ion of Forestry Fact Sheets



This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. http://www.leg.state.mn.us/lrl/lrl.asp

(Funding for document digitization was provided, in part, by a grant from the Minnesota Historical & Cultural Heritage Program.)

1987 Legislative Session



Division of Forestry Box 44 500 Lafayette Road St. Paul, Minnesota 55146 **EGISLATIVE REFERENCE LIBRARY 645 State Office Building Saint Paul, Minnesota 55155

TABLE OF CONTENTS

GENERAL OVERVIEW

Division of Forestry Overview

The Division of Forestry's Role

Selected Forestry Accomplishments: FY 1986

Forestry Funding

Forestry Spending: FY 88-89

Division of Forestry Program Funding

Forestry Use of General Fund Dollars

Forest Management Fund

Forest Management Fund: FY 88-89

FOREST MANAGEMENT

Forest Industry Outlook

Forest Products Economy

Commercial Wood Energy Use in Minnesota

Wood Energy in Minnesota

Forest Resource Inventory

Forestry Systems Unit

Forest Roads

Oak Wilt Control Project

Community Forestry Program

Forest Recreation Program

Fish and Wildlife Habitat Management

Minnesota Forest Resource Management Act of 1982: Accomplishments

BWCAW Forestry Intensification Program

Conservation Reserve Program (CRP)

FIRE FIGHTING

Wildfire Protection Program

FOREST MANAGEMENT GRANTS

Forest Management Grants

General Overview

DIVISION OF FORESTRY OVERVIEW

Approximately one-third of the state's total land area is forested and supports one of the largest manufacturing industries in the state--the forest products industry. The state's forests also play a major role in supporting the state's tourism industry by providing good wildlife habitat, quality forest recreation opportunities, and an aesthetically pleasing environment.

(1) THE DIVISION OF FORESTRY'S ROLE IN MANAGING THE STATE'S FOREST LANDS

The Division is responsible for protecting and managing the state's forest resources to maintain the social and economic benefits derived from these resources for the benefit of present and future generations.

(2) THE MAJOR FUNCTIONS OF THE DIVISION OF FORESTRY

- a) Multiple use management of 4.6 million acres of state forest and other state-owned land.
- b) Forest fire protection on 22.8 million acres.
- c) Forest and shade-tree management assistance to non-industrial private forest landowners, counties, schools and municipalities.
- d) Management evaluation and planning for 13.7 million acres of commercial forest lands.
- e) Assistance to wood users to improve harvesting, utilization and marketing of the timber resource.
- f) Insect and disease protection on 16 million acres of forest lands.
- g) Production of tree planting stock at state nurseries.

(3) DIVISION OF FORESTRY'S MAJOR ACCOMPLISHMENTS F.Y. 1985 - F.Y. 1986

- a) 834,800 cords of wood sold from state forest lands.
- b) 27,700 acres of state forest land reforested.
- c) 31,266 private forest landowner assistance requests serviced.
- d) 49,700,000 seedlings shipped from state forest nurseries (including container grown).
- e) 1,438,000 acres of Phase II inventory completed.
- f) 2,602 fires controlled; 51,706 acres burned.
- g) Resource utilization analyses and reports completed resulting in 200,000 cords of increased wood utilization and economic activity.

(4) <u>DIVISION OF FORESTRY EXPENDITURES 1988-89</u> (Biennium totals)

(Based on same level budget request)

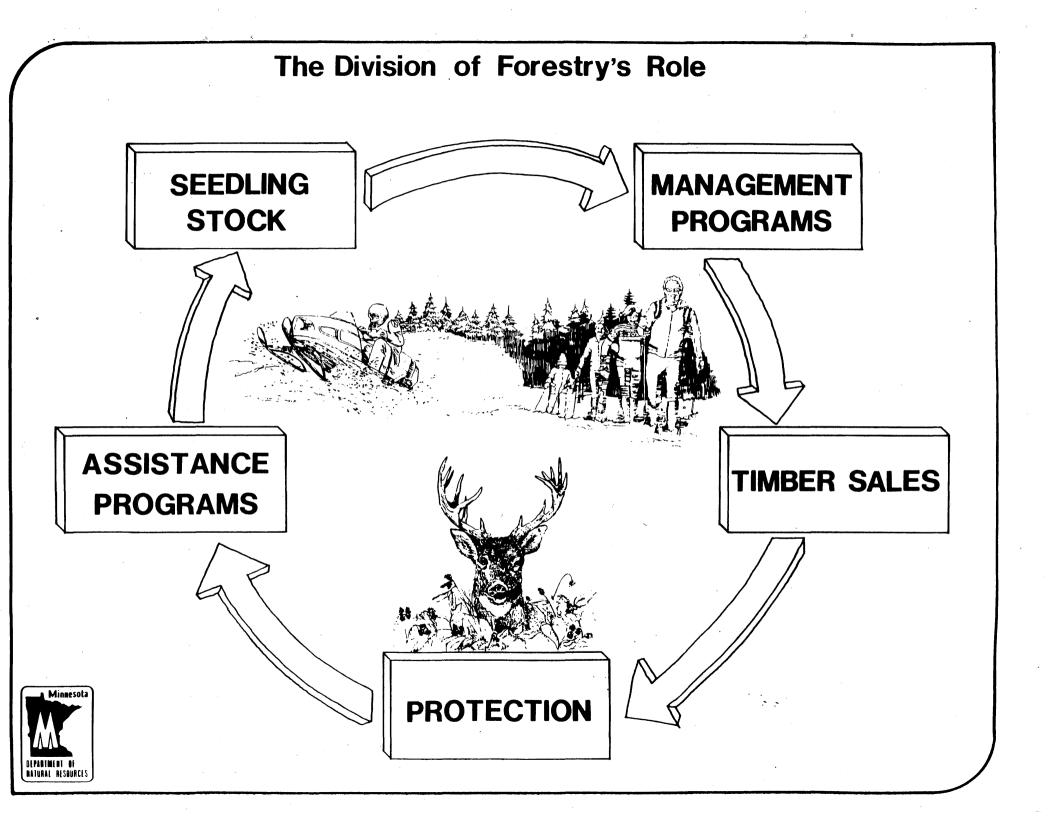
State Land Programs
County and Local Aid
Private Landowner Assistance

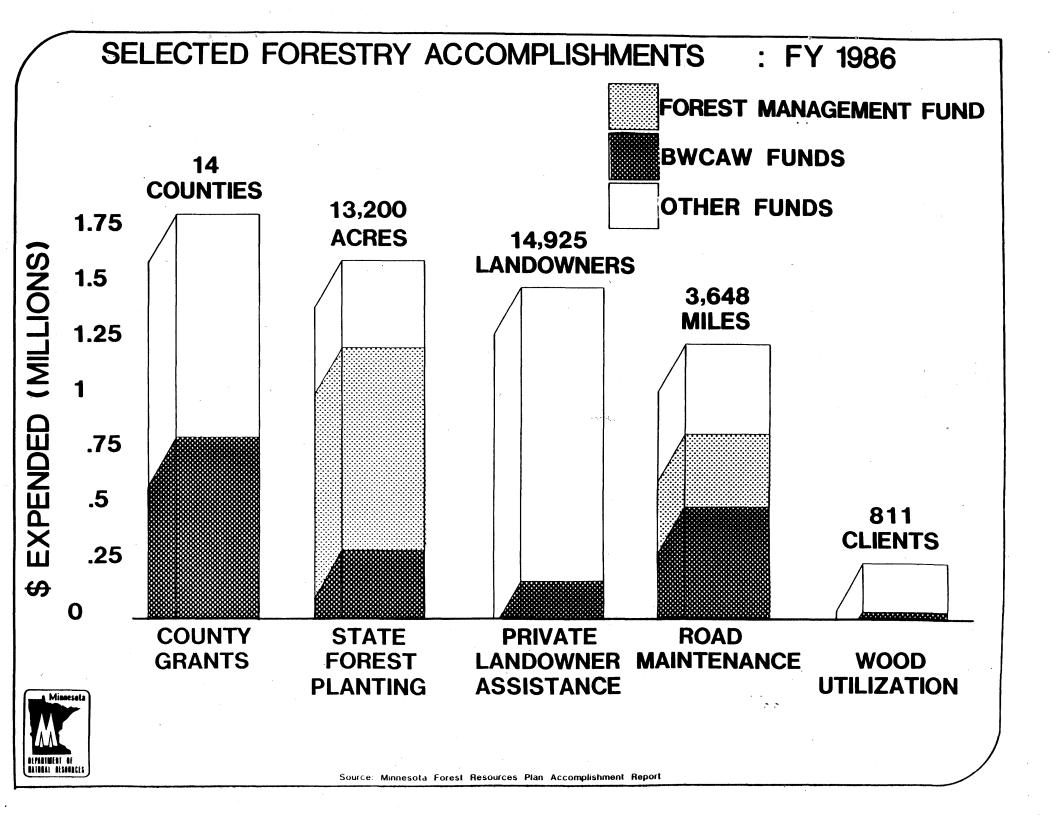
\$31.7 million (66%)
4.4 million (10%)
11.7 million (29%)
\$47.8 million

