they had used only data from profitable operators, but contended they had done so to establish equitable fees. That is, had they used data from unprofitable operators, the fees and rates thereby determined would not apply to a resort of "average

operating efficiency." Further, according to Service officials, the proposed system allowed unprofitable operators to pay a lower fee rate (half of the rate base) on sales that did not exceed the break-even point.

While ski industry representatives believed that the Service defined the items that could be included in fixed costs too conservatively, Service officials said their definition was consistent with that used in the summer resort fee system.

Service officials disagreed that the balance-of-sales rate was too high. They believed that their analysis of the economic data supported an 8-percent rate, and that this rate would allow a permittee of average operating efficiency to realize a reasonable return on investment.

The 1979 Study

The 1979 fee system proposal was based on a study that began in 1976, spurred by two major concerns expressed by resort operators and Service officials: (1) the system was complicated and, as a result, difficult to administer and (2) the fee formulas were unfair because they had not been updated to reflect changing economic conditions. However, the ski industry strongly objected to the fee system proposal, which proposed a fee equal to 10 percent of permittee profits. Among the industry's objections were that the proposal ignored the capital investment risk that permittees bore alone, while unfairly providing the government with too high a fee in return for little or no risk. Another objection was that the proposal's lowered break-even point was not economically justified and did not consider cost increases due to inflation. Faced with the industry opposition, the Service elected not to implement the proposed fee system changes.

Data Collection and Analysis

During this study, Service officials took a statistical sample of winter and summer resorts and obtained 5 years' financial operating data from the 45 sampled resort operators. The officials analyzed interrelationships between various economic factors such as gross fixed assets, gross sales, fixed costs, variable costs, break-even points, and profits. They compared winter and summer resort operations in different geographic regions and of different sizes. In finalizing the proposed system changes, the Service solicited comments and suggestions from resort operators and Service field offices.

Service officials determined that, under the fee system in effect at that time, the average winter resort operator was paying fees that were well

below 10 percent of net profit, whereas the average summer resort operator was paying fees equivalent to 10 percent of net profit. These fee percentages were based on averages; highly profitable resorts were paying lower percentage fees, while marginally profitable resorts were paying higher ones. Service officials recognized that the contrast in the percentage fees paid by winter and summer resorts was due to the winter resorts' paying lower fee rates than had been recommended by the previous study for their most profitable operations—ski lifts, tows, and ski schools.

Description of the 1979 Proposed Fee System

Because winter resorts are more profitable than summer resorts, the 1979 fee proposal established two business categories: one for winter resorts and one for summer resorts. After determining the points at which the average winter and summer resorts began to realize profits on sales, Service officials recommended break-even points of 13 (when the ratio of sales to gross fixed assets' value reaches 13 percent) for winter resorts and 35 for summer resorts. The proposal also established a rate schedule that would be applied to each resort, depending on its break-even point, so that the fee obtained would equal 10 percent of a typical resort's net profit.

The proposal also recommended that gross fixed assets' value be updated annually, using the Construction Cost Index, to reflect the current value. The purpose of updating the value was to minimize distortions in break-even points (which reflect the relationships of gross fixed assets' value, sales, and profits). The distortions occur over time because of inflation and any disproportionate increases in sales or costs.

Finally, the proposal recommended that all resort operators pay a minimum fee (an occupancy fee) of .25 percent of their updated gross fixed asset value.

Industry Criticisms of the 1979 Study Proposal

Ski industry representatives had several objections to the 1979 proposal. Basically, they believed that it went beyond simplifying the system; it made major changes to it. Among their objections were that (1) the proposal provided the government too high a fee in return for little or no risk, (2) the Service provided no data to support the proposal's 13-percent break-even point for winter resorts, and (3) the proposal added a minimum fee to the percentage fee.

**Appendix II
Descriptions of the Three Forest
Service Studies**

Although Service officials believed the proposed fee system was sound, it was not implemented. In March 1984, responding to a Property Review Board finding that ski resorts were paying fees much lower than fair market value, the Forest Service Chief noted the similarities in the findings of the Board and the Service's 1979 study. According to the Chief, "we chose not to implement the findings because of industry opposition at that time."

