

GAO

Briefing Report to Congressional Requesters

June 1986

TIMBER SALE
ACCOUNTING

Analysis of Kootenai
National Forest



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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

ACCOUNTING AND FINANCIAL
MANAGEMENT DIVISION

June 6, 1986

B-222397

The Honorable Sidney R. Yates
Chairman,
The Honorable Ralph Regula
Ranking Minority Member,
Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives

As requested by your office, we have conducted a follow-up review on our previous report Timber Sale Accounting: Analysis of Forest Service's Proposed Timber Program Information Reporting System (GAO/AFMD-86-42, April 4, 1986). On May 2, 1986, the Service informally presented a revised system proposal to the subcommittee staff. Part of that proposal related to the Kootenai National Forest, which was used as a "test forest" to illustrate the types of reports that the proposed system would produce based on fiscal year 1985 timber sales. The primary purpose of our follow-up was to perform a limited evaluation of the information contained in these reports on the Kootenai National Forest. We examined this information in terms of the concerns about the proposed system which we raised in our prior report. On June 2, 1986, we briefed your staff on the results of our work.

We found that the conditions described in our earlier report still exist and that the Service would be unable to rely on the results of the system's cost analysis. For example, we found that as a result of errors, cost exclusions, and basic flaws in the Service's proposed system, the costs for the Kootenai Forest were understated by about \$4.6 million. The specific problems we found include the following:

- The system excluded the costs of locating forest boundaries and the payments to state governments for schools and roads. It also used average costs in one instance instead of actual costs.
- The system collects some estimated labor costs rather than actual amounts.

--Depreciation expense for roads was understated, and the accounting reports did not flow from the controlled records of the Service's formal accounting system, as required by generally accepted accounting principles for the federal government.

--Costs are aggregated at the forest level, while management occurs at the district or subdistrict unit level, thus diminishing the opportunity for managing and controlling sales.

--Economic benefit calculations were made with erroneous data.

In addition, we noted that the Service added another element to its primary financial report that is intended to show the federal income taxes paid to the Treasury as a result of timber operations. This is defined as direct, indirect, and induced income to the communities as a result of the timber harvested, and is shown as an additional source of funds in determining profit or loss. We believe that the inclusion of such data is inappropriate in a financial report on the costs and receipts of timber sales because its determination is highly subjective and cannot be accurately measured. If presented at all, this information should be presented in the report on economic benefits. The appendix discusses our findings in more detail.

Our work was performed at the Kootenai National Forest during May 1986. We did not have sufficient time to examine all report elements of the proposed system in detail, but rather concentrated on the cost data that was reported. We reviewed documentation relating to the financial information shown to determine how the figures were derived, and we conducted interviews of both forest and regional personnel involved in the preparation of the reports. Since the forest is divided into several districts, we also performed work at the Troy Ranger District.

As agreed with your office, we did not obtain formal agency comments on our findings. We did, however, discuss the contents of this report with Forest Service officials, and their comments are included where appropriate. The officials did not dispute the accuracy of the facts we presented. However, they disagreed with our conclusions. One official said that the proposed system would produce accurate results when it becomes fully operational. We considered the official's comments, and still believe that the results of the proposed reporting system will be incomplete and inaccurate.

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Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that time, we will send copies to the Secretary of Agriculture, the Chief of the Forest Service, and other interested parties. Copies will also be made available to others on request. If you have any questions about this report, please call John F. Simonette, Associate Director, on (202) 275-9490.