(5) <u>DIVISION OF FORESTRY FUNDING 1988-89</u> (Biennium totals)

(Based on same level budget request)

General Fund	\$26.9 million	(56%)
Receipts	12.6 million	(26%)
BWCAW Funds	6.7 million	(15%)
Federal Funds	1.6 million	(3%)
•	\$47.8 million	





FORESTRY FUNDING

FY86-87

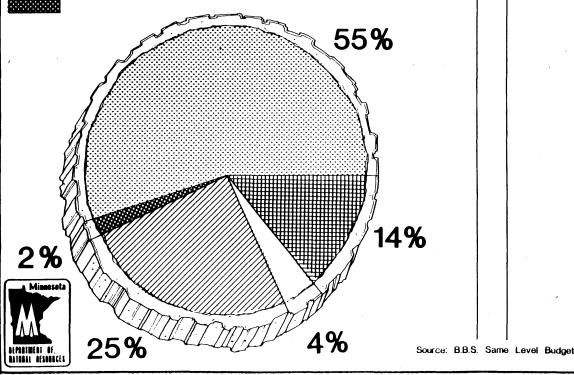
General Fund

Receipts

BWCAW Funds

Federal

Minnesota Resource Fund



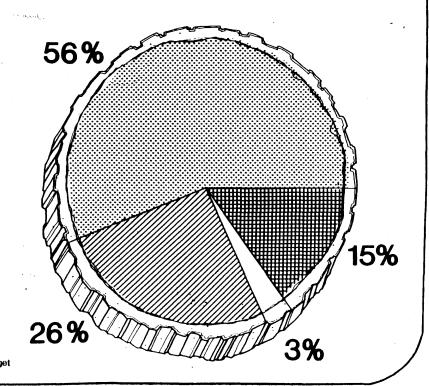
FY 88-89



Receipt



Federal



FORESTRY SPENDING FY 88-89

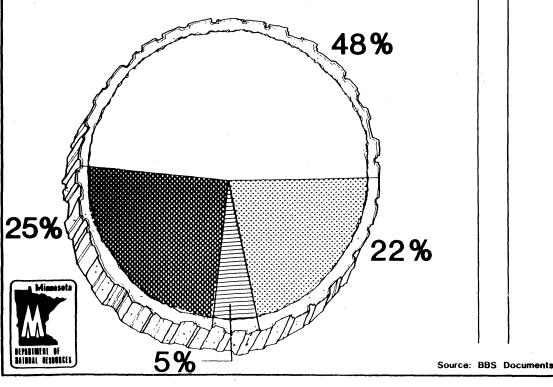
By Type of Activity

State Land Management

Protection and Administration

PFM Assistance

County and Local Aid



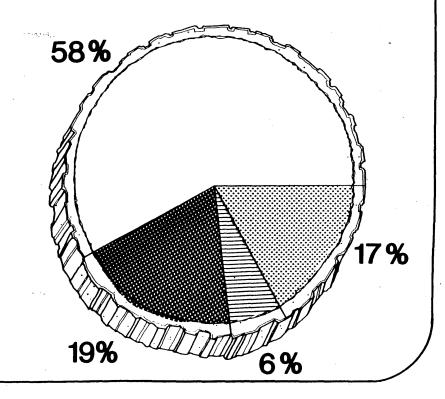
By Type of Expenditure

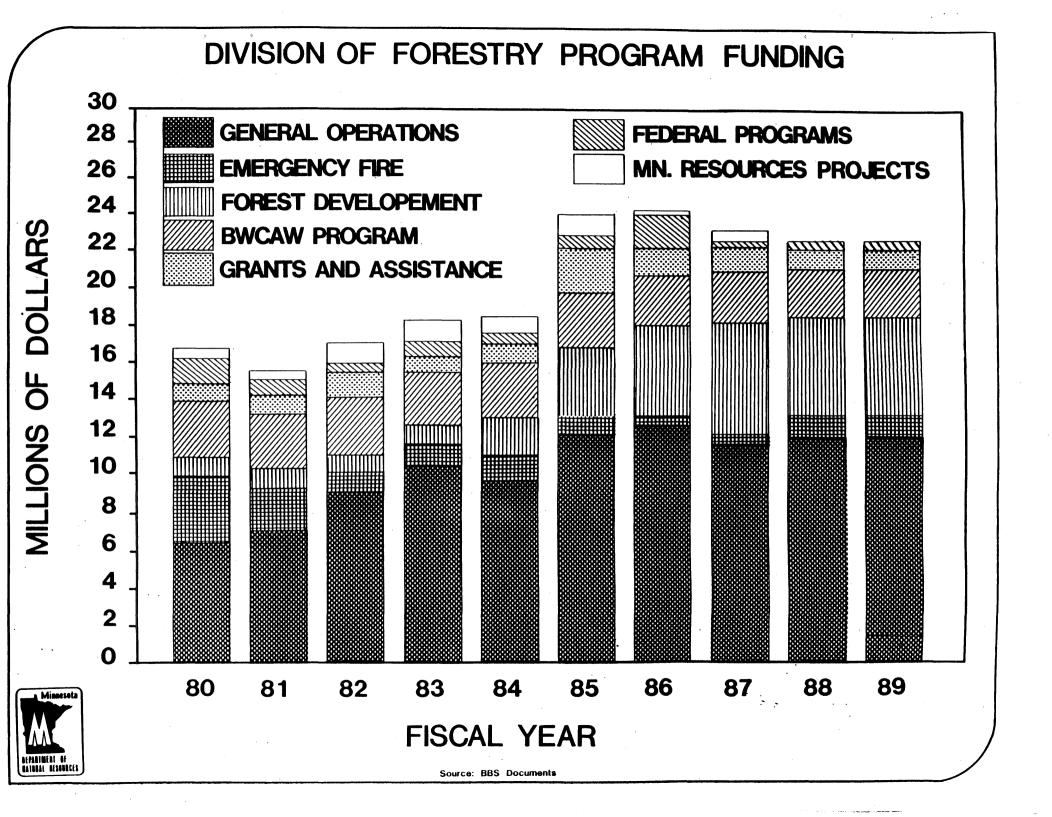
Personnel

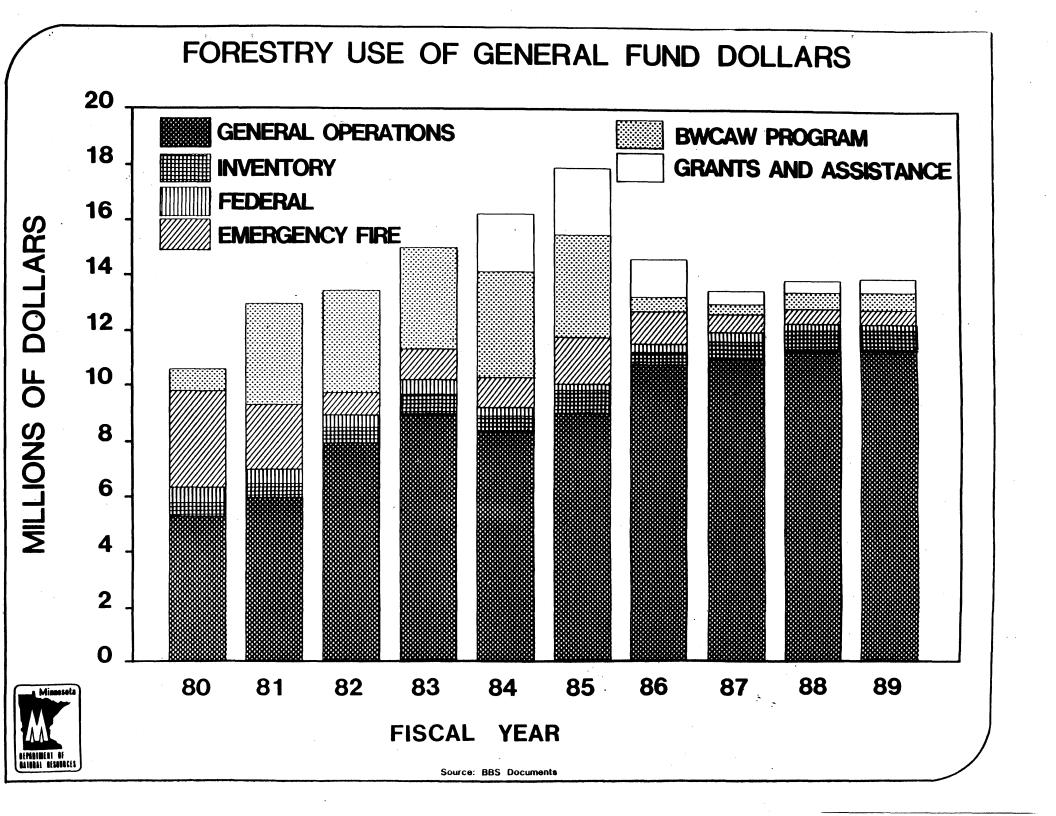
Operating Expense

Project Dollars

Grants







1987 Legislative Fact Sheet

FOREST MANAGEMENT FUND

(1) LEGAL HISTORY

a) Minnesota Constitution, Article XI, Section 11 states "School and other public lands of the state better adapted for the production of timber than for agriculture may be set apart as state school forests or other forests as the Legislature may provide. The Legislature may also provide for their management on forestry principles. The net revenue therefrom shall be used for the purposes for which the lands were granted to the state."

b) Minnesota Statutes 16A.125 and subsequent amendments:

 creates a suspense account for holding trust land receipts prior to deducting costs;

- requires the Commissioner of Finance to certify the costs incurred for forestry management:

- provides that the first \$500,000 in certified costs be transferred to the State Forest Development Account and the remainder to the Forest Management Fund.

c) An agreement between the Department of Natural Resources and the Department of Finance specifies that forestry management costs can only be certified against the following classes of trust land receipts: land use rental fees, timber sale receipts, sand and gravel receipts, and timber sale interest and penalty fees.

d) Minnesota Statutes 89.04 establishing the Forest Management Fund:

- states that money transferred from the state forest suspense account may be spent only on state forest trust fund lands;

 includes the receipts from the sale of state forest nursery products in the Forest Management Fund (state law requires the nurseries to sell their products at cost and operate on a self-sustaining basis);

