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*REPORT TO THE SUBCOMMITTEE ON
CONSERVATION AND NATURAL RESOURCES COMMITTEE ON
GOVERNMENT OPERATIONS
HOUSE OF REPRESENTATIVES* 090112

RELEASED 090112

Need To Direct Cooperative
Forestry Programs Toward
Increasing Softwood
Sawtimber Supplies

B-125053

Department of Agriculture

*BY THE COMPTROLLER GENERAL
OF THE UNITED STATES*

OCT. 8, 1974

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-125053

The Honorable Henry S. Reuss, Chairman
Subcommittee on Conservation and
Natural Resources
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

This is our report on the need to direct Department of Agriculture cooperative forestry programs toward increasing softwood sawtimber supplies. We made our review pursuant to your June 7, 1973, request, as modified by subsequent discussions with your office.

As your office requested, we did not obtain the Department's written comments on this report; however, we did discuss the matters with Forest Service officials and considered their views in preparing the report.

We do not plan to distribute this report further unless you agree or publicly announce its contents. We want to invite your attention to the fact that this report contains recommendations to the Secretary of Agriculture, which are set forth on page 24. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions he has taken on our recommendations to the House and Senate Committees on Government Operations, not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report. Your release of the report will enable us to send the report to the Secretary and the four committees for the purpose of setting in motion the requirements of section 236.

Sincerely yours,

A handwritten signature in cursive script that reads "James P. Stacks".

Comptroller General
of the United States

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ABBREVIATIONS

- ASCS** Agricultural Stabilization and
Conservation Service
- CFM** Cooperative Forest Management
- GAO** General Accounting Office
- MARS** Multiple Accomplishment Reporting
System

COMPTROLLER GENERAL'S
REPORT TO THE SUBCOMMITTEE ON
CONSERVATION AND NATURAL RESOURCES
COMMITTEE ON GOVERNMENT OPERATIONS
HOUSE OF REPRESENTATIVES

NEED TO DIRECT COOPERATIVE
FORESTRY PROGRAMS TOWARD
INCREASING SOFTWOOD
SAWTIMBER SUPPLIES
Department of Agriculture
B-125053

D I G E S T

WHY THE REVIEW WAS MADE

As the Subcommittee Chairman requested, GAO reviewed the effectiveness of the Department of Agriculture's State and private cooperative forestry programs in, and their potential for, increasing softwood sawtimber production on private, nonindustrial forest land because of predicted shortages facing the Nation.

The programs included three longtime Forest Service-administered programs: the Cooperative Forest Management Program; the Clarke-McNary, Section 4 Program; and the Agricultural Act of 1956 Title IV Program.

They also included the recently enacted--August 1973--Forestry Incentives Program administered by the Agricultural Stabilization and Conservation Service. (See p. 2.)

GAO concentrated its review on the Cooperative Forest Management and Forestry Incentives Programs, the principal cooperative forestry programs.

FINDINGS AND CONCLUSIONS

Purpose and administration
of programs

A major purpose of the Forest Service programs and the primary purpose of the Forestry Incentives Program is to increase timber production.

These programs, in cooperation with the States, make available to the private, nonindustrial forest landowner technical advice on various types of land management practices, financial aid to share in the cost of carrying out the management practices, and nursery stock for reforestation.

The Forest Service administers its programs through cooperative agreements with the States which are responsible for providing technical advice and assistance to the forest landowners. The Forest Service is responsible for such matters as providing program direction and allocating program funds to States.

For fiscal years 1969-73, Federal funds made available

to the States through the Forest Service programs totaled about \$25 million. For the same period the States more than matched the Federal funds, spending over \$94 million.

Under the Forestry Incentives Program, for which the Congress appropriated \$10 million for fiscal year 1974, the Agricultural Stabilization and Conservation Service is responsible for general program administration.

The Forest Service, in consultation with State foresters, is responsible for developing recommendations for allocating program funds, for establishing cost-sharing priorities, and for providing technical advice to landowners. (See p. 2.)

Timber supply shortage

Demands for lumber and plywood are increasing more rapidly than softwood sawtimber supplies can be made available. The President's Advisory Panel on Timber and the Environment reported in April 1973 that the most crucial forestry-related problem facing the Nation was maintaining an adequate supply of timber from softwood trees for conversion into lumber and plywood.

The Congress and the Forest Service have recognized that the best opportunity for alleviating the timber

supply problem is to increase production on the Nation's 300 million acres of private, nonindustrial forest land. This land is generally the most accessible of the Nation's forest land. (See p. 6.)

Cooperative Forest Management Program

The Forest Service had not established specific goals and plans for directing the Cooperative Forest Management Program toward increasing the supply of softwood sawtimber on private, nonindustrial forest land and for other multiple-use management purposes, such as improved watershed and wildlife areas. The States were conducting the program passively by relying on landowner requests as the primary basis for providing assistance.

Under these procedures, no priority was given to any particular forestry objective and no special efforts were being made to offer assistance to owners of land that offered the most potential and best opportunity for increasing the growth of softwood sawtimber. (See p. 6.)

The Forest Service reported to the Congress that, during fiscal year 1973, 107,600 woodland owners were assisted through the cooperative forestry programs affecting 5.4 million acres of forest land. (See p. 12.)

As part of its review, GAO examined fiscal year 1973

Cooperative Forest Management Program accomplishments reported for one county in each of six States--Georgia, Minnesota, North Carolina, Oregon, Washington, and Wisconsin. Each county had considerable acreages of private, nonindustrial forest land either growing, or suitable for growing, softwoods.

Most assistance provided to landowners in these counties, although authorized, was for purposes that did not contribute to increasing future softwood sawtimber supplies. This included growing and harvesting Christmas trees, planting and caring for ornamental and shade trees, and growing and marketing pulpwood.

This assistance was beneficial to the landowners and contributed to other program objectives, but it had little or no impact on increasing the growth of softwood sawtimber. (See p. 12.)

Assistance directed at softwood sawtimber production was often provided for land that did not have the best potential for growing softwood sawtimber. (See p. 17.)

Although other timber and nontimber purposes should be considered in administering this program, increased emphasis should be given to accelerating the growth of softwood sawtimber, because of the importance of having sufficient supplies to meet the Nation's needs.

Forestry Incentives Program

Under the Forestry Incentives Program, no specific quantitative goals had been established for increasing production of softwood sawtimber, although the legislative history indicates that this should be emphasized.

The program's fund allocation procedures give more consideration to softwood than to hardwood opportunities in determining State allocations. The procedures, however, do not provide for distributing funds on the basis of the best opportunities for increasing softwood sawtimber supplies or for designating specific amounts of the allocated funds for softwood production.

In allocating funds for fiscal year 1974, the Forest Service considered all opportunities for increasing timber production that showed a positive rate of return on investment and allocated the funds to insure that each State received some funds. Once allocated, the funds could be used for either softwood or hardwood opportunities. (See p. 21.)