Ownership of Resorts on Forest Service Lands

The following is a list of the top 50 resorts, in descending order of fees paid in 1985, and ownership information. We gathered the ownership data from permittees' responses to our questionnaire and from interviews.

Resort Name and Location	Ownership
1. Mammoth Mountain Ski Area, California	Mammoth Mountain Ski Area Inc., a family-owned corporation.
2. Vail Winter Ski Area, Colorado	Vail Associates, Inc., a wholly owned subsidiary of Gillett Holdings, Inc.
3. Keystone Winter Ski Area, Colorado	Keystone Arapahoe, Ltd., wholly owned by Ralston Purina.
4. Breckenridge Winter Ski Area, Colorado	Aspen Skiing Company, a partnership owned by the Lester Crown family and Denver-based partnership of Miller, Klutznick, Davis, Gray.
5. Snowmass Winter Ski Area, Colorado	Aspen Skiing Company, a partnership owned by the Lester Crown family and Denver-based partnership of Miller, Klutznick, Davis, Gray.
6. Heavenly Valley Ski Area, California/Nevada	Heavenly Valley Ski, a limited partnership owned by the Killebrew family.
7. Alpine Meadows Ski Area, California	Alpine Meadows of Tahoe, Inc.
8. Steamboat Winter Ski Area, Colorado	Colorado Northwest Ski Corporation.
9. Winter Park Winter Ski Area, Colorado	Winter Park Recreational Association, a corporation owned by the City of Denver.
10. Copper Mountain Winter Ski Area, Colorado	Copper Mountain, Inc., a corporation owned by Apex Oil.
11. Sun Valley, Idaho	Sun Valley Holding, a corporation owned by Sinclair Oil.
12. Bachelor Butte Ski Area, Oregon	Mount Bachelor, Inc.
13. Purgatory Winter Ski Area, Colorado	Owned by the Denver-based Duncan family.
14. Sierra Ski Resort, California	Sierra Ski Resort, Inc.
15. Crystal Mountain Ski Area, Washington	Crystal Mountain, Inc.
16. Bridge Bay Resort, California	Seven Resorts, Inc.
17. Snow Summit, California	Snow Summit Ski Corporation.
18. Crested Butte Ski Area, Colorado	Crested Butte Mountain Resort, Inc., a corporation owned by Bo Calloway and Ralph Walton.
19. Timberline Lodge, Oregon	R.L.K. and Company.
20. Mt. Hood Meadows, Oregon	Mt. Hood Meadows, a limited partnership.
21. Jackson Hole Ski Area, Wyoming	Jackson Hole Ski Corporation.
22. Kirkwood Ski Resort, California	Kirkwood Associates, Inc.
23. Stevens Pass, Washington	Harbor Properties, Inc.
24. Alpentel-Ski, Washington	Ski Lifts, Inc.

(continued)

**Appendix III
Ownership of Resorts on Forest
Service Lands**

Resort Name and Location	Ownership
25. Arapahoe Basin, Colorado	Summit Resort Development, Inc., a corporation owned by Ralston Purina Company.
26. Loon Mountain, New Hampshire	Loon Mountain Recreation Corporation.
27. Waterville Valley, New Hampshire	Waterville Company, Inc.
28. Taos Ski Area, New Mexico	Taos Ski Valley, Inc.
29. Mt. Snow, Vermont	Mt. Snow, Ltd., owned by Ski, Ltd.
30. Mt. Reba, California	Mt. Reba, Inc.
31. Alta, Utah	Alta Ski Lifts Company.
32. Sierra Blanca Ski Area, New Mexico	Mescalero Apache Tribal Organization.
33. Zephyr Cove Resort, Nevada	Travel Systems, Ltd.
34. Buttermilk Ski Area, Colorado	Aspen Skiing Company, a partnership owned by the Lester Crown family and Denver-based partnership of Miller, Klutznick, Davis, Gray.
35. Sierra Summit, California	Sierra Summit, Inc.
36. Snowbird, Utah	Snowbird Ski and Summer Resort.
37. Digger Bay Marina, California	Seven Resorts, Inc.
38. Big Mountain, Montana	Winter Sports, Inc.
39. Santa Fe Ski Basin, New Mexico	Lake Peak Corporation.
40. Sandia Peak Ski and Tramway, New Mexico	Sandia Peak Ski and Tramway.
41. Beaver Creek Winter Ski, Colorado	Vail Associates, Inc., a wholly owned subsidiary of Gillette Holdings, Inc.
42. Dodge Ridge, California	Dodge Ridge Corporation.
43. Holiday Harbor, California	Holiday Harbor.
44. Mountain High Ski Area, California	Mountain High Holiday Hill Corporation.
45. Fairfield Snowbowl, Arizona	Fairfield Snowbowl, Inc., a corporation owned by Fairfield Communities, Inc.
46. Diamond Lake Resort, Oregon	Diamond Lake Improvement Company.
47. Aspen Highlands Winter Ski Area, Colorado	Aspen Highlands Skiing Corporation.
48. Sugar Bush Resort, Vermont	Sloan Valley, Inc.
49. Multnomah Falls Lodge, Oregon	Multnomah Falls Company.
50. Alyeska Ski Area, Alaska	Seibu Alaska, Inc.