- includes in the Forest Management Fund, the 50% of the receipts to the State Forest Fund (acquired state lands account) which

are not refunded to the counties;

- limits the uses of the fund to: reforestation, forest road improvements, equipment and training needed for the prevention and suppression of forest fires, and forest pest prevention and control.

(2) INVESTMENT ON STATE LANDS

Prior to the establishment of the Forest Management Fund, the Division of Forestry conducted a large-scale timber sales program on state lands, but had only \$500,000 per year to regenerate the cutover lands. By the late 1970's this level of funding had become inadequate to pay for reforestation, resulting in a backlog of deforested areas. The effects were most obvious on trust fund lands outside state forest boundaries and on acquired state lands. The Forest Management Fund was created as a means of currecting the "timber mining" which had taken place on these lands. It provides the Division of Forestry with a source of revenue to insure a reliable forest resource for the needs of future generations.

(3) GENERAL FUND OFFSET

a) An offset is an accounting technique used to cover costs of one account with revenues from another account.

b) The Forest Management Fund covers costs of managing school trust

lands both inside and outside state forest boundaries.

c) The General Fund Offset in the Forest Management Fund expenditures each year (currently \$417,100 per year) is used to reduce the General Fund expenditures of the Division of Forestry for managing trust lands outside state forest boundaries.

d) Costs incurred managing school trust lands which aren't covered by revenues must be covered by the General Fund. The offset reduces

the General Fund subsidy to the Permanent School Fund.

(4) IMPACT OF FOREST MANAGEMENT FUND ON PERMANENT SCHOOL FUND

a) By the end of the 1987-89 biennium, some 8.4 million dollars of trust land receipts will have been deposited in the Forest Management Fund.

b) By law, only the interest earned by the Permanent School Trust can be spent for educational purposes. A reduction in principle of \$8.4

million results in loss of approximately \$756,000 in 1990.

) A loss of \$756,000 (or \$1.06 per pupil unit) amounts fo 4/100 of 1

percent of the current (1987) State School Aid budget.

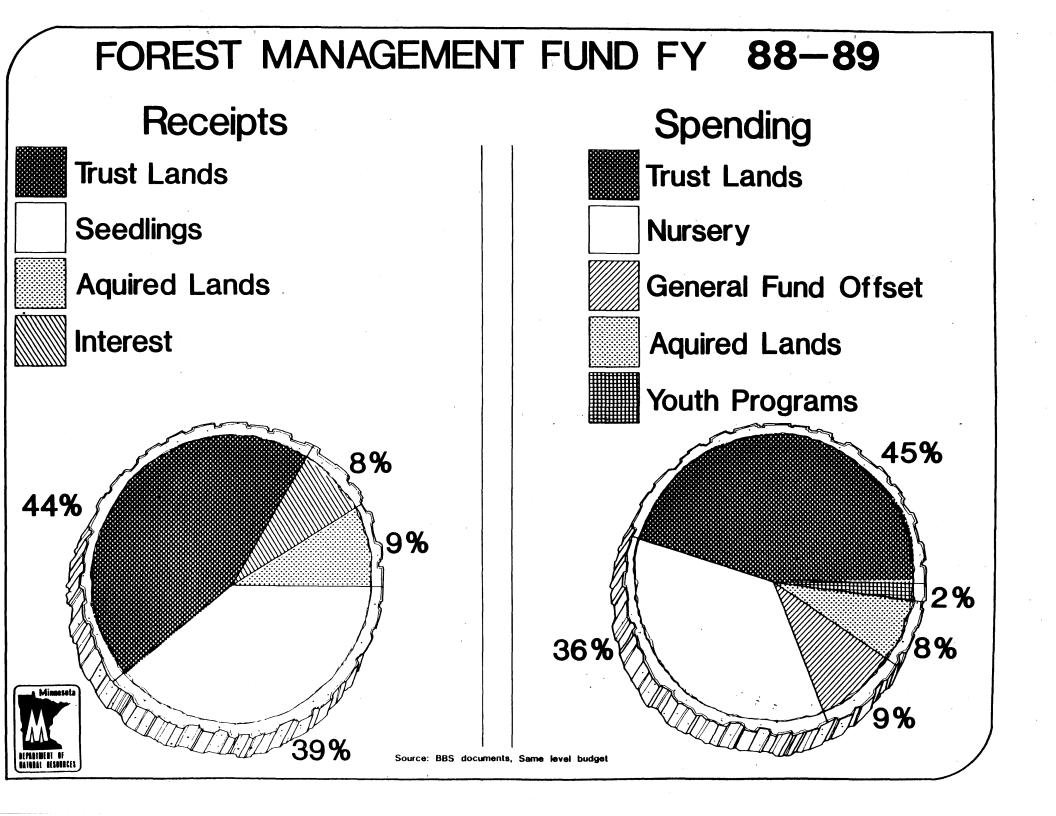
d) Assuming the Legislature appropriates to education the general funds freed by the Forest Management Fund's General Fund Offset, there will be less than a 2/100 of 1 percent impact on the state's education funding.