Conclusions

Effectiveness of the Cooperative Forest Management and Forestry Incentives Programs could be increased if the Forest Service, the Agricultural Stabilization and Conservation Service, and the States cooperated in planning and directing the programs toward

increasing the supply of softwood sawtimber and in meeting other program purposes. This will require modifications in planning, fund allocation, and reporting procedures. (See p. 23.)

RECOMMENDATIONS

To increase the effectiveness of the Cooperative Forest Management and Forestry Incentives Programs, the Secretary of Agriculture should have the Forest Service and the Agricultural Stabilization and Conservation Service:

- Establish specific annual goals for increasing the supply of softwood sawtimber on private, nonindustrial forest land and for the other multiple-use management purposes.
- Determine what portion of the total efforts should be directed toward each of the specific program purposes.
- Request States to develop plans for accomplishing

their proportionate shares of the annual program goals.

- Request States to make special efforts to offer assistance to owners having land with the best potential for achieving program goals.
- Obtain appropriate information and evaluate the effectiveness of these programs to increase the supply of softwood sawtimber and to meet other program purposes, and report these results to the Congress.
- Base fund allocations on contributions toward meeting previously established goals and the capability to meet current goals. (See p. 24.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

As the Chairman requested, GAO did not obtain the Department's comments on these recommendations. GAO did, however, discuss the matters in the report with Forest Service officials and considered their views in preparing the report.

CHAPTER 1

INTRODUCTION

We reviewed the effectiveness of the Department of Agriculture's State and private cooperative forestry programs in, and their potential for, increasing softwood sawtimber production on private, nonindustrial forest land because of the predicted softwood sawtimber shortages facing the Nation.

We directed our review at those cooperative programs-- including three programs administered by the Forest Service and one program administered by the Agricultural Stabilization and Conservation Service (ASCS)--whose major purpose is to improve the management of this forest land.

Some Department soil and water conservation programs also provide Federal cost-sharing funds to landowners for reforestation and timber stand improvement. We did not review these programs because forest management practices account for only a small portion of program expenditures and because these programs have reached only a small percentage of the private, nonindustrial forest landowners.

PRIVATE, NONINDUSTRIAL FOREST LAND

Privately owned forest land other than forest industry land¹ totals about 300 million acres, or 60 percent of the Nation's 500 million acres of commercial forest land. The Congress, the Forest Service, and others have recognized that the best opportunity for alleviating the timber supply problem is to increase production on this private, nonindustrial forest land, which is generally the most accessible of the Nation's forest land. The major portion of this land, however, is in small ownerships--about 4 million owners averaging about 75 acres per holding. Although much of this land is growing or is suitable for growing hardwoods, such as oak, maple, and walnut trees, a large portion is growing or is suitable for growing softwoods, such as pine, spruce, and fir trees.

¹Land owned by companies or individuals operating wood-using plants.

The Department has said that this land is poorly managed and is producing at only about half of its potential. The President's Advisory Panel on Timber and the Environment (Seaton Panel) reported in April 1973 that many of these owners lacked the necessary technical forestry skills to manage their lands to provide their share of the Nation's needs for forest products and services.

COOPERATIVE FORESTRY PROGRAMS

The three Forest Service cooperative forestry programs covered in our review are:

- The Cooperative Forest Management Program, authorized by the Cooperative Forest Management Act of August 25, 1950, as amended (16 U. S. C. 568c and d).
- The Clarke-McNary, Section 4 Program, authorized by the Clarke-McNary Act of June 7, 1924, as amended (16 U. S. C. 567).
- The Title IV Program, authorized by title IV of the Agricultural Act of 1956 (16 U. S. C. 568e).

The ASCS-administered program, the Forestry Incentives Program, is authorized by section 1(28) of the Agriculture and Consumer Protection Act of 1973 (87 Stat. 245).

These programs make available to the private, nonindustrial forest landowner assistance, such as technical advice on various types of land management practices, financial aid to share in the cost of carrying out the management practices, and nursery stock for reforestation. A major purpose of the three Forest Service programs and the primary purpose of the Forestry Incentives Program is to increase timber production.

Under the Cooperative Forest Management (CFM) Program, the Secretary of Agriculture is to cooperate with State foresters to provide technical services to private, nonindustrial forest landowners; forest operators; wood processors; and public agencies for such purposes as multiple-use management, environmental protection, and improvement of forest land and the harvesting, marketing, and processing of forest products.

The CFM program's legislative history discussed the poor management of the Nation's private, nonindustrial forest land and stated that better forest management was essential for insuring an adequate future timber supply. The 92d Congress, in reports¹ on legislation which increased the amount authorized to be appropriated for the program from \$5 million to \$20 million annually, reiterated the urgency of improving the timber management on this land.

Under the CFM program, Federal funds are made available to the States who must, at least, match these Federal funds. The funds are used to help pay the salaries and expenses of State forestry personnel who provide technical advice on applying proven forest management practices to meet the Nation's multiple-use needs for wood, water, recreation, wildlife, forage, and special forest products. For fiscal years 1969-73, Federal funds made available to the States for the CFM program totaled about \$20 million. For the same period the States more than matched the Federal funds, spending about \$46 million.

The Clarke-McNary, Section 4 Program's objective is to stimulate reforestation on non-Federal lands by assisting the States in furnishing planting stock--seedlings--at a reasonable cost. Private, nonindustrial forest landowners may buy seedlings from State nurseries. State CFM program personnel often provide the landowners with technical advice on how to properly plant the seedlings. For fiscal years 1969-73, about \$1 million was made available to the States for this program. For the same period the States more than matched the Federal funds, spending over \$24 million.

Title IV Program funds, although authorized to be used for tree planting on Federal and non-Federal lands, have been used only for tree planting on non-Federal lands. For fiscal years 1969-73-, about \$4 million in Federal funds was given

¹S. Rept. 92-592, Committee on Agriculture and Forestry, 92d Cong., 2d sess., Jan. 24, 1972; and H. Rept. 92-472, Committee on Agriculture, 92d Cong., 1st sess., Sept. 9, 1971, Public Law 92-288.

to the States for tree planting. With one exception, these funds were used to help finance the reforestation of State-owned land. For the same period the States spent about \$24 million for tree planting under this program.

The Forest Service administers these three programs through cooperative agreements with the States. Under the terms of these agreements, States are responsible for providing technical advice and other services, such as operating State nurseries and making tree nursery stock available to eligible landowners. The Forest Service is responsible for providing program direction, allocating program funds to participating States, reviewing State expenditures subject to Federal reimbursement, disseminating suggestions on more effective working procedures, and assisting in training State personnel.

The Forestry Incentives Program was enacted on August 10, 1973, in response to concern about the Nation's timber supply. This program, under which up to \$25 million a year is authorized to be appropriated for sharing in the owners' costs, is aimed primarily at encouraging private, nonindustrial forest landowners to plant trees and improve existing timber stands. Cost-sharing rates range from 50 to 75 percent. They can vary at the discretion of individual States and/or counties subject to approval by ASCS.

