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Minnesota
Department
of
Natural
Resources

BIENNIAL REPORT

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STATE OF
MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

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COMMISSIONER OF NATURAL RESOURCES
 Robert L. Herbst

DEPUTY COMMISSIONER
 Clarence B. Buckman

ASSISTANT COMMISSIONER (Administrative Services)
 Joseph N. Alexander

ASSISTANT COMMISSIONER (Field Operations)
 Donald Carlson (effective 11-24-76)

ASSISTANT COMMISSIONER (Planning & Environmental Protection)
 Richard J. Myshak

DIVISIONS - STAFF DIRECTORS

ENFORCEMENT
 Earl Lhotka

FISH & WILDLIFE
 Milo Casey

FORESTRY
 Earl J. Adams

MINERALS
 Elwood F. Rafn

PARKS & RECREATION
 Don D. Davison

WATERS
 Gerald D. Seinwill

REGIONS - ADMINISTRATORS

REGION I (NORTHWEST)
 Merlyn Wesloh

REGION II (NORTHEAST)
 Milton Stenlund

REGION III (CENTRAL)
 Roger Lorenz

REGION IV (SOUTHWEST)
 Maynard