(5)	FINANCIAL STATUS	Actual FY 1986	Est. FY 1987	Est. FY 1988	Est. FY 1989
	Receipts (in thousands):				
	Trust land receipts	\$2,358.7	\$2,070.0	\$1,778.9	\$1,839.8
	Acquired land receipts	385.8	401.6	373.2	386.4
	Nursery sale receipts	1,601.9	1,600.0	1,600.0	1,600.0
	Interest	327.0	330.0	330.0	330.0
		\$4,673.4	\$4,401.6	54,082.1	\$4,156.2
	Expenses (in thousands):	,,,,,,,	* ' • '	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Trust land expenditures	\$1,497.2	\$2,212.8	\$2,212.8	\$2,212.8
	Acquired land expenditures	258.5	330.5	330.5	330.5
	Nursery expenditures	1,802.7	1,800.0	1.800.0	1,800.0
	Youth Programs expenditures	85.0	85.0	85.0	85.0
	General Fund offset	393.5	417.1	417.1	417.1
		\$4,036.9	\$4,845.4	\$4,845.4	\$4,845.4
	Balance Forward (in thousands):		.,	* . ,	
	Trust land account	\$1,978.7	\$1,658.8	\$1,047.8	\$ 477.7
	Acquired land account	215.8	241.9	239.7	250.5
	Nursery account	579.6	429.6	279.6	129.6
	nar serigi assessing	\$2,774.1	\$2,330.3	\$1,567.1	\$ 857.8

Notes: a) much of the interest earned by the fund is earned on nursery and trust dollar deposits and must be expended for those purposes.

b) acquired land receipts, besides paying for Youth Programs, are the only source of funds for forest management activities on

1,985,500 acres of non-trust lands.



Forest Management

FOREST INDUSTRY OUTLOOK

(1) MINNESOTA FOREST RESOURCES PLAN STRATEGY STATEMENT

Promote wood products industry expansion and new industrial development by ensuring the availability of an adequate supply of raw material.

The forest products industry in Minnesota provides jobs for more than 52,000 people. Each of these jobs, in turn, provides employment for another 2.36 people in related industries.

(2) RECENT WOOD INDUSTRY GROWTH IN MINNESOTA

COMPANY	LOCATION	TYPE OF DE	VELOPMENT	INVESTMENT	COMPLETION DATE	NEW JOBS	ADDITIONAL ANNUAL WOOD USE
Louisiana Pacific	Two Harbors	New Plant	(waferboard)	\$16.5 million	1985	100	60,000 cords
Hill Wood Products	Cook	•	(to produce for Mintac)	\$1.6 million	1986	14,	20,000 cords
International Bildrite	International Falls	New Plant board)	(sheathing	\$10 million	1987	75	60,000 cords
Lakewood Industries	Hibbing	New Plant	(chopsticks)	\$5.4 million	1986	76	10,000 cords
Lake Superior Paper Industries	Duluth	New Plant	(paper mill)	\$300 million	1987	293	230,000 cords
Swedehomes	Pine City	New Plant	(prefab houses)	\$.8 million	1986	50	n/a

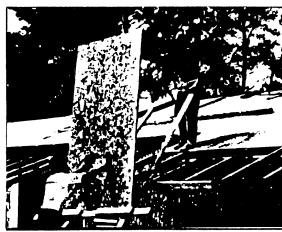
(3) DIVISION OF FORESTRY ROLE IN FOREST PRODUCTS INDUSTRIAL DEVELOPMENT

- a) Manage forest resources to ensure continued availability of raw material.
- b) Maintain an accurate and up-to-date forest resource inventory.
- c) Identify and promote wood-based industrial development opportunities.
- d) Work cooperatively with other agencies and organizations in promoting wood-based industrial development.

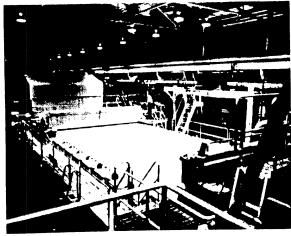
(4) REASONS TO EXPECT FUTURE GROWTH OF MINNESOTA'S FOREST PRODUCTS INDUSTRY

- a) Minnesota is currently producing an annual surplus of 2 million cords of commercial quality wood.
- b) Current industry interest points to the good possibility of at least one new waferboard mill and one major paper mill expansion in 1987.
- c) Minnesota's \$160 million cabinet industry is a national distributor of quality hardwood cabinets. There is currently interest in expansion within this industry.
- d) The Division of Forestry and other agencies cooperate in an active forest products industrial development program.

Forest Products Economy

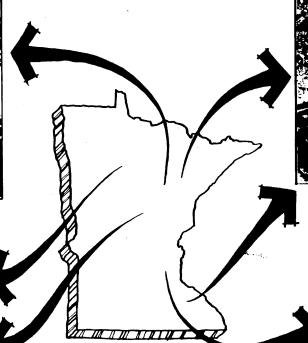


Waferboard



Paper





Other Businesses:

LUMBER
SAW MILLS
PARTICLE BOARD
FURNITURE
SPECIALTY WOOD PRODUCTS
RECYCLING



Logging



Publishing / Printing

SOURCES: Photos courtesy of Blandin (waferboard), Potlatch (paper), and West Publishing (publishing).

COMMERCIAL WOOD ENERGY USE IN MINNESOTA

(1) MINNESOTA FOREST RESOURCES PLAN PROGRAM DIRECTION STATEMENT

Interest in alternative energy has peaked and stabilized. The current needs are to identify wood resources available for commercial energy, work cooperatively with other agencies in wood energy promotion, and provide existing and potential commercial wood energy users with fuel resource and market information.

(2) DNR ROLE IN WOOD ENERGY DEVELOPMENT

Set a precedent in the use of wood energy. The DNR currently has 8 wood energy installations.

(3) DIVISION OF FORESTRY ROLE IN WOOD ENERGY DEVELOPMENT

a) Maintain information on current status of wood energy resources.

b) Update and publish wood residue and resource information to assure potential wood energy users that wood resources are available.

c) Make wood available to the market through state timber sales program.

(4) COMMERCIAL USE OF WOOD ENERGY IN 1986

a) Current commercial scale wood energy installations:

Schools = 70
Government and Public Organizations = 30
Forest Products Industry = 35
Private Businesses and Organizations = 54
TOTAL = 189

b) According to the Fiber Fuels Institute, Minnesota is a national leader in the use of wood for commercial energy.

(5) POTENTIAL FOR COMMERCIAL WOOD ENERGY USE IN MINNESOTA

a) Only 38% of the wood available for commercial energy use is now being used.

b) Current low oil prices have slowed the growth of commercial wood energy use. In the long run, however, fiber fuel energy will compete favorably with non-renewable energy.

(6) ECONOMIC IMPACT OF COMMERCIAL WOOD ENERGY USE (Source: Fiber Fuels Institute)

a) \$.80 out of every \$1 spent on fossil fuel leaves Minnesota.

b) Every \$1 spent on wood fuel creates \$2.40 of economic activity in Minnesota.

c) \$1 spent on wood fuel creates 10 times as much economic activity in Minnesota as \$1 spent on fossil fuel.

WOOD ENERGY IN MINNESOTA

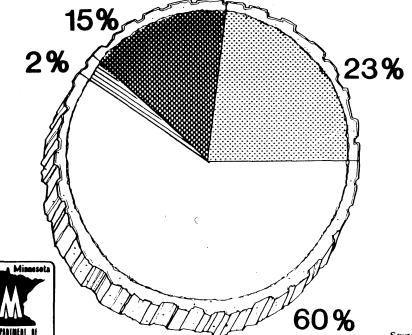
Wood Fuel Use

Unused

Residential

Industrial

Public and Commercial



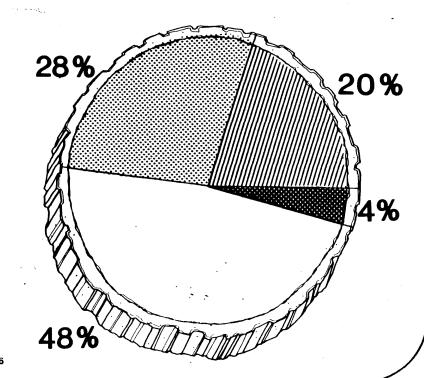
Wood Fuel Available

Other Forest Fiber

Logging Residue

Limited Value Timber

Industrial Residue



Source: U & M Specialists, 1986

FOREST RESOURCE INVENTORY

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

To monitor and evaluate Minnesota's renewable forest resources to enable increased productive use of these resources for state economic development.

(2) WHAT DOES THE FOREST RESOURCE ASSESSMENT PROGRAM INCLUDE?

Remote sensing, field survey and data processing and analysis efforts in the maintenance of two critical data bases for a variety of users: Forest Inventory Analysis - FIA (formerly called Phase I) and the Cooperative Stand Assessment - CSA (formerly called Phase II).