Although program funds can be used for other forest management practices, the program's legislative history shows, and the Secretary has acknowledged, that the major emphasis is to increase production of softwood sawtimber for lumber and plywood.

Under the program, for which the Congress appropriated \$10 million for use during 1974, ASCS is responsible for receiving applications for cost-sharing assistance, for executing contracts with the landowners for such assistance, and for certifying payments to the landowners.

The Forest Service, in consultation with State foresters, is responsible for developing recommendations for allocating program funds to States and counties, for establishing priorities for cost-sharing assistance, and for providing technical advice to landowners for planning and accomplishing the practices approved for cost sharing. The technical advice is available from State CFM program personnel.

Because the Clarke-McNary, Section 4 Program is funded at a low level and because Title IV Program funds are being used primarily on State-owned land, we concentrated our review on the CFM and Forestry Incentives Programs.

CHAPTER 2

NEED TO DIRECT THE CFM

AND FORESTRY INCENTIVES PROGRAMS

TOWARD INCREASING SOFTWOOD SAWTIMBER SUPPLIES

One of the CFM program's major purposes is to increase the timber supply on private, nonindustrial forest land to help meet the Nation's timber needs. The Congress, the Forest Service, and the Seaton Panel have recognized that the most crucial timber supply problem facing the Nation involves softwood sawtimber and that the best opportunity for alleviating this problem is to increase production on private, nonindustrial forest land. Although other timber and nontimber purposes, such as hardwood production and multiple-use management, should be considered in administering the CFM program, accelerating the growth of softwood sawtimber should be emphasized because of the importance of having sufficient supplies of such timber to meet the Nation's needs.

Because the Forest Service had not established specific goals and plans for directing the CFM program, the States were conducting the program passively by relying on landowner requests as the primary basis for providing assistance. Under these procedures, no priority was given to any particular forestry objective and no special efforts were made to offer assistance to owners of land that offered the most potential and best opportunity for increasing the growth of softwood sawtimber. As a result, much of the assistance provided to private, nonindustrial forest landowners, although related to other program purposes, had little or no direct impact on increasing the softwood sawtimber supply.

NEED AND POTENTIAL FOR INCREASED SOFTWOOD SAWTIMBER SUPPLIES

Demands for lumber and plywood are increasing more rapidly than softwood sawtimber supplies can be made available. The Seaton Panel reported that the most crucial,

forestry-related problem facing the Nation was maintaining an adequate supply of timber from softwood trees for conversion into lumber and plywood. The Seaton Panel said that softwood sawtimber shortages were expected to occur in the future with the most serious shortages forecast for the period 1980-99.

An October 1973 Forest Service report, entitled "The Outlook for Timber in the United States" (Outlook Report), showed that, if current management levels of the Nation's forests were maintained and if timber product prices relative to competing products remained the same, softwood sawtimber shortages would start to occur during this decade and continue to increase into the next century. The study showed, for example, that U.S. demand for softwood sawtimber would exceed supplies by about 9 billion board feet in 1980, by about 15 billion board feet in 1990, and by about 18 billion board feet in 2000. For hardwood sawtimber, the Outlook Report showed a surplus in 1980, a deficit of 300 million board feet in 1990, and a deficit of about 2 billion board feet in 2000.

Softwood sawtimber potential on private, nonindustrial forest land

Softwood trees are growing on about 84 million acres, or 28 percent, of the Nation's private, nonindustrial forest land. This land supplies only about 27 percent of the Nation's softwood sawtimber which, according to Department studies, is only about half of its potential.

The Chief, Forest Service, has said that shrinking forest resources and rising demand for forest products point to the need for more efficient management of the Nation's forest land. He said that, because Federal and State forests are under increasing pressures to emphasize nontimber uses and because industry forests are currently producing at or near capacity, the best opportunity to meet the future need for increased timber supplies lies with the private, nonindustrial forest landowners.

The Outlook Report commented on the potential for increasing timber production on private, nonindustrial forest land, as follows:

"On non-industrial private ownerships held by farmers and a wide variety of miscellaneous owners, timber growing efforts other than fire protection have been limited. Yet several million of these owners hold 59 percent of the timberlands in the United States that are considered suitable and available for timber production. Most of these owners are unwilling to invest in timber growing and many are reluctant to sell timber because of conflicts with other purposes.

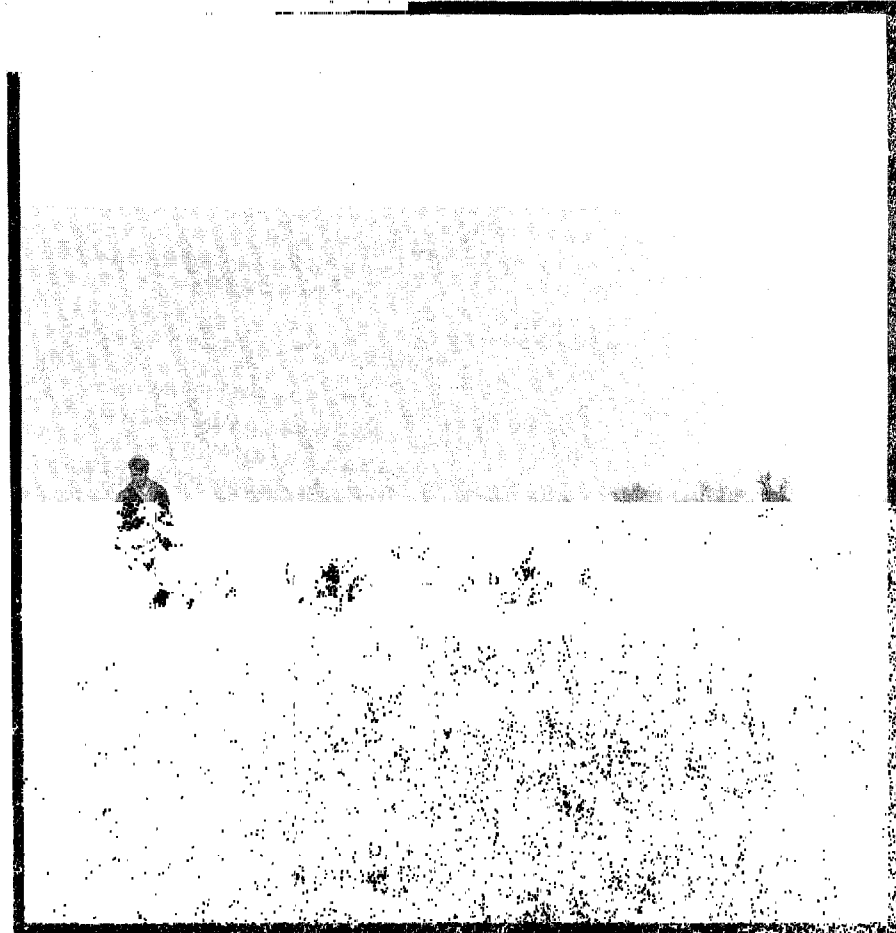
"Capturing a larger part of the very large potential for timber growing on these numerous holdings is technically sound and economically feasible, but will require substantial investments. On many ownerships public cost sharing and technical assistance appear necessary to achieve the increased growth that is estimated to be economically feasible to produce."