Forest Service Field Units Visited

Region and Forest	Location
Rocky Mountain Region:	Lakewood, Colorado
Arapahoe National Forest	Fort Collins, Colorado
White River National Forest	Glenwood Springs, Colorado
Pacific Southwest Region:	San Francisco, California
Inyo National Forest	Bishop, California
Shasta-Trinity National Forest	Redding, California
Eastern Region:	Milwaukee, Wisconsin
Superior National Forest	Duluth, Minnesota
White Mountain National Forest	Laconia, New Hampshire

Location and Size of Resorts GAO Visited

Table V.1: Summer and Winter Resort Operators Visited, by Type and Size

Resort name (by state)	Resort type	Resort size*
California:		
Bridge Bay Resort	Summer	Large
Cedar Stock Resort	Summer	Medium
June Lake Junction	Summer	Large
Lakeview Resort	Summer	Large
Mammoth Mountain Ski Area	Winter	Large
McGee Creek Pack Station	Summer	Small
Pine Cove Marina	Summer	Small
Silver Lake Resort	Summer	Medium
Tamarack Lodge	Summer	Large
Colorado:		
Aspen Mountain Ski Area	Winter	Large
Beacon Landing Marina	Summer	Small
Bell Crest Marina	Summer	Small
Breckenridge Ski Area	Winter	Large
Buttermilk Ski Area	Winter	Large
Copper Mountain Resort	Winter	Large
Loveland Ski Basin	Winter	Medium
Snowmass Ski Area	Winter	Large
Winter Park Resort	Winter	Large
Minnesota:		
East Bearskin Lodge	Summer	Medium
Lutsen Mountains	Winter	Small
Roaring Stoney Resort	Summer	Small
Sawbill Canoe Outfitters	Summer	Medium
Timber Bay Lodge	Summer	Medium
New Hampshire:		
Loon Mountain	Winter	Large
Mount Attitash Ski Resort	Winter	Medium
Wildcat Ski Resort	Winter	Medium

*Size based on gross receipts

Winter resorts:

- Large (over \$5 million)
- Medium (\$1 to \$5 million)
- Small (under \$1 million)

Summer resorts:

- Large (over \$500,000)
- Medium (\$100,000 to \$500,000)
- Small (under \$100,000)

Appendix V
Location and Size of Resorts GAO Visited

**Table V.2: Summary of Resorts Visited,
by Size**

Resort size	Resort type		Total
	Summer	Winter	
Small	5	1	6
Medium	5	3	8
Large	4	8	12
Total	14	12	26

Request Letter

HOWARD M. METZENBAUM
OHIO

COMMITTEES
ENERGY AND NATURAL RESOURCES
JUDICIARY
LABOR AND HUMAN RESOURCES
BUDGET

United States Senate

WASHINGTON, D.C. 20510

November 10, 1986

The Honorable Charles A. Bowsher
Comptroller General of the United States
General Accounting Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Bowsher:

We are writing to request that the General Accounting Office study and make recommendations on the Graduated Rate Fee System used by the Forest Service to assess permit fees paid by summer and winter resort facilities, to determine whether or not the current system results in return of fair market value, as mandated by OMB Circular A-25, the Independent Offices Appropriations Act of 1952 (31 U.S.C. 483(a)), and incorporated in Forest Service regulations (36 CFR 251.57).