(3) WHO USES THE FOREST RESOURCE DATA?

- a) Planners and decision makers.
- b) Field managers foresters, wildlifers, and recreation specialists.
- c) Environmentalists.
- d) Industry.
- e) Economic development staff.
- f) Private consultants.
- g) Researchers.
- h) Utilization and marketing staff.

(4) WHAT CAN THE INVENTORY INFORMATION BE USED FOR?

- a) To determine resource availability and identify surpluses or shortages of different tree species.
- b) To develop local growth models and make long-term projections about the characteristics of the state's forest resources.
- c) To identify forest quality problems due to insect, disease and environmental agents.
- d) To moritor overall environmental quality such as acid deposition.
- e) To develop statewide wildlife and recreational perspectives.
- f) To determine feasibility of new or expansion of existing wood based industries.
- g) To provide information to other DNR divisions, agencies, and counties for resource management and economic development purposes.
- h) To guide the management strategies and operations on DNR-administered lands.

(5) WHAT IS THE CURRENT OPPORTUNITY?

To increase Minnesota's competitive edge in promotion and expansion of the state's economy in the forest products sector by providing up-to-date reliable information on timber resources.

(6) WHAT IS THE FOREST INVENTORY ANALYSIS (FIA)?

It is a forest survey system that collects data at ten year intervals on all ownerships from permanent plots located throughout the state. It provides a statistically reliable estimate of the extent, condition, volume, growth and depletion of the state's forest resources. State participation in the Forest Inventory Analysis improves the accuracy of Minnesota information, gives us input on data use and reporting, and provides timely growth data and photography for updating our cooperative stand assessment data base.

(7) WHY IS THE FOREST INVENTORY ANALYSIS RESURVEY IMPORTANT TO MINNESOTA?

The 1977 FIA survey resulted in over \$500 million of primary industrial expansion in the state. Additional industrial expansion of \$1 billion is currently under construction or being planned. To maintain Minnesota's competitive edge for further economic development requires current information detailing Minnesota's forest resources.

Forest resource information on all ownerships is necessary to fulfill the legislative mandate to manage the forest resource for multiple uses. Up-to-date information is needed to develop sound policies and programs to attract and support industry, add jobs, improve fish and wildlife habitat, and promote statewide recreational opportunities for the people of Minnesota.

(8) WHY A \$200,000 A YEAR CHANGE LEVEL REQUEST?

To restore funding to the original 1985 request and allow the department to complete the survey in a timely fashion with appropriate quality control. Actual field work would be accomplished through contracts with private vendors and potentially provide jobs in northern Minnesota.

FORESTRY SYSTEMS UNIT

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

Coordinate, provide direction and be responsible for the processing of the Division of Forestry's information.

(2) FORESTRY SYSTEMS UNIT ACTIVITIES

- Maintain 42 personal computers for field and St. Paul use and 1 minicomputer for statewide reporting and data capture (TI-990).
- Provided technical support and assistance for many programs developed for local forestry applications.
- Developed and maintained Division-wide systems including:

(3) FORESTRY SYSTEM MODULES

<u>Timber Sales System</u> - Tracks the sale and harvest of wood from state lands. These sales result in annual income to the state of over \$3,000,000. Information is used by program administrators, resource managers, and forest products firms.

Nursery Tree Order System - Records data on the millions of seedlings that are shipped annually from 2 state forest tree nurseries. This system provides information on the status of any order and generates order acknowledgments, shipping notices, and shipping tags.

<u>Staff Training and Experience System</u> - Maintains data on 500 Division of Forestry staff member's training and experience. This information is used to support personnel development efforts and plan for future training.

Message Sending System - Sends text messages to all Forestry offices that have computers to promote communications on all Forestry activities (e.g., 300-400 messages are sent per week during critical fire periods).

<u>Data Collecting System</u> - Collects data from the various systems and locations within Forestry and stores the data in a central data base on the St. Paul minicomputer for reporting and analysis.

Fire Status and Reporting System - Collects data on approximately 1,400 fires annually (which burn 45,000 acres). Plays a critical role in protecting 2.2 million acres of wildland by providing current information to state, federal and local cooperators.

Timber Management and Planning System - Uses forest inventory data to project future timber management alternatives for Division of Forestry lands. Identifies the Division's need for tree planting stock by describing what the composition of the forest would be in the future, based on various assumptions. Provides valuable information at the local level for timber management planning, road planning, and wildlife habitat development.

Forest Inventory System - Provides the Division with the ability to process, analyze and distribute resource data for use by industry, state and county land managers, recreation interests, the University and other agencies. The forest inventory is the foundation for the development of other integrated systems. The information has, in part, been responsible for the recent \$500 million expansion of the forest products industry.

(4) WHY CONTINUE TO DEVELOP NEW MODULES?

 The demand for accurate, quickly retrievable, electronically produced information is rapidly increasing. The current LCMR project has demonstrated the value and utility of Forestry's' Management Information System.

 To remain economically competitive in the Lake States, the ability to provide accurate and timely information must be maintained. Information provided to industry is critical for plant expansions

and location.

- As the various modules are developed and integrated, the benefits from the system as a whole will be multiplied. The transfer of information between the various subsystems will allow more comprehensive reporting with less data entry.

- Foresters rely or processed information in making critical land

management and protection decisions.

- Counties, local governments, and other agencies are dependent on the

Division's ability to provide data for their use.

 Improved forest management will be absolutely essential to support the increased use of Minnesota's forest resources. Effective computer applications will be a fundamental ingredient of good forest management.

(5) NEEDS FOR NEW OR IMPROVED SYSTEMS

- Improved forest inventory data handling, storage, retrieval and analysis system

Geographic information systems (forest inventory)

- Forest management development records
- Enhanced timber sales system
- Forest access (roads) system
- Fire systems: Dispatching

Damage appraisal Large fire accounts

Fire fighter qualifications

- Work planning and accomplishment reporting
- Forest products marketing
- Office automation
- Private forest management system
- Expanded forest nursery system

FOREST ROADS

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

Identify, develop and maintain a safe, efficient forest transportation system that provides access to protect, manage and use Minnesota's forest resources.

A well developed forest road system will facilitate the timber harvest and regeneration programs of the Division and will provide public access to recreational opportunities on state forest lands, thereby increasing job opportunities for Minnesota citizens and improving the flow of forest products and services from state forest lands.

(2) MINNESOTA'S FOREST ROAD SYSTEM

The 1982 Forest Management Act calls for the Commissioner to provide a system of forest roads and trails which provide access to state forest land and other forest lands under his authority. At present, the ongoing forest road inventory shows:

	Statewide	Region I	Region II	Region III	Region V
Total miles Existing bridges Pridges in need of repair or replacement	20 63.4 68 29	937.5 32 14	514.4 19 7	485.2 10 1	12 6.3 7 7

(3) STABLE FUNDING SOURCE NEEDED

A top priority of the Governor is Minnesota's transportation system and its effects on the state's agriculture and forest industries. The State Planning Agency's report, "Transportation Economic Barriers," recommended that the Division's 1982 estimated need of 2.2 million dollars/year be met through a stable funding source. Recent funding for the State Forest Roads Program has been:

Years	Annual Funding Level	Funding Source
1980 to 1982	470,000	BWCA & Forest Road & Bridge Betterment Bonding
1983 to 1987	1,639,800	BWCA & Forset Road & Bridge Betterment Bonding Capital Improvement Bonding, Trust Fund

Projected needs and costs for the State Forest Roads Program are:

	1986-89 (yearly average)	<u>Total</u>	
New Road Construction Road Reconstruction Bridge Repair or Replace. Road Maintenance	\$ 850,000 (17 mi.) 2,595,000 (90 mi.) 210,000 (6) 760,000 (1900 mi.)	\$ 3,400,000 10,380,000 840,000 3,040,000	(360 mi.) (24)
TOTAL COST	\$4,415,000	\$17,660,000	

(4) CAN FOREST ROADS BE FUNDED FROM THE FOREST MANAGEMENT FUND?

The Forest Management Fund is composed of 3 different accounts: forest nurseries, trust fund lands, and non-trust lands. The non-trust land account is the only part of the Forest Management Fund available to carry out management activities on approximately 2 million acres of non-trust lands and 1,000 miles of forest roads associated with these lands. It can provide only a small portion of the \$4,400,000 needed per year for the road program.