The Seaton Panel reported that, although timber growth on private, nonindustrial forest land could be increased, it was far more important to increase the growth of softwoods than hardwoods. It concluded that, if public programs to increase timber growth on private, nonindustrial forest land were undertaken, they should be concentrated on the softwood forests.

Forest Service studies and the Seaton Panel report show that the best opportunity for increasing softwood sawtimber supplies is through reforestation and timber stand improvement on private, nonindustrial forest land.

A 1967 Department of Agriculture report on a national inventory of soil and water conservation needs showed that, of the 300 million acres of private, nonindustrial forest land, about 78 million acres were understocked and about 135 million acres needed timber stand improvement. In comparison, the National Forest System, which includes 187 million acres, had 3.3 million acres understocked and about 13.4 million acres needing timber stand improvement.

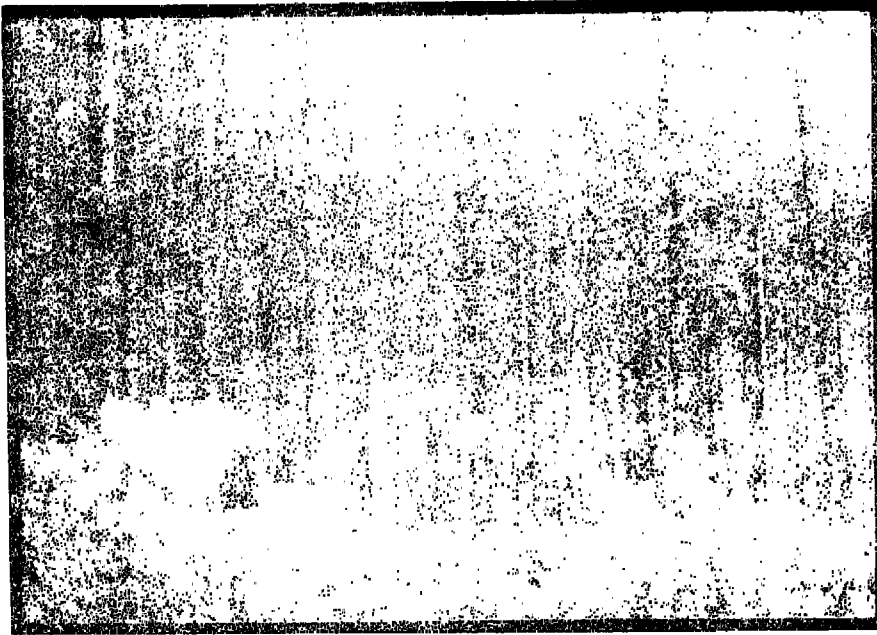
Reforestation refers to planting trees on nonstocked and poorly stocked land or converting existing stands of inferior species or quality to better quality trees by clearing and replanting the land.



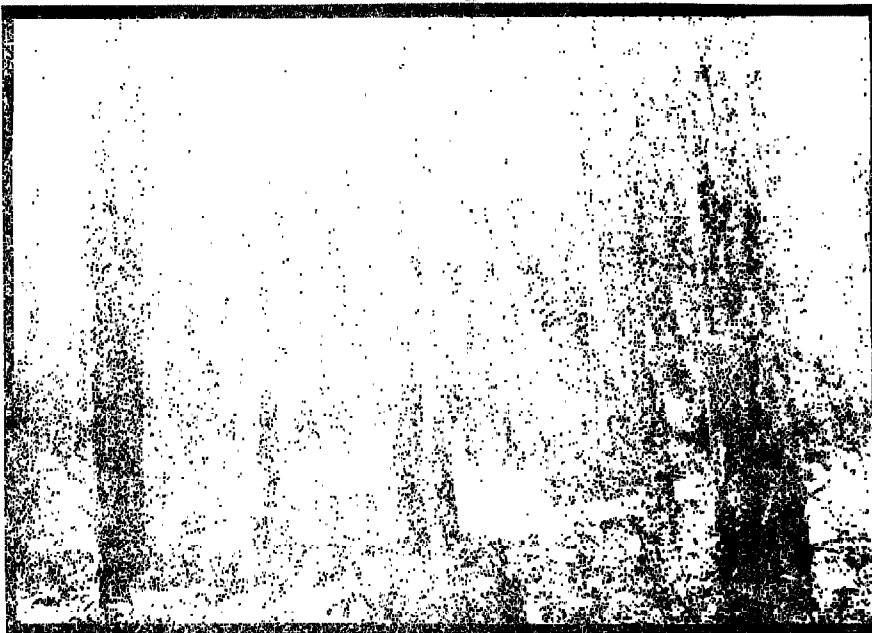
1. Land in Minnesota poorly stocked with softwood trees.

GAO Photograph

Timber stand improvement practices include thinning overstocked stands of either pre-commercial-size or commercial-size trees to improve spacing and stimulate the growth of the remaining trees. (See photographs 2, 3, and 4.)