We have received information from the Forest Service indicating that, in 1982, the total fees paid to the Forest Service by resort concessioners was \$6,992,377, while the total of the combined gross receipts of the concessioners was \$362,433,538. The Forest Service expects to soon have more current data.

We understand that the GAO last reviewed the graduated rate fee system in 1983 and found fault with the system. In a letter to Forest Service Chief R. Max Peterson, dated August 18, 1982, GAO detailed the results of a limited study that it had completed and pointed out several specific flaws in the system; a copy of the letter is attached. We are not aware of any subsequent studies or inquiries on the part of GAO or any other agency, nor are we aware of any attempts, legislative or administrative, to address the concerns raised in the 1982 letter.

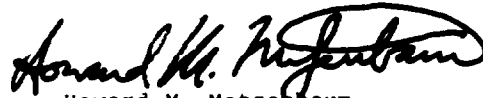
Appendix VI
Request Letter

The Honorable Charles A. Bowsher
November 7, 1986
Page Two

Therefore, we are requesting that GAO conduct a thorough review of the Graduated Rate Fee System used by the Forest System for the purposes of determining lease values for summer and winter resorts on Forest System lands, evaluating the system as it now exists in accordance with the National Forest Ski Area Permit Act of 1986. The study should also address the concerns raised in GAO's 1982 review, determining whether or not those problems remain valid. In addition, I would like to know the names of all parent companies to which any ski area permittees are subsidiaries. Finally, the report should recommend solutions to any flaws that GAO might find with the current system.

Please respond to and direct all questions to Beverly Anthony of my staff. Thank you for your assistance.

Very sincerely yours,



Howard M. Metzenbaum
United States Senator

HMM/ba

Comments From the Forest Service



United States
Department of
Agriculture

Forest
Service

Washington
Office

12th & Independence SW
P.O. Box 96090
Washington, DC 20090-6090

Reply To: 1420

Date: MAR 1 9 1988

Mr. J. Dexter Peach
Assistant Comptroller General
Resources, Community, and Economic
Development Division
U. S. General Accounting Office
Washington, DC 20548

Dear Mr. Peach:

Thank you for the opportunity to comment on the draft GAO report entitled Parks and Recreation: Problems with Fee System for Resorts Operating on Forest Service Lands (RCED-88-94). Here are our comments:

PRINCIPAL FINDING: Current Fee System Does Not Calculate Market Value.

As the fee system is a formula or model approach and, therefore receives fees based on averages, the case is presented that it cannot receive market value from each permit individually. Due to these ambiguities, reviewers concluded that fair market value is not being obtained. We believe this is not a proper conclusion. The Graduated Rate Fee System (GRFS) collects a market value for the United States from concession operations on National Forest System Lands.

PRINCIPAL FINDING: Winter Resort Fees Probably Lower Than Fair Market Value.

Definitions of market value represent different beliefs and assumptions about the market place and the nature of value. Elements of market value for resorts on National Forest System Lands to be considered are the site, interest conveyed, use allowed of the site, and Government objectives. There is the preception that ski areas have an inordinately high return on investment and, therefore, the Government should get a higher fee. Financial data would state otherwise. The national average return on gross fixed assets for the 1986-87 season was 4.9 percent. In the Central Rockies where the areas are almost all on the National Forests, the average was 4.3 percent.

Ski areas are limited market properties with relatively few potential buyers at a particular time. Most of the National Forest land used for ski areas would be landlocked by private property except for the joint venture opportunities provided by the private landowner and the Forest Service (FS).



FS-6200-28b (7/86)

Appendix VII
Comments From the Forest Service



Mr. J. Dexter Peach

2

Market value of the permit is a value of the leasehold estate which conveys the right to use and occupy real estate for stated term and under certain conditions. Studies of GRFS have not, to any significant extent, considered the market value of the leasehold interest. Restriction in the special use permit include numerous constraints for environmental protection, development and expansion, and management control. Permits to date have not been assignable nor transferable; factors which greatly affect leasehold interests. The resort owner assumes all risk and furnishes most of the agents of production, labor, capital, coordination, and land, while the Government only provides some of the land.