1987 Legislative Fact Sheet

OAK WILT CONTROL PROJECT

Oak wilt is the most serious disease of shade trees in Minnesota. Each year more oaks are killed by oak wilt than elms are killed by Dutch Elm Disease. In a 1985 statewide survey, 241 communities in 49 counties reported losses to oak wilt. Oak wilt is threatening the state's vast northern and transition zone forests, in which oak trees are a significant component.

(1) THE OAK RESOURCE DESERVES OUR CONCERN

A single large red oak can add \$10,000 to the property value of a residential lot!

Oak is the primary wood used in the manufacture of furniture, cabinets, millwork and flooring!

Red Oak accounts for 90% of the lumber used by Minnesota cabinet manufacturers.

Cabinet manufacturing is a \$160,000,000 per year industry in Minnesota.

There is a substantial foreign demand for Minnesota's oak lumber, logs and products. However, many foreign countries have placed severe restrictions on the importing of Minnesota oak due to the presence of oak wilt in our state.

(2) THE OAK WILT MANAGEMENT PROPOSAL

A statewide oak wilt management program is needed to provide information and advice to communities and rural landowners on how to deal with the disease. The proposed program consists of four main parts; detection, control, education, and management and utilization. The Division of Forestry will coordinate oak wilt management in forested areas throughout the state and will assume leadership for detection, management and utilization activities. The Minnesota Department of Agriculture will coordinate control activities in urban areas, and the Extension Service at the University of Minnesota will coordinate education activities for the program.

(3) THE DIVISION OF FORESTRY'S ROLE

The detection phase will involve three components: 1) sketch mapping (aerial visual inspection and plotting disease centers on township maps); 2) photography; and 3) interpretation of the photographs. Most of the oak wilt range immediately north of the Twin Cities (41 townships) would be photographed. In addition, sketch mapping in the remaining potential oak wilt range south of the Twin Cities will identify specific oak wilt problem areas to be photographed. This phase will cost approximately \$39,800 per year.

Management planning will include recommendations for tree removal, site preparation, reforestation, planting materials and weed control. Utilization and marketing will consist of developing markets for diseased oak and advising landowners and communities in timber sale procedures. For this effort, one full time position, one part time position and miscellaneous support services will be required at a cost of \$46,500 per year.

1987 Legislative Fact Sheet

COMMUNITY FORESTRY PROGRAM

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

To assist rural Minnesota communities with the management of their urban vegetation through a cooperative effort with other governmental agencies and private citizens, so that the physical, social and economic well being of these communities is improved.

(2) A MULTI-AGENCY INITIATIVE

This change level request is part of a comprehensive multi-agency program proposal. Minnesota Department of Agriculture and the University of Minnesota also have significant responsibilities regarding the overall proposed program. For more specific budget information and agency responsibilities, see the 1986 State Shade Tree Advisory Committee Report.

(3) WHY HAVE AN INITIATIVE LIKE THIS?

The DNR has made extensive use of its District Foresters to provide technical assistance to homeowners, to woodlot owners who own property in and near urban areas, and to community tree inspectors and municipal officials concerned with tree problems in their communities. The demand for these services greatly exceeds the capacity of the current work force, and either services must be denied or additional forces must be provided to meet public needs.

(4) HOW TO ACHIEVE THIS GOAL

The DNR is requesting that its budget be increased by \$190,000 per year to provide funds and support services for four community forestry staff specialist positions. The positions would be established to complement the efforts of the Minnesota Department of Agriculture's Shade Tree Program and the DNR's Community Forestry Program. These positions would be located in the DNR's regional offices in Bemidii, Brainerd, Grand Rapids and Rochester. Locating them in the DNR's regional offices will provide easy access to outstate communities and a regional link in the network of local shade tree programs.

Specifically, these positions will coordinate and supplement current DNR and MDA activities by:

conducting tree inventory and disease detection programs

- providing utilization and marketing assistance for community forests and diseased shade trees
- assisting in the establishment and management of school forests

participating with local planning and zoning committees

- promoting community Arbor Day programs, and providing other technical assistance necessary to assure success of the community programs.

(5) PLANNED ACCOMPLISHMENTS BY DNR

- Increase individual landowner assists from 570 per year to 735 per year.

Increase the percentage of Minnesota's 800 communities receiving community forestry assistance from the current level of 10% to a planned level of 25% per year.

FOREST RECREATION PROGRAM

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

Fulfill the outdoor recreation potential of Minnesota's state forest lands by providing developed recreation areas and opportunities for dispersed recreational activities compatible with other forest uses and consistent with user demands.

Historically, appropriations to the Division for outdoor recreation on the 4.6 million acres of forestry administered public lands have been minimal, particularly for: campgrounds, BWCA wilderness campsites, picnic areas, and maps showing public ownership open to hunting and other forms of recreation.

(2) FACILITIES MAINTAINED BY THE DIVISION OF FORESTRY

4.6 million acres open to public use

46 campgrounds

44 day use areas

1,200 miles of trail

142 water access sites

17 canoe campsites

1,900 miles of road

(3) ECONOMIC IMPACT OF RECREATION

a) \$1.00 spent on recreation by the public generates \$13.00 in total economic activity.

b) Outdoor recreation and related tourism accounts for a major share of tourism revenue in Minnesota. Expanded tourism promotional efforts have put added pressure on already minimally maintained and supervised forestry facilities.

c) Many forest recreation facilities are maintained by contract with Greenview, Inc., a program which supplies 30 jobs to needy elderly persons in outstate Minnesota.

(4) WHY IS IT IMPORTANT TO MAINTAIN DIVISION'S RECREATIONAL FACILITIES?

a) LCMR and the Resource 2000 bonding dollars have been used to rehabilitate some forest recreation facilities. These rehabilitated facilities can only be kept up to standard through increased maintenance funding.

b) Visitors expect a quality experience when they use forest recreational facilities. The only way to provide this quality is to properly maintain and supervise facilities.

c) As manager of 1/5 of the state's forested lands the Division has the capability to meet increasing demand for outdoor recreation, thereby having a considerable impact on the tourism industry.

d) The State Comprehensive Outdoor Recreation Plan is estimating a 15% increase in outdoor recreation participation between 1980-1995.

Total number of camper nights increased from 45,000 in F.Y. 1979 to 70,000 in F.Y. 1984 -- 55% increase in 5 years (statistics apply only to 34 campgrounds where fees are charged). f)

Recreational visitors travel over 5 million vehicle miles per year

on the 1,900 mile state forest road system.

WHY DOESN'T THE DIVISION USE DEDICATED FUNDS FROM CAMPER FEES TO (5) MAINTAIN THE FACILITIES?

Only collect fees at 28 of the 46 campgrounds. It is not cost a) effective to collect fees at the other facilities which have less 4 than 8 campsites each. **b**)

Fees collected are not sufficient to cover maintenance costs of all

the facilities the Division is responsible for.

c) Campers are only a small percentage of the people who use state forest land and recreational facilities.

FISH AND WILDLIFE HABITAT MANAGEMENT

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

Provide forest habitats conducive to managing and protecting a variety of fish, wildlife and native plant resources compatible with forestry and fish and wildlife management objectives, site capability and adjacent land uses.

(2) HOW IS THIS GOAL BEING ACCOMPLISHED?

- a) Integrating fish and wildlife principles into forest and land management activities.
- b) Managing forested lands to achieve wildlife objectives through forestry practices wherever possible.
- c) Implementating practices recommended in the Department's "Forestry/Wildlife Habitat Management Guidelines."

(3) HOW PLANNED FOREST MANAGEMENT CAN BENEFIT WILDLIFE AND CREATE QUALITY WILDLIFE HABITAT

- a) Increasing food supply from new regrowth and maintaining food plots.
- b) Retaining shelter by reserving areas from harvest.
- c) Creating openings and edges.
- d) Perpetuating key forest stands and associated plant species in adequate quantity for target wildlife species.
- e) Protecting and/or enhancing wetlands.

(4) HOW ARE MAXIMUM WILDLIFE BENEFITS ACHIEVED?

- a) Recycling forested types by non-commercial means when demand for fiber is not sufficient to secure harvest before deterioration of stand and unwanted natural forest conversion takes place.
- b) Favoring harvest of several small tracts rather than one large one to maximize edge effect and more evenly distribute the newly created habitat.
- c) Designing timber sales to create the proper mix and distribution of timber age classes to provide maximum wildlife habitat.
- d) Maintaining early successional vegetation by prescribed burning favored by species like sharptail grouse.