Arthur R. Goldbeck for
Frederick D. Wolf
Director

APPENDIX I

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BACKGROUND

- **PRIOR GAO REPORT**
- **REVISED PROPOSAL**
- **KOOTENAI NATIONAL FOREST**

PRIOR GAO REPORT

On April 4, 1986, we issued our report Timber Sales Accounting: Analysis of Forest Service's Proposed Timber Program Information Reporting System (GAO/AFMD-86-42). In that report, we stated our primary concerns with the proposed system were:

- The system might not account for all costs. The proposal did not clearly define the costs to be accounted for, excluded some costs entirely, and used average costs instead of actual costs for some others.
- The existing accounting system, which the Service would rely on for data, distributed some costs on an estimated rather than actual basis and, therefore, might not provide accurate cost information.
- The proposed methods of accounting for such items as depreciation would not conform with government accounting principles and standards in all key respects, and reported costs might be distorted as a result.
- The level of accounting proposed might not provide sufficient detail for the Congress and the Service in managing the timber sales program.
- The methods for calculating benefits, a highly subjective area, had not been specified, and accurate forest use data on which to base the computations were not available in all cases. Furthermore, assigning dollar values to some benefits of an elusive nature, such as the value of an afternoon spent fishing, might lead to the erroneous perception that the values represented real dollar returns.

REVISED PROPOSAL

Our April 1986 report was based on a working draft of the proposed reporting system which the Service had provided us in mid-March. At its appropriation hearings before the Subcommittee on Interior and Related Agencies in April, the Service said that it was addressing the issues that we had raised. Additionally, the Service asked for time to present its draft report which outlined the planned reporting system. Since there was not sufficient time during the hearings, the Service presented its revised proposal on May 2, 1986, to the subcommittee staff.

The Kootenai National Forest was one of the many forests which the Service used to test the concepts that it formulated

during the process of designing its proposed information reporting system. The Service included information on this forest in the draft report which it presented to the subcommittee staff in May. That draft displays three reports which the Service believes will disclose the results of timber operations at the forest. The proposed reports include:

- Report 1. Financial Account, which was to display line-by-line sources and applications of funds,
- Report 2. Economic Account, which was to show the investment made in harvested acres, and
- Report 3. Employment, Income, and Program Account, which was to show the impacts of the timber sale program on the local community.

KOOTENAI NATIONAL FOREST

The Kootenai National Forest is located in Libby, Montana, which is in the northwestern corner of the state. The forest is divided into seven ranger districts and three engineering zones. Almost 400 personnel are employed on a permanent basis, and over 300 were seasonally employed during 1985.

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***SYSTEM MAY NOT ACCOUNT
FOR ALL ACTUAL COSTS***

- **SOME COSTS EXCLUDED**
- **SOME COSTS AVERAGED**

SOME COSTS EXCLUDED

As presently proposed, the Service's system excludes some costs entirely. For example, 25 percent of timber sales revenue is paid to state governments. This was not included in the original proposal as a cost of timber sales, nor is it included as a part of the data provided on the Kootenai National Forest for fiscal year 1985. Thus, the cost of operations does not include some \$2.9 million.

Another area in which the Service excludes costs that should be a part of the cost of selling timber is in the treatment of landline costs. (The determination of the forest boundary is called landline location.) In the Kootenai example, these costs, which amounted to \$319,000, were excluded. When asked why these costs were not included, we were told by a forest official that the instructions which were sent to the forest required all such costs to be excluded. In discussing the location of boundaries with the timber staff officer, he said that the costs would not have been incurred if there had been no sales. Where landline costs are incurred as a result of timber sales, we believe these costs should be charged to the timber sale program.

Another instance of cost exclusion occurs in the area of mitigation or enhancement costs. The data available to the forest were insufficient for officials to determine whether some costs were paid to enhance wildlife habitat or other outputs, or were to mitigate the damage done to other outputs by cutting timber. The distinction between enhancement and mitigation costs is important since mitigation costs are a cost of the sale. On the other hand, enhancement costs are generally incurred for purposes other than to support timber sales. None of the dollars in mitigation and enhancement costs were attributed to the timber sales program.

Finally, as we stated in our April 4 report, Regional Office overhead and Washington Office overhead and program costs were not included as a cost of operations. For example, the Washington headquarters staff has several people who oversee timber operations from the national office perspective. We believe that it is necessary to include such costs so that the total cost of timber sales can be computed.

USE OF AVERAGE COSTS

During the May 2 briefing to the subcommittee staff, the Service representative stated that the reports of the Kootenai National Forest did not use average costs for any of its cost

components. The reports presented by the staff show an adjustment entitled "silviculture exam," which decreases cost by \$267,000. (Silviculture is the process by which the Service determines how a stand of timber can best be managed.)