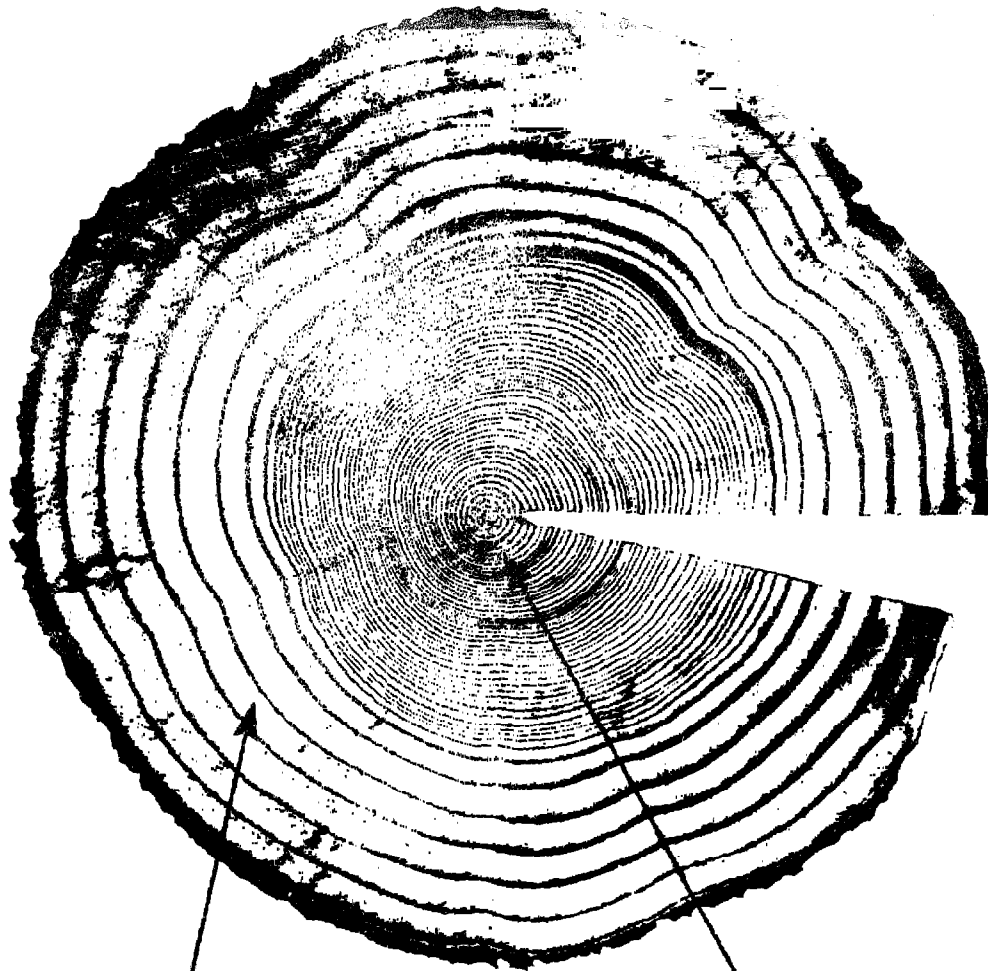


2. The growth rate of this stand of 50-year-old trees in the State of Washington has been slowed because of overstocking.



3. A stand of trees in Oregon that has been properly thinned to increase the growth of the remaining trees.

GAO Photographs



49 YEARS SLOW GROWTH

**7 YEARS FAST GROWTH FOLLOWING
TIMBER STAND IMPROVEMENT**

4. Cross section of tree showing the increase in growth that can be attained from thinning an overstocked stand.

(Photograph furnished by the Forest Service)

COOPERATIVE FORESTRY PROGRAMS'
FISCAL YEAR 1973 ACCOMPLISHMENTS

To support its fiscal year 1975 budget request, the Forest Service reported to the Congress that during fiscal year 1973 the following major accomplishments had been achieved through its cooperative forestry programs.

Number of woodland owners given assistance	107,600
Acres of woodland involved	5.4 million
Volume of timber products harvested	766 million board feet
Acres of timber stand improvement	266,000
Acres planted or seeded	295,000

As part of our review, we examined fiscal year 1973 CFM program accomplishments reported for one county in each of six States-Georgia, Minnesota, North Carolina, Oregon, Washington, and Wisconsin. We selected only counties (1) that had considerable acreages of private, nonindustrial forest land either growing or suitable for growing softwoods and (2) in which the CFM program was at least moderately active in fiscal year 1973 in providing technical advice to private, nonindustrial landowners.

These six States received about \$900,000, or about 22 percent, of the Federal funds allocated to States under the CFM program for fiscal year 1973.

EFFECTIVENESS OF CFM PROGRAM ASSISTANCE
IN INCREASING SOFTWOOD SAWTIMBER SUPPLIES

Most of the assistance provided to landowners in these counties, although authorized under the CFM program, was for purposes other than increasing future softwood sawtimber supplies. This assistance was beneficial to the landowners and contributed to other program objectives, but it had little or no impact on increasing the growth of softwood sawtimber. The assistance that was directed at softwood sawtimber production was often provided for land that did not have the best potential for growing softwood sawtimber.

The State CFM program personnel provided the assistance in response to landowner requests, with no priority given to any particular forestry objective.

Assistance provided for purposes other than increasing softwood sawtimber supplies

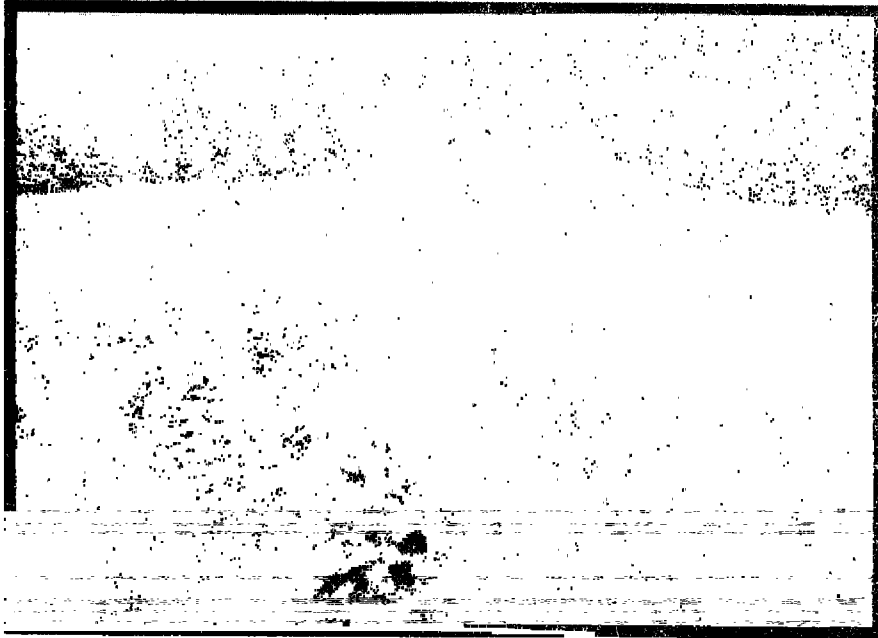
As shown by the following schedule, the percentage of assists¹ provided to private, nonindustrial forest landowners during fiscal year 1973 for purposes other than increasing future softwood sawtimber supplies varied among the counties included in our review.

<u>County</u>	<u>Percent</u>
Treutlen County, Georgia	92
Pine County, Minnesota	60
Wake County, North Carolina	69
Benton County, Oregon	62
Kitsap County, Washington	75
Portage County, Wisconsin	37

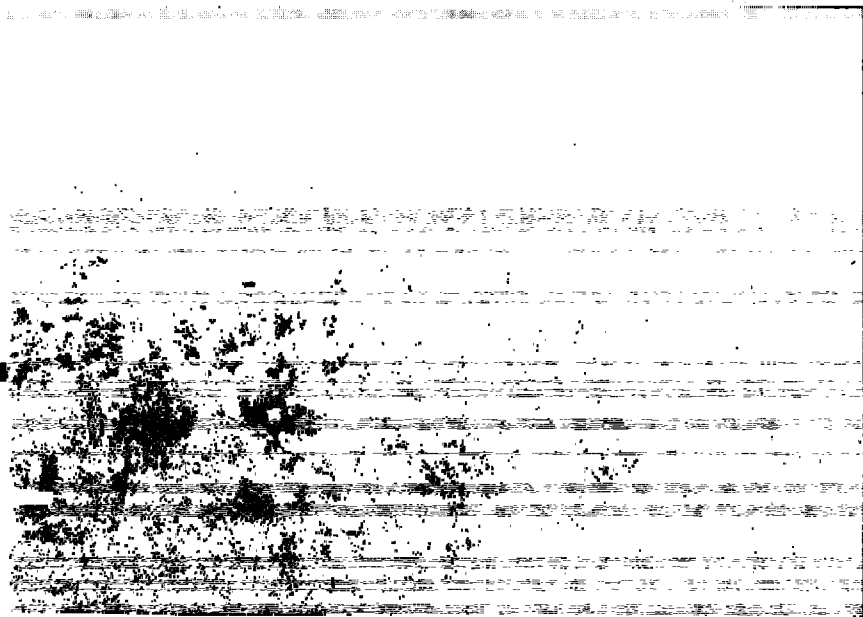
Some specific examples of the assistance provided in selected counties for other than softwood sawtimber production are as follows.