(5) GOOD WILDLIFE HABITAT PROMOTES TOURISM

60% of the 550,000 licensed small and big game hunters use state lands. Licensed hunters spend an estimated \$212,000,000 annually in Minnesota.

MINNESOTA FOREST RESOURCE MANAGEMENT ACT OF 1982: ACCOMPLISHMENTS

- (1) MINNESOTA FOREST RESOURCES PLAN (MFRP)
 The MFRP was completed in 1983 and is being used to guide the operations of the Division of Forestry. It contains base-level information on the state's forest resources and program direction for the DNR Division of Forestry. As required by the Forest Management Act, an MFRP program update will be completed by spring, 1987.
- (2) AREA FOREST RESOURCE PLANS
 The Moose Lake Administrative Area Plan was completed in 1985. Plans for the Orr and Park Rapids Areas are in draft form and will undergo public review this winter. Plans for the Cambridge, Lewiston, Baudette and Littlefork Areas also are being developed and will be completed in F.Y. 1988. These will be 10-year plans which guide the day-to-day operations of the areas.
- (3) STATE FOREST BOUNDARY REALIGNMENT PLAN
 The state forest boundary realignment plan was completed in 1984 and submitted to the Legislature. The plan sets out criteria for considering state forest designations. State forest boundary adjustment proposals will be submitted to the Legislature following completion of each area plan.
- (4) ADMINISTRATIVE REALIGNMENT PLAN
 The administrative realignment plan was completed in 1983. It has been used to make changes to the organization which have improved the Division's efficiency and effectiveness.
- The State Forest Road Plan was completed in 1982 as part of the MFRP. It provides a good "first-cut" operating plan for road development needs. Individual area plans further refine the estimated forest road needs for each administrative area.
- (6) NURSERY AND TREE IMPROVEMENT PLAN
 The Nursery and Tree Improvement Plan was completed in 1983, has been implemented, and is presently being updated.
- (7) FOREST MANAGEMENT FUND
 The reforestation effort for F.Y. 86 directly attributable to this fund was 6,950 acres of the total 13,200 acres of artificial regeneration. In addition to funding forest management activities, this fund provides \$85,000 per year in support of the Youth Conservation Program.
- (8) FORESTRY EDUCATION
 A continuing education plan for state foresters was completed in 1983.
 The Division's program is being implemented. The Society of American Foresters will coordinate the continuing needs assessment. University of Minnesota Extension Service foresters are playing a greater role in meeting forestry educational needs.

BWCAW FORESTRY INTENSIFICATION PROGRAM

(1) PROGRAM HISTORY

Authorized by the U.S. Congress in PL 95-495 Boundary Waters Canoe Area Wilderness (BWCAW) Act of 1978. Provides \$3,000,000 per year in federal funds from 1980 through 1990 (11 years). Requires a 20% (\$750,000 per year) State matching fund appropriation. The program's purpose is to reduce the impact of timberland withdrawals caused by the designation of the BWCA as a wilderness area. The program is intended to intensify softwood regeneration and hardwood utilization on state, county and private lands outside the wilderness area.

(2) ACCOMPLISHMENTS AND TARGETS

Type of Activity	Accomplished FY 80 - 86	Planned FY 87 - 89	
State Forest Development	Reforestation	83,181 acres	56,000 acres
	Stand Improvement	54,566 acres	32,000 acres
State Forest Roads	Maintenance	4,494 miles	2,400 miles
	Construction	47 miles	8 miles
	Bridge Rehab.	14	4
State Forest Nurseries	Seedlings Shipped	146,090,000	96,000,000
County Forest Management	Reforestation	33,958 acres	20,000 acres
	Stand Improvement	5,904 acres	2,000 acres
	Road Reconstruct.	384 miles	160 miles
Private Forest Management	Reforestation	9,069 acres	6,000 acres
	Stand Improvement	2,002 acres	800 acres
	Management Plans	83,382 acres	40,000 acres

Other activities include: acceleration of Forest Inventory, marketing and utilization assistance to private individuals and firms, acceleration of the forest planning effort.

(3) IMPACT OF LOSS OF FEDERAL FUNDS

Federal monies account for 80% of the BWCAW Forestry Intensification Program budget. If federal funds for the program are lost, at least an 80% reduction in program accomplishments could be expected. This reduction would lower the Division of Forestry's overall accomplishments in various program areas by 25 to 50 percent.

More important than the loss of funding will be the loss of experienced Division personnel whose positions are now funded by the BWCAW program. Many professionals specializing in areas such as silviculture, private management assistance, planning, and economics are currently paid from BWCAW program funds. In addition, almost one quarter of the Division's full-time clerical and technician work force is currently supported solely by the BWCAW program. Without these key personnel, many of the programs and tasks undertaken by the Division will have to be severely curtailed.

CONSERVATION RESERVE PROGRAM (CRP)

(1) WHAT IS IT?

The Conservation Reserve Program is a voluntary land retirement program designed to reduce erosion by taking highly erodible cropland acres out of production and establishing permanent cover crops of grass or trees on those acres. This federal program was authorized and funded as part of the 1985 Farm Bill.

(2) WHAT ARE THE BENEFITS?

* Retire highly erodible marginal cropland from farming.

* Improve water quality by reducing sedimentation of streams.

* Increase wildlife habitat.

* Increase the mation's future supply of forest products.

* Receive a better return on investments by concentrating production of crops on the most productive lands.

* Reduce Federal expenditures for price support programs.

(3) HOW DOES IT WORK?

- a) Eligibility of land for the program is determined by the USDA Soil Conservation Service if:
 - * it is highly erodible (index greater than 3T),
 - * it was cultivated annually for at least two out of the last five years; and
 - * it is still available for crop production.
- b) Landowners make bids for annual rental payments (the minimum they will accept to retire the land) during a sign-up period. There is a \$50,000 personal payment limitation.
- c) Land accepted in the program must be protected from erosion by establishing a stand of trees or planting a permanent vegetative cover. The cover cannot be harvested or grazed during the contract period. (Congress has targeted 12.5% of the national CRP acreage for tree planting.)

(4) MINNESOTA RESULTS

Over 1.9 million acres are eligible for the program. About 2.5 percent of the acres signed up will be planted in trees. The following table summarizes the results of the first three sign-up periods in Minnesota.

1986 Sign-ups

	0f	Offered		Accepted		Tree Acres Accepted*	
	Acres	# of Farms	Acres	# of Farms	Acres	# of Farms	
Sign-up 1	275,000	3,303	79,000	1,074	2,274	159	
Sign-up 2		3,783	215,000	2,379	2,725	210	
Sign-up 3	460,000	4,669	368,000	3,854	2,475	187	
TOTAL	1,105,000	11,755	662,000	7,307	7,474	556	

*Actual acres of trees being planted is about double the sign-up, representing a switch from grasses to trees.

Of all states: MN has the leading number of farms enrolled in the program.

MN is the third highest in total number of acres accepted.
MN has the 4th highest ratio of acres signed to eligible

acres (MN has 35% of eligible acres signed-up).

(5) <u>3T or E.I. of 8?</u>

In 1987, the program will switch the erosion standard from 3T to E.I. of 8 in order to make the standard compatible with sodbuster, swampbuster, and cross compliance. T or tolerance measures the actual erosion occurring due to current cover crops or management practices. E.I. or erodibility index measures the inherent erosion potential in a given soil.

Results of this change:

- * Decrease of eligible acres in areas with heavy wind erosion.
- * Increase of eligible acres in areas with slope as a predominant factor.
- Nationally eligible acreage would double.
- * MN is one of a few states where eligible acreage would decrease.

For more information contact:

Department of Natural Resources, Division of Forestry Box 44 DNR Building, 500 Lafayette Road, St. Paul, MN 55146 (612) 296-4491

Fire Fighting

The second state of the second second

0.1. 17**96-2**011

. 54655

WILDFIRE PROTECTION PROGRAM

(1) MINNESOTA FOREST RESOURCES PLAN GOAL STATEMENT

Provide wildfire protection to the level necessary to avoid loss of life and, considering values at risk, minimize the potential for loss of property and natural resources on public and private land.