We discussed the adjustment with the timber staff officer at the forest, and he stated that the adjustment had been made according to the instructions received from headquarters. The intent of the adjustment is to apportion the cost, based on the average cost per acre, to the present year's harvest. Subsequently, Service officials told us that this practice will not be followed in the future and that actual costs will be charged.

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***SYSTEM MAY NOT PROVIDE
ACCURATE COST INFORMATION***

- **PLANNED, NOT ACTUAL
COST RECORDED**
- **DIRECT TIME CHARGES
INACCURATE**

PLANNED INSTEAD OF ACTUAL COSTS

Our review at the Kootenai National Forest showed that some timber costs are recorded as planned, or estimated, instead of as actually worked. For example, at the Troy Ranger District, time spent by the timber management officer and the three nontimber resource managers (general resources, silviculture and reforestation, and fire management) is distributed to both timber and nontimber accounts on a planned rather than actual charge basis. This problem did not occur for the remaining personnel in the district because timber resource personnel charge their time directly to timber support codes. Also, nontimber resource staff who work on timber sales charge their time directly to a separate "timber support" management code. Thus, no further distribution on the basis of estimated cost is required for these staff members. We were told by forest officials, however, that Service personnel in all the other districts in the forest charge their timber support time to one management code which is then distributed to various other accounts on a planned rather than actual basis.

INACCURATE DIRECT CHARGES

We were unable to confirm the accuracy of direct time charges at the Troy Ranger District. We attempted to test the accuracy of charges to nine management codes set up for timber sales work in the fiscal year 1985 work plans. One of these nine, for example, covers the preparation of environmental assessments on four selected sales. The work plan for this management code shows time estimates and staff assignments for all four sales combined. We were unable to test the reasonableness of charges to this or any other timber management code because no daily, weekly, or other periodic work scheduling or planning records are available to show what management had authorized the staff to be working on at any given point.

The work plan's figures cannot be compared to direct time charges because the work plan did not always reflect the work that was actually performed and the plan's estimates may influence the amount actually charged to it. We noted these problems with the work plans:

- In some instances, the actual work changed but the work plan did not. Officials in the Troy district told us that to adjust to changing priorities in fiscal year 1985, they curtailed work on some sales in the plan, added sales not in the plan, and only partly completed some work in the plan.

--In one instance, work plan cost estimates were changed, but the actual work planned for the staff did not. Five months into fiscal year 1985, district officials received their final approved budget that shifted significant funds from one work plan management code to another. District officials said the actual work was not changed to meet this budget change, but the amounts charged to these two codes were managed so that they reflected the authorized budget amounts. Without some record showing where the staff were actually working at a given point, it is difficult to verify the accuracy of these final charges.

***PROPOSED ACCOUNTING DOES NOT
MEET PRINCIPLES AND STANDARDS***

- **UNDERSTATED DEPRECIATION**
- **SOURCE OF REPORT DATA**

UNDERSTATED DEPRECIATION

In questioning the Service's use of a 50-year life for computing depreciation of roads, we stated in our prior report that we had generally suggested a life of no more than 40 years and that we believed a standard life for all roads would not properly recognize that some roads may have substantially shorter useful lives. The report presented for the Kootenai National Forest displays depreciation based upon the 50-year life that the Forest Service uses. Using 50 rather than 40 years lowers the annual costs for depreciation that will be charged to timber sales by about 20 percent. In relation to the Kootenai National Forest, the depreciation cost, therefore, is about \$787,813 lower than we believe it should be.

REPORTS ARE NOT BASED ON CONTROLLED RECORDS

Under current generally accepted accounting principles for the federal government, financial reports are to be derived from an agency's formal accounting system. However, we found three areas in the Service's reports where this requirement was not being met. For example, in our earlier report, we stated that the Service might have difficulty in complying with existing requirements to capitalize all assets because of a lack of current, accurate records on road costs. We reviewed the information available at the Kootenai Forest and found that the records used to generate the road costs were not a part of the Service's formal accounting system. In addition, the informal records that were used had not been updated since September 1984 and, therefore, did not include at least \$13.5 million of road investments.