The National Forest Management Act states the National Forests are to be managed for many resources, including recreation. Resorts constructed on the National Forests, almost exclusively with private capital, provide jobs, create wealth, attract capital, and provide access. Were it not for concession opportunities, the Government could be called on to provide the same or similar facilities at public expense. Public (values) and market values need to recognize the opportunities provided for the public to pursue outdoor recreation. Private suppliers, in partnership with the FS, are able to provide recreation in a scale and scope which the Government could not do alone. Through the permit process, Government provides recreation, a positive business climate, competition and jobs.

The GAO draft report states, "The Forest Service has no assurance that its fee system formula, as designed, calculates fair market value, and the rates used in the formula have never been updated to reflect changed economic conditions." This does not prove that the fee derived is not market value. By its nature and application, GRFS is market value.

PRINCIPAL FINDING: The Service Has Not Corrected Most of the Previously Reported Problems.

Reviews of GRFS have stated that there are methodological problems in the system. The Graduated Rate Fee System was developed as a system that addressed the requirements of law and market value. We have accomplished change to the existing system, particularly in the area of gross fixed assets and will continue to refine and eliminate problems with GRFS.

PRINCIPAL FINDING: Alternatives For Revising or Replacing the System.

The General Accounting Office recommends development of a unique fee that more closely reflects market value, but that this could only be cost-effective for the larger resorts. For smaller resorts, the Agency should either revise the current formula to correct known methodological problems or implement a fee formula (system) that is cost-effective to administer.

A main tenet given in the audit report to substantiate this position is that GRFS is based on a formula or model from industry averages and, to obtain market value (at least by the land residual method) for each operation, there would have to be exclusive and unique fees. The amount of additional fees which might be collected, number of permits, and size of the auditor workforce does not warrant a tailor-made fee for each permit. The Agency will continue to apply the system so as to get average market value from the industry.



FS-6200-22b (7/86)

Appendix VII
Comments From the Forest Service



Mr. J. Dexter Peach

3

RESPONSE TO THE RECOMMENDATIONS:

The Forest Service plans to continue to use the Graduated Rate Fee System. The Graduated Rate Fee System obtains a market value for the permitted use. The draft GAO report has pointed out problems in the System and is critical of the complexity. These are not fatal flaws. However, we have made corrections to the GRFS and plan additional fine-tuning. We are satisfied that GRFS does provide for collection of a fair market value.

A handwritten signature in cursive script that reads "Charles R. Hartgraves".

CHARLES R. HARTGRAVES
ASSOCIATE DEPUTY CHIEF



FS-6200-286 (7/86)

The following are GAO's comments on the Forest Service's letter dated March 18, 1988, and received March 24, 1988.

GAO Comments

1. The Forest Service states several times that GRFS provides for the collection of market or fair market value but it never demonstrates how GRFS does this. The Service states that (1) studies of GRFS, presumably including the study used to develop GRFS, did not consider various factors that affect market value and (2) the Service's failure to update the fee formula rates to reflect changes in economic conditions during the past 20 years does not prove that the fees being collected today are not market value. However, neither of these factors support the Service's contention that GRFS provides for the collection of fair market value.

2. The Forest Service states that (1) there is the perception that ski areas have an inordinately high return on investment and (2) the average return on gross fixed assets for the 1986-87 season was lower for ski areas in the Central Rockies, where almost all are located on National Forests, than for the nation as a whole. Our report does not state that ski areas have an inordinately high return on investment. However, we did find that the rate of return of ski areas located on Service land had been higher than that of ski areas not located on Service lands for 8 of the last 11 years for which data were available. For the comparison to be valid, the Service should have used the same measure of return as we did and the data should have been disaggregated into ski areas located on Service and non-Service lands. At any rate, our observation is based on data for 11 years, and data on 1 year cannot indicate a reversal in the pattern we observed.

3. The Service comments that restrictions are placed on the permit holders for environmental protection, development and expansion, and management control and that permit holders are providing a recreational service to the public. Accordingly, the government needs to recognize these factors in determining fair market value for these permits. While numerous factors can be considered in determining fair market value, the Service is encouraged by law to collect the full fair market value. The definition of this value is as defined in our report and it is also well established in literature, by law, and by OMB circular.