The Division provides primary suppression action on 22.8 million acres of land in the state, and is authorized to provide assistance to local officials for fire protection on an additional 22.7 million acres.

(2) LEGAL AND STATUTORY AUTHORITY

Article XJ of the State Constitution acknowledges forest fire protection and its need for funding.

Minnesota Statutes Chapter 88, sections 88.01 to 88.22 pertain to forest fires.

All but 13 counties meet the statutory provisions necessary to be considered forested and eligible for DNR assistance in wildland fire protection.

(3) WILDFIRE POTENTIAL

The DNR suppresses an average of over 1,500 wildfires which burn 60,000 acres annually.

People, either deliberately or accidentally, cause over 99% of the fires which the DNR suppresses. Fire causes include: Lightning--.6%, Campfire--1.4%, Smoking--4.9%, Debris Burning--36.1%, Arson--35.1%, Equipment--4.8%, Railroad--4.9%, Children--5.7%, and Miscellaneous--6.5%.

Because of increasing rural development, the potential for losses of life and property as a result of wildfire are greater now than in the past.

In 1976, Minnesota's Badoura Fire burned 23,000 acres and destroyed a dozen buildings in 6 hours.

Resort owners suffered \$75,000,000 in losses during the 1976 fire season.

Minnesota's 1980 Motley Fire burned 6,800 acres, destroyed over 20 structures and endangered the towns of Motley and Philbrook.

(4) COMPONENTS OF THE WILDFIRE PROTECTION PROGRAM

Division fire protection activities are separated into prevention, presuppression and suppression. Between 13 and 19% of the Division's time is spent on the wildfire protection program. Of the time spent on fire protection, 45% is spent on presuppression, 49% on suppression and 6% on prevention.

Over 65,000 burning permits are issued each year, many by the 2,300 township fire warden volunteers who participate in the wildfire protection program.

The Great Lakes Fire Compact includes Minnesota, Wisconsin and Michigan. Ontario is in the process of joining and Manitoba is expressing a strong interest.

Minnesota's interagency fire cooperative (Minnesota Incident Command System--MINICS) consists of DNR, the Chippewa National Forest, the Superior National Forest, the National Park Service, the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs.

The Division has firefighting equipment agreements with over 700 private equipment owners. In addition, the Division contracts for six helicopters.

Contracts are issued for two airtankers. The Bureau of Indian Affairs contracts for another.

(5) ASSISTANCE TO OTHERS

The Department participates in the Federal Excess Property program and has placed more than \$3,000,000 worth of property with 470 fire departments.

Under the Federal "Rural Community Fire Protection Program" \$1,536,000 has been matched by rural fire departments for various suppression improvements. Funds are distributed to over 100 fire departments each year.

Over 30 new fire departments have been started using resources from these two assistance programs.

(6) CFUNDING

An economic analysis of the DNR's fire protection program was performed between 1983 and 1985 using methods approved by the U.S. Forest Service and the Federal Office of Management and Budget. This study found that:

The most cost efficient level of fire protection would occur with a 14% increase in presuppression funding over 1982 levels. That increase should result in a 29% decrease in total costs plus losses.

If funding were reduced by 14%, expenditures and damages could increase by 62% and total acres burned could increase by 120%.

The base-level budget analysis, done by the DNR in 1986 at the request of the Department of Finance, shows that:

The 10 year average cost per acre protected is 15 cents per year: 6 cents from the General Fund and 9 cents from the Emergency Fire Fund. Average fire expenditures are \$3,600,000 per year.

The 10 year average for Emergency Fire Fund expenditures is \$2,276,000 per year. If the high year is excluded the average is \$1,500,000 per year.

An additional \$200,000 per year in Emergency Fire funds has been requested from the Legislature to pay for purchased services within the state's 30-day bill paying guidelines. This change level would bring the funding available in the Emergency Fire Fund up to \$950,000. This amount is still \$550,000 short of the average anticipated firefighting expenditure of \$1.500.000.

an area of the

Tigoresino Copression Membs each

中产50m 内内内等 中

performed
*** Service
***und shat:

e oriw wich a selection line light losses high loses

To tremper o

50

THERE MADE A

al server one.

nast and consit and nast and national and consistence of the constant of the c

Forest Management Grants

256

1038 (1) 877 (1) 1776 (2) (2) 1786 (2) 1886 (3)

The second of

1417

P

: [] *p =

(2

(2) GRANTS SUP (NIPS) LA

nenagenam

008710 (A 008044 008700

guit a H

\$ 140 A 150

The state of the s

Spired

is a second of

anders with latheringham transport over their

en de la companya de

<u>.</u>1:

FOREST MANAGEMENT GRANTS

The Division of Forestry will make available, directly or through technical guidance, over 3 million dollars in 1987 to support the management of private and county forest lands and support rural community fire protection programs! These funds are made available in the form of grants and incentives to encourage and support protection and management activities. The goal is to provide and protect a sustained flow of natural resources from all of Minnesota's forest lands.

(1) GRANTS SUPPORTING FOREST MANAGEMENT ON COUNTY ADMINISTERED LANDS

- A) Source of Funds:
 - 1) Federal BWCAW Act \$810,000 \$570,000 of this funding is in the form of cash payments for county targeted forestry projects, while the balance of the funds are used to grow seedlings for the counties at the state forest nurseries.
 - 2) Minnesota General Fund Appropriations \$250,000 Funding in the Division of Forestry's budget has been: \$2,000,000 in F.Y. 1985; \$1,250,000 in F.Y. 1986; and \$250,000 in F.Y. 1987.

(2) GRANTS SUPPORTING FOREST MANAGEMENT ON NONINDUSTRIAL PRIVATE FOREST (NIPF) LANDS

Source of Funds: State and federal funds are used to increase forest management on NIPF lands in two ways:

A) Direct Cost-Share Payments - These are made available to landowners engagingparticipating in forestry practices for soil and water conservation, wildlife and forestry purposes.

Estimated 1987 Cost-Share Payments by Program

Federal:	Estimated Amount
Agricultural Conservation Program (ACP) Forestry Incentives Program (FIP)	\$ 500,000 200,000
Conservation Reserve Program (CRP)* State:	1,000,000
Minnesota Forest Improvement Program** Reinvest in Minnesota (RIM)*	120,000 150,000
TOTAL	\$1,970,000

^{*} Represents portion of funds anticipated for use in forestry activities.

^{**} Appropriated directly out of the Division of Forestry budget.

B) Federal Technical Assistance Grants - These are funds provided to the Division of Forestry to provide technical assistance related to cost-share program implementation or other forestry projects on NIPF lands.

Estimated 1987 Federal Technical Assistance Grants

ACP	\$ 75,000
FIP	15,000
CRP	60,000
PL-566 (Water Quality Program)	17,500
Rural Conservation and Development (RC&D)	70,000
State & Private Forestry Focused Funding	30,000
TOTAL NIPF Technical Assistance Grants	\$267,500

(3) GRANTS SUPPORTING RURAL COMMUNITY FIRE PROTECTION PROGRAMS

- A) Federal Title XVI funds (estimated \$79,500 in F.Y. 1987) provide the basis for a 50/50 matching grant program aimed at providing fire suppression assistance to rural communities under 10,000 in population. Each year the program reaches approximately 110 fire departments. The average grant is \$1,000.00 which must be matched by local funds and spent on organizing, training, and/or equipping their fire department.
- B) In cooperation with the U.S. Forest Service, the Division provides basic wildland fire suppression training to approximately 100 rural fire departments each year.
- C) The Division processes approximately 145 applications each year from rural fire departments for federal excess property acquisitions. To date, \$3,000,000 of excess property has been placed with 470 fire departments throughout the state.

(4) <u>1987 TARGETS</u>

- A) County Grant Program
 - Reforestation efforts on 5,000 acres
 - Timber stand improvement activities on 1,000 acres
 - Forest road construction and maintenance on 50 miles of road
- B) Private Forest Management
 - 14,000 landowners assisted
 - Management plans prepared for 80,000 acres
 - 13,000 acres reforested
 - Timber stand improvement activities on 4,000 acres
 - Wildlife habitat improvement on 6,000 acres
- C) Rural Community Fire Protection Program
 - 79 fire departments assisted through Tital XVI grants
 - 90 fire departments trained in wildfire suppression techniques
 - 145 applications processed for Federal Excess Property Program