During our evaluation of the information presented in "Report 1. Financial Account," we also found that since our prior report the Service included one major new item entitled "Federal Income Taxes Paid on Direct, Indirect, Induced Income to Community." This is intended to show tax revenue to the federal government resulting from timber sold from national forests. The amount shown for this item is necessarily based upon assumptions made relative to many variables, including individuals' income and dependency status as well as a changing tax code. In our opinion, the inclusion of such data in a financial report on the costs and receipts of timber sales is inappropriate because its determination is highly subjective and cannot be accurately measured.

Finally, concerning the source of the accounting data, we were told by a Service official that the information contained in

"Report 1. Financial Account" was not taken from the accounting system. Although the first column is entitled "Data From Accounting System," these data were computed by taking information from the system during October 1985 and applying manual reclassifications and adjustments to obtain what the Service considered to be a proper year-end amount. We were told by Service officials that the reason the Service had to do this was because the fiscal year-end statements as of September 30 did not contain all of the adjustments needed to adequately show costs. They said that this resulted in the Kootenai National Forest "Report 1. Financial Account" not balancing with the fiscal year 1985 year-end statements issued by the Service's accounting system.

***LEVEL OF ACCOUNTING AND
REPORTING TOO GENERAL FOR
MANAGEMENT OF SALES***

- **MANAGEMENT AT THE
DISTRICT OR
SUBDISTRICT LEVEL**
- **COSTS AGGREGATED AT
FOREST LEVEL**

**TIMBER SALES ARE OFTEN
MANAGED AT DISTRICT LEVELS**

Our review at the Kootenai National Forest shows that the forest does not plan timber sales or budget and account for its costs at the forest level. Timber sale planning and budgeting is done instead at levels within the forest, such as the district level. Decisions to proceed with what may be a potential below-cost timber sale are originally made, for example, at the district level. The district ranger decides which sales will be offered and approves their placement on the 5-year action plan which is used to disclose timber sale plans to the public.

To make its sales selection decisions, the Troy Ranger District plans and manages timber sales by focusing on 25 subunits within the district. This is done by reviewing each subunit's history and using that information to spread sales equitably throughout the district. The district prepares an environmental assessment for each subunit and uses that assessment when offering subsequent sales.

We think timber sales are best managed by aggregating costs and benefits at the management level each forest uses. We believe that if the timber sale planning, budgeting, and accounting systems were all integrated at this same level, managers would have a common set of rules with which to make valid comparisons between planned and actual results.

COSTS ARE AGGREGATED AT FOREST LEVEL

Contrary to the above, the Forest Service proposes to report timber sale costs and benefits at the forest level. Such reporting will not provide sufficient detail to control and manage timber sales. When costs are aggregated at the forest level, the sales receipts of the forest as a whole may be sufficient to conceal the losses of component below-cost sales. As a result, the Congress will have less information on the extent of below-cost sales, and effective control and management opportunities will be diminished.

***BENEFIT CALCULATIONS
SHOW PROBLEMS***

- **CALCULATIONS WITHOUT ACCURATE DATA**
- **ERRONEOUS PERCEPTIONS POSSIBLE**

ACCURACY OF TIMBER SALE BENEFIT DATA

As directed in the conference report, the Service intends to report benefits other than revenue from timber sales. Our evaluation of the information presented for the Kootenai National Forest underscores the need to explain clearly that information.

We examined the benefit values attributed to nontimber resources from timber sales in the Troy Ranger District and found the accuracy of the data to be uncertain. The uncertainty stems from the degree to which the figures are based on estimates rather than verifiable numbers. The district resource manager stated that the information on the availability of such nontimber benefits as recreation and fish and wildlife is based on sources such as personal judgment, estimates, personal observations, and traffic counters. The resource manager said she was not confident that these estimates were accurate and that her confidence decreases further when attempts are made to identify that portion attributable to timber sales or to assign dollar values to them.