4. Our report acknowledges the changes made to GRFS with respect to the handling of gross fixed assets. The Forest Service comments are not specific as to what further changes the Service plans to make to refine and eliminate current problems with GRFS or whether it disagrees with any

of the problems that are discussed in our report. However, we believe that it is particularly important that the GRFS formula be based on current economic data.

5. We disagree with the Forest Service's contention that it would not be cost-effective to implement a fee system for the larger resort operations that considers the economic profile and profitability of individual resorts. As stated in our report, the National Park Service has a fee system that does this. However, the Forest Service would have to perform a study to determine the resort size threshold above which the fee system would be cost-effective.

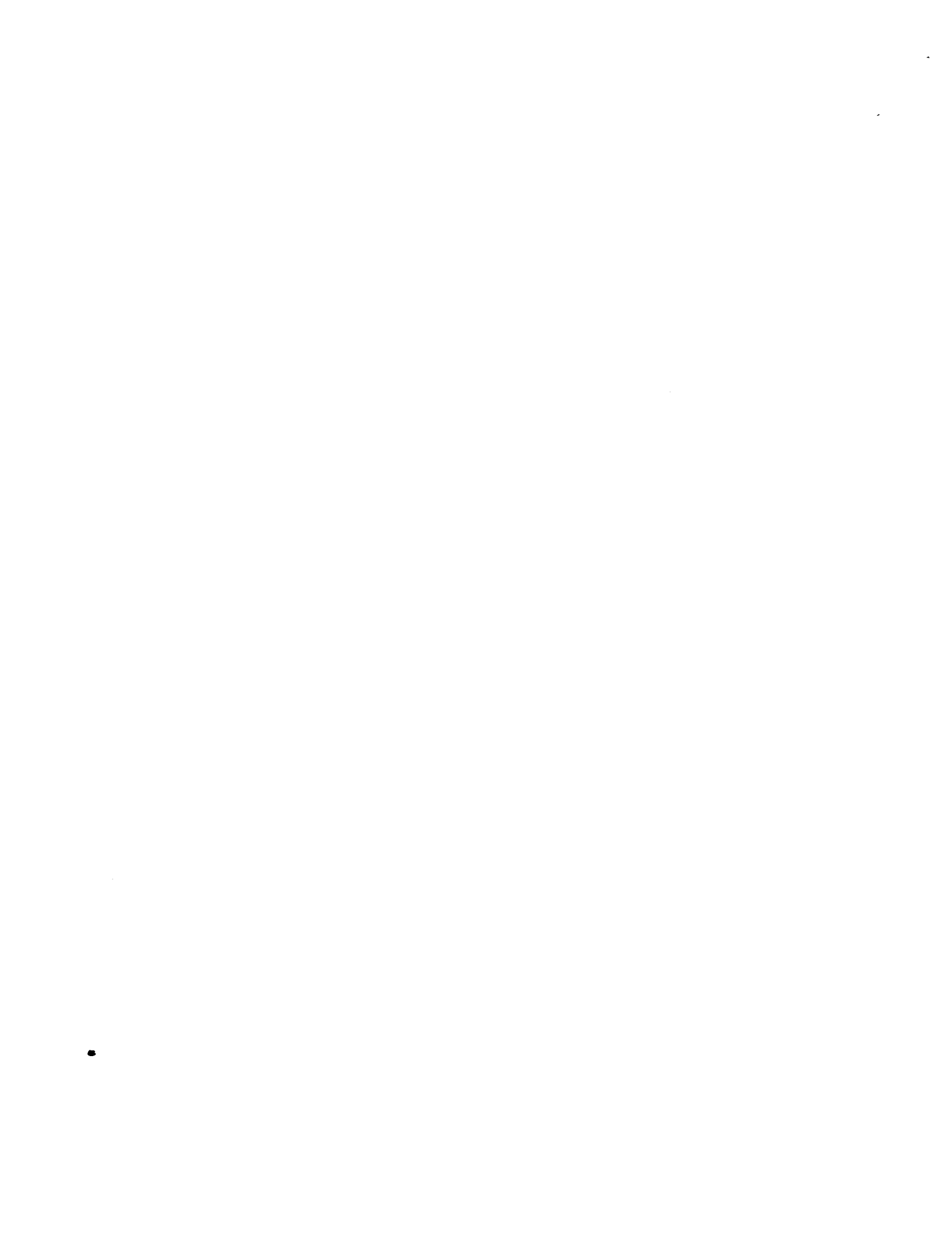
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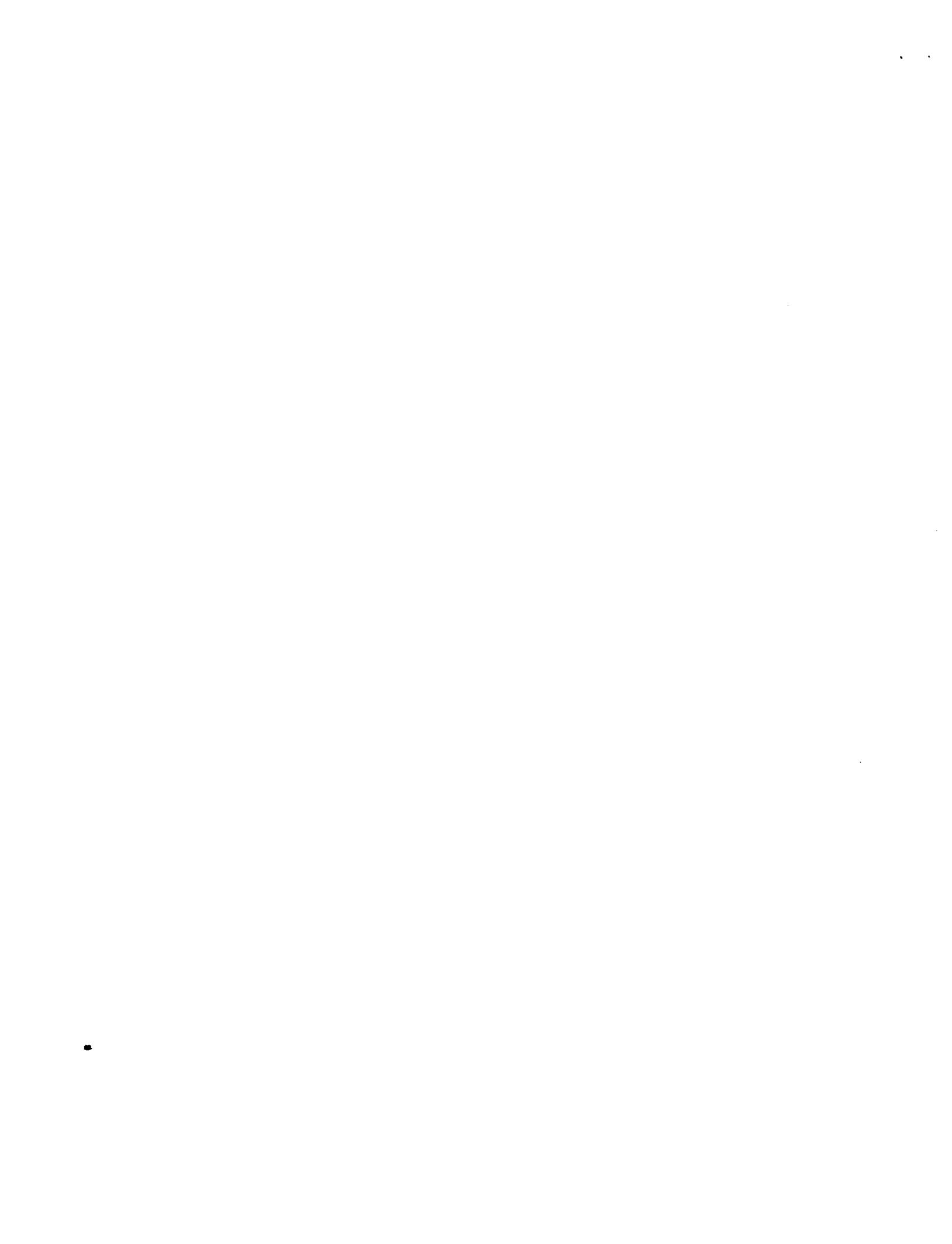
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