Christmas trees--In Benton County and Kitsap County, 31 percent of the assists involved technical advice on how to grow and harvest Christmas trees. (See photographs 5 and 6.) One landowner in Kitsap County received technical advice from the CFM forester on planting 3 acres and harvesting another 20 acres of Christmas trees.

¹For purposes of our analysis, we considered an assist to be the inspection of land and the subsequent advice provided by a CFM employee to a private, nonindustrial landowner on multiple-use forest management or the harvesting or marketing of primary forestry products.



5. The owner of this Christmas tree farm in Oregon received technical advice on planting and growing the trees.



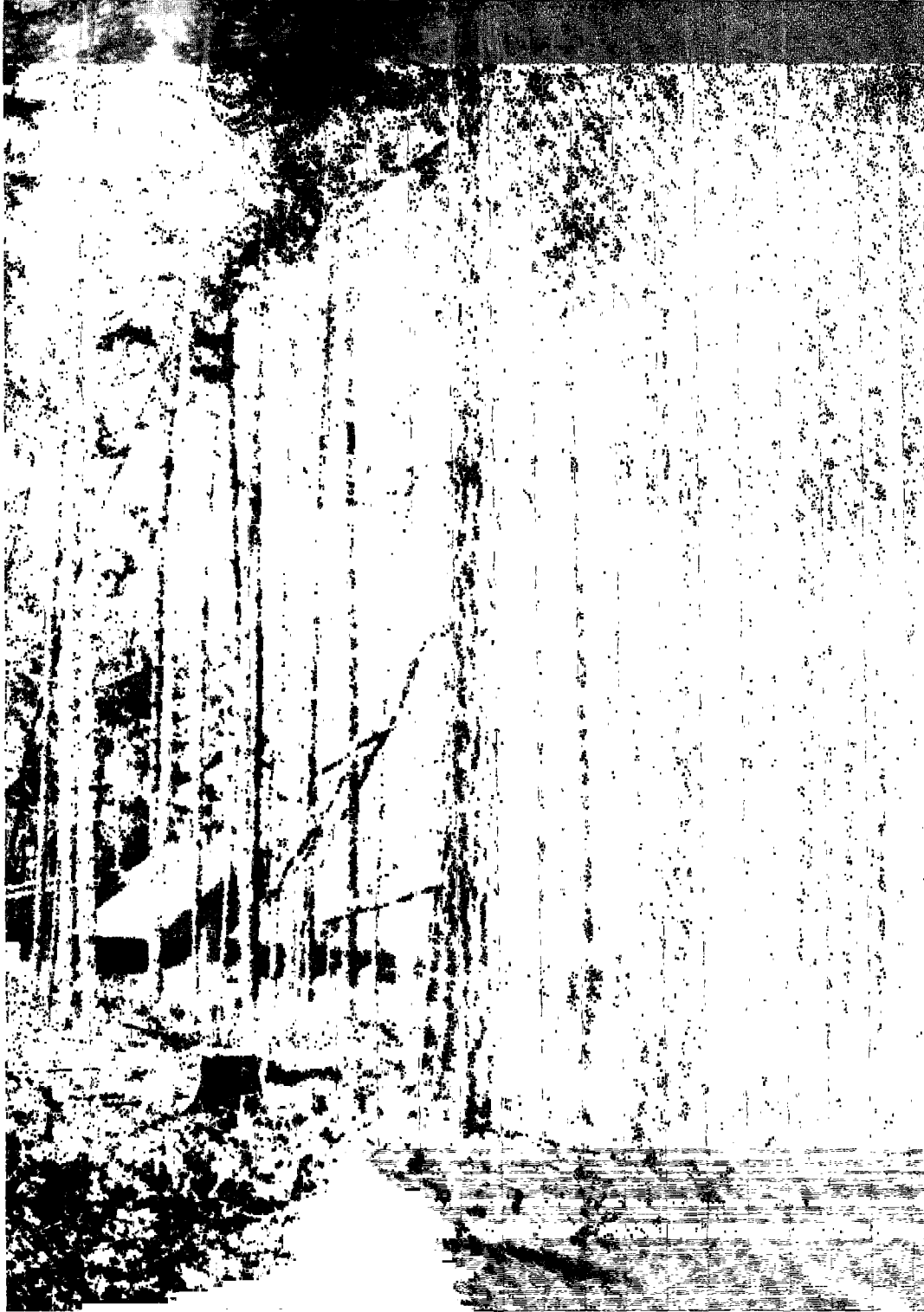
6. The owner of this Christmas tree farm in Washington was given technical advice on how to grow the trees in compact form.

GAO Photographs

Ornamental and shade trees--In Wake County, 52 percent of the assists involved technical advice on planting or caring for shade trees.

Conversion of forest land--In Kitsap County, 12 percent of the assists involved technical advice on selling and harvesting timber on land that was being converted or was planned for conversion to other uses. One owner received technical advice from the CFM forester in planning an access road and harvesting timber on 30 acres of forest land that was being developed for homesites. (A portion of this area is shown in photograph 7.)

Pulpwood--In Treutlen County, 7 percent of the assists involved technical advice on harvesting and marketing pulpwood. One landowner in the county received technical advice from the CFM forester on marketing pulpwood from a 100-acre clearcut harvesting operation.



7. Housing development in Washington where technical advice was given to the landowner on the harvesting of timber.

GAO Photograph

The CFM foresters also provided technical advice to landowners on land management matters affected by various property and income tax laws and on the process of collecting pine sap from trees for use in making turpentine.

Assistance provided for practices on lands which did not have the best potential for growing softwood sawtimber

From 8 to 63 percent of the assistance provided to landowners in the six counties was for softwood reforestation and timber stand improvement practices. Our comparison of this assistance with information classifying private, nonindustrial forest land as to its capability to grow timber showed that the recommended practices were often not accomplished on the most potentially productive forest land. Also some assistance was for practices on forest land which was likely to be converted to other uses.

Although this assistance may result in some increased growth of softwood timber and was beneficial to the landowners, it was not directed to forest land which offered the best opportunities for increasing the softwood sawtimber supply.

Assistance not provided for practices on the most productive lands

Differences in land factors, such as soil fertility, moisture, slope, exposure, and elevation, cause wide variations in the timber-growing potential on the Nation's 300 million acres of private, nonindustrial forest land. For instance, some forest land in the South and on the west coast can produce wood at the rate of 200 cubic feet per acre yearly compared with other forest land that can only produce from 20 to 50 cubic feet per acre yearly.

The Seaton Panel reported that land which grew less than 50 cubic feet a year not only had a low growth rate but also responded poorly to intensive timber management. In contrast, the Panel reported that land which grew 120 or more cubic feet a year not only had a higher growth rate but also responded several times better to reforestation and timber stand improvement practices.

For the counties reviewed, we obtained from the Department's Soil Conservation Service or from the State, information classifying the private, nonindustrial forest land as to its capability to grow timber. Although not standardized, the soil productivity data for five of the six counties was classified into categories ranging from low to high. For example, in Wake County a soil productivity of 105 cubic feet per acre yearly was in the high category, but land with a similar productivity in Kitsap County was in the low category. Soil productivity data for Treutlen County was not classified in a similar manner and therefore was not considered in the analysis.

In the five counties with data classified in the low to high categories, fiscal year 1973 accomplishments reported under the CFM program included reforestation and timber stand improvement practices on about 1,200 acres of private, nonindustrial forest land. Our comparison of these accomplishments with the available productivity data showed that about 800 of the 1,200 acres of reforestation and timber stand improvement accomplishments were on forest land whose potential productivity was low to medium.

The following shows, by county, the percentage of accomplishments on forest land whose potential productivity was low to medium.

<u>County</u>	<u>Reforestation</u>	<u>Timber stand improvement</u>
Pine County	47%	No accomplishments
Wake County	55%	84%
Benton County	38%	51%
Kitsap County	100%	98%
Portage County	69%	87%

Although assistance for practices on forest land with medium to low potential productivity may increase the growth of softwood timber, the States were not using information on potential productivity to identify and direct assistance to forest land which offered the best opportunities for increasing the growth of softwood sawtimber.

Assistance provided for practices on lands likely to be converted to other uses

The probability of converting forest land to other uses is another factor that should be considered in identifying land with the most potential for growing softwoods. Because it takes from 40 to 100 years for a softwood sawtimber stand to reach maturity, reforestation and timber stand improvement practices would be wasted if the forest land were converted to other uses. In this regard, the Seaton Panel reported:

"Forest lands located near urban centers, on main highways, or which are suited for recreational use will develop increasingly higher values, thus making it uneconomic and the owners unwilling to use such lands for timber growing. Any program encouraging the practice of forestry on these lands would simply result in more volume becoming unavailable for manufacture, hence from a forestry standpoint the investment would be lost."

Washington was the only State included in our review that included information in its accomplishment-reporting system as to whether the CFM program assistance had been provided on land in the urban or the forest zone. This State classifies land as being in the urban zone if the land has or will have a higher value for uses other than growing timber. We noted that about half the CFM assistance provided for increasing the growth of softwood stands in Kitsap County was for land in the urban zone.

Although assistance for practices on such land may increase the growth of softwood sawtimber and may benefit some other program objectives, such assistance is not being directed to the best opportunities for increasing softwood sawtimber supplies on private, nonindustrial forest land.

PROCEDURES FOR ADMINISTERING THE CFM PROGRAM

Under Forest Service planning, fund allocation, and reporting procedures, CFM program assistance is not specifically directed toward national objectives for increasing the production of softwood sawtimber or other program purposes. The effectiveness of the CFM

program in increasing the supply of softwood sawtimber could be improved if the Forest Service and the States took cooperative action to specifically plan and direct the program toward that purpose.

The Forest Service uses its Multiple Accomplishment Reporting System (MARS), in part, to assist it in administering the CFM program. This system provides for planning program activities and obtaining and reporting data on program accomplishments.

In planning CFM activities the Forest Service's procedures provide for annually establishing targets to be reached by the States for items, such as number of woodland owners assisted, volume of timber harvested with technical assistance, and acres of reforestation and timber stand improvement.

The Forest Service took action in October 1973 to strengthen its planning procedures by bringing State foresters into the planning process at the national level. Under the strengthened procedures, the Forest Service obtains estimates from the States on activities they plan to accomplish. This information is then aggregated into national goals.

The present Forest Service procedures, however, do not provide for establishing specific annual goals for increasing the supply of timber--softwood, hardwood, or pulpwood--on private, nonindustrial forest land or determining the amount of effort that should be directed toward each of the specific program purposes.

Further, no direction was provided to encourage States to make an active effort to concentrate their timber stand improvement and reforestation assistance on high productive land and land that can be expected to remain in the forest base to obtain the best possible benefits.

Forest Service's CFM program funds are allocated to the States on the basis of a 1951 formula developed cooperatively by the Forest Service and the National Association of State Foresters. The only factors included in the formula are the number of landowners, acres of forest land, and funds spent by the States in the CFM program. These factors do not

recognize the State's contribution toward meeting previously established goals or the State's capability to meet current goals for timber production or other specific program purposes.

Accordingly, although increased timber production is a major program purpose and the availability of softwood sawtimber is the most crucial U. S. timber supply problem, the procedures for allocating CFM program funds to the States give no priority to, and no specific amount of funds have been earmarked for, this or any other specific program purpose.

State and Forest Service personnel are required to report accomplishments through the MARS system. The Forest Service summarizes, by activity, these accomplishments on a county, State, regional, and national basis. The Forest Service reports major accomplishments to the Congress in support of its budget requests. (See p. 12 for fiscal year 1973 accomplishments.) Although this system provides some useful data, its full capabilities are not being used to efficiently and effectively administer the CFM program.

The Forest Service reporting system does not obtain enough information on timber management accomplishments. In addition to the information currently obtained, such as number of woodland owners assisted and number of acres of reforestation and timber stand improvement, data should be obtained on such matters as age of the stand, species, and site productivity for reforestation and timber stand improvement accomplishments.

This information would provide a better basis for evaluating the effectiveness of the CFM program in increasing the supply of softwood sawtimber on private, nonindustrial forest land and for assessing the effectiveness of State efforts to direct assistance to the most productive land.

FORESTRY INCENTIVES PROGRAM

The Forestry Incentives Program was initiated in fiscal year 1974 to increase timber production on private, nonindustrial forest land by sharing in the owners' reforestation and timber stand improvement costs. The legislative history for the Forestry Incentives Program

indicates that emphasis should be given to accelerating the growth of softwoods for sawtimber production. As in the case of the CFM program, no specific quantitative goals have been established for increasing the production of softwood sawtimber.

The Forest Service has developed a formula for timber production that considers both softwood and hardwood opportunities for allocating Forestry Incentives Program funds to the States. Although the formula gives more consideration to softwood opportunities in determining each State's allocation, the funds, once allocated, can be used within the States for either softwood or hardwood opportunities. In the absence of designating specific amounts for softwood production, there is no assurance that the procedures followed will adequately emphasize softwood sawtimber production.

Even if part of the funds allocated to the States had been designated for softwoods, the Forest Service's allocation procedures do not insure the distribution of funds on the basis of the best opportunities for increasing the softwood sawtimber supplies. For example, in determining the amount of funds each State was to receive for fiscal year 1974, the Forest Service considered all opportunities for increasing timber production that showed a positive rate of return on investments in timber management. Although the better opportunities carried more weight, considering all opportunities made it possible for all States to receive some Forestry Incentives Program funds.

Also, allocating Forestry Incentives Program funds in accordance with the various weighted timber production opportunities would have resulted in 11 States receiving a total of less than \$55,000 during fiscal year 1974. The allocations were adjusted, however, to reallocate to these 11 States a total of about \$300,000.

Forest Service officials said that the Secretary in consultation with the Department's National Policy Board and the National Association of State Foresters made the decision to allocate Forestry Incentives Program funds to all States. They said the decision represented the need to obtain broad congressional support for the program.

CONCLUSIONS

The effectiveness of the CFM and Forestry Incentives Programs in increasing the supply of softwood sawtimber could be increased if the Forest Service, ASCS, and the States cooperated in planning and directing the programs toward that purpose. This will require modifications in planning, fund allocation, and reporting procedures.

Because the funds that may be made available annually under the Forestry Incentives Program are sufficient to finance only a small percentage of the needed reforestation and timber stand improvement, it is especially important that the funds be directed to the best opportunities. Further, although performance in meeting timber production goals could not be considered in allocating funds for the initial year's operation of the Forestry Incentives Program, such performance, together with the capability for meeting current timber production goals, should be a primary consideration in subsequent fund allocations.

We recognize that the production of softwood sawtimber is not the only objective of the programs, but timber production is a major purpose. Because of predicted shortages of softwood sawtimber and the opportunity that exists for increasing softwood production on private, nonindustrial forest land, the Forest Service and ASCS should emphasize this purpose in administering the programs.

The practice of relying on landowner-initiated requests as the basis for providing CFM program assistance is not the best possible means for directing the program toward specific program purposes. We recognize, however, that a certain amount of time is required to respond to landowner requests for assistance that may relate to other program objectives or that do not provide the best opportunities for increasing the supply of softwood sawtimber.

For this reason there is a need to (1) establish specific program goals for increasing the supply of softwood sawtimber, (2) decide what portion of the CFM program should be devoted to this purpose, and (3) request States to initiate action to identify and offer assistance to those

landowners who have the best opportunities for growing timber. Also appropriate information on the results achieved in meeting specific program objectives should be obtained and evaluated to provide a basis for better insuring that the best possible use is made of available funds. For example, additional information on timber management, such as age of stand, species, and site productivity, would provide a better basis for evaluating reforestation and timber stand improvement accomplishments.

Funds appropriated for the cooperative forestry programs, including the recently authorized Forestry Incentives Program, have been increasing. Evaluation of results achieved in meeting specific program objectives would also provide a better basis for reporting accomplishments to the Congress for use in its consideration of budget requests.

RECOMMENDATIONS TO THE SECRETARY OF AGRICULTURE

We recommend that, to increase the effectiveness of the CFM and Forestry Incentives Programs, the Forest Service and ASCS:

- Establish specific annual goals for increasing the supply of softwood sawtimber on private, nonindustrial forest land and for the other multiple-use management purposes.
- Determine what portion of the total efforts should be directed toward each of the specific program purposes.
- Request States to develop plans for accomplishing their proportionate shares of the annual program goals.
- Request States to make special efforts to offer assistance to owners having land with the best potential for achieving program goals.

- Obtain appropriate information and evaluate the effectiveness of these programs to increase the supply of softwood sawtimber and to meet other program purposes, and report the results to the Congress.

- Base fund allocations on contributions toward meeting previously established goals and the capability to meet current goals.

CHAPTER 3

SCOPE OF REVIEW

We reviewed applicable legislation and Forest Service and State policies, procedures, and practices relating to the administration of the cooperative forestry programs. We also reviewed Forest Service and other records and reports relating to projected national timber demands and the opportunity to meet these demands by increasing the supply of timber on private, nonindustrial forest land.

We made our review at the Forest Service and ASCS's headquarters offices in Washington, D. C., at the Forest Service's regional office in the Pacific Northwest Region, and at the State and private forestry area offices for the Northeast and Southeast. Work was also done at the State forestry departments in Georgia, Minnesota, North Carolina, Oregon, Washington, and Wisconsin. About 20 percent of the Nation's private, nonindustrial forest land is found in these States. These States also were allocated about 22 percent of fiscal year 1973 Federal financing for the Forest Service-administered cooperative programs. They were allocated about 19 percent of the 1974 Forestry Incentives Program funds.

We discussed the cooperative forestry programs with Forest Service headquarters, regional, and area office officials and with State forestry department officials. Also, we discussed the purposes, objectives, and effectiveness of the cooperative forestry programs with representatives of several national timber industry and environmental associations.

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NINETY-THIRD CONGRESS
Congress of the United States
House of Representatives
 CONSERVATION AND NATURAL RESOURCES SUBCOMMITTEE
 OF THE
 COMMITTEE ON GOVERNMENT OPERATIONS
 RAYBURN HOUSE OFFICE BUILDING, ROOM B-349-C
 WASHINGTON, D.C. 20515

June 7, 1973

Mr. Elmer B. Staats
 Comptroller General of the United States
 441 G Street, N.W.
 Washington, D. C. 20548

Dear Mr. Staats:

This supplements our Subcommittee's letter of November 22, 1972, requesting that your office examine into several practices and procedures of the U.S. Forest Service and the Bureau of Land Management, concerning timber sales and mineral activities. One of the areas of particular concern to us is the adequacy, efficiency, and effectiveness of the Forest Service's program of assisting State and private cooperative forestry programs.

Recently, our Subcommittee staff discussed with your staff the scope of this portion of our November 22 request. It is our understanding that the GAO will select several programs in the various States for review to determine, among other things, the adequacy and effectiveness of these programs, whether their purposes are adequately defined, the extent to which the Forest Service is effectively administering these programs nationally, and whether all Federal funds are being spent economically and efficiently. We are particularly interested in learning what, if anything, the Forest Service is doing through these programs to encourage environmentally sound timber cutting on non-Federal lands receiving direct or indirect benefits from these programs so as to relieve the pressure on national forests for increased timber harvests.

We would appreciate the GAO providing to us a report of its findings, conclusions, and recommendations when its investigation is completed. Please keep our Subcommittee informed as to the progress of this investigation. Before finalizing your report or letter, we would appreciate your staff discussing your proposed findings, etc., with our Subcommittee staff. As has been our practice in requesting other such investigations, we also request

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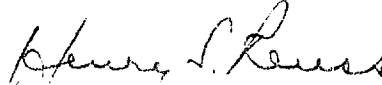
Mr. Elmer B. Staats

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that you discuss with the Service and other appropriate officials the contents of your proposed report or letter to insure adequacy of data, etc., but that you do not seek written comments thereon from the Service or others. This will be done by our Subcommittee.

Sincerely,



HENRY S. REUSS
Chairman
Conservation and Natural Resources
Subcommittee