Given that the benefits often represent estimates rather than verifiable amounts, it is important that the basis for the estimates be clearly specified. Otherwise, the reasonableness of the stated benefits cannot be judged. We did not find that the Forest Service's report for the Kootenai National Forest specified the basis for the estimates. Thus, the revised proposal contains the same problem we identified in our earlier report.

INFORMATION MAY LEAD TO WRONG CONCLUSIONS

Reliance on data presented in "Report 2. Economic Account" may lead to erroneous conclusions that the amounts shown can be obtained. For example, the Service reports that the present net benefit of timber is \$7.483 million. This means that the value of the future flow of benefits expected to flow to the Treasury over the next growing cycle is \$7.483 million in today's money.

We interviewed the person at the regional office responsible for preparing the report and were told that the amounts used were derived from the 1980 Resource Planning Act values. These values were based on the sales value of timber, which was estimated to be \$157 per 1,000 board feet (MBF) in 1980, \$243 per MBF in 1990, and \$648 in 2030. The background material included in the Kootenai National Forest report states that in 1985 the average bid per MBF was \$22.11 and that the average bid per MBF has not

exceeded \$85 since 1979. This is significantly less than the amounts used to calculate benefits.

A similar circumstance exists in the case of grazing benefits claimed. The region used an amount of \$8 per animal unit month (the measurement unit by which charges are levied). However, we were told that the Service received only \$1.35 per animal unit month during 1985.

We believe that providing economic data intended to show the benefit of timber sales without clearly explaining and disclosing the procedures and techniques used to calculate the amounts shown may mislead the users of the information.

In examining the benefit computations, however, we found two areas in which appropriate decisions appeared to have been made. For example, no benefit was claimed for recreation at the Kootenai Forest. We were told that in the opinion of the forest personnel, no additional benefit would accrue to recreation due to timber harvest. Similarly, the calculation for benefits generated by grazing was capped at 13,000 animal unit months. In this instance, we were told that the cap was established since the forest had never been able to successfully offer a greater amount.

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***KOOTENAI FINANCIAL REPORT
CONTAINS NUMEROUS ERRORS***

- **AMOUNTS MISCLASSIFIED**
- **INCORRECT AMOUNTS USED**

AMOUNTS MISCLASSIFIED

As part of our review, we analyzed the amounts used in preparing "Report 1. Financial Account," which is intended to show the source and application of funds for the Kootenai National Forest's fiscal year 1985 sales. As part of that work, we reviewed the data used to construct the information shown in that report with the officials who prepared and reviewed the original data. In reviewing the reports with us, officials determined that several errors had been made. They said that one cause of the errors was that some timber-related costs had been misclassified as nontimber costs, and vice versa. This resulted in timber costs being understated by about \$27,000.

INCORRECT AMOUNTS USED

Other errors were made because incorrect amounts were used in computing some costs, which resulted in a further understatement of about \$375,000. The largest portion of that amount was attributed to errors in computing depreciation charges. This is in addition to the depreciation error discussed previously.

The officials could offer no explanation for the errors, other than the fact that they had limited time in which to prepare the reports. We believe the problems were caused in part because the cost data were not produced by a formal accounting system.

As a result of the errors and other costs being excluded from the reports, the reported fiscal year 1985 costs for the Kootenai National Forest timber sales were understated by about \$4.6 million as shown below:

Costs excluded

25 percent payments of revenue to states	\$2,851,400
Landline location costs	319,000
Added depreciation based on 40-yr. life	787,813

Errors

Cost misclassifications	27,000
Average silviculture costs	267,000
Adjust Service 50-yr. depreciation	352,250
Other errors	22,800

Total	<u>\$4,627,263</u>
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When we discussed our findings with the Service, an official said that reviewing the accuracy of the amounts at this time was premature because the system has not yet been finalized. The official also stated that the proposed system will produce accurate results once it becomes fully operational. We considered the official's comments, and still believe that the results of the proposed reporting system will be incomplete and inaccurate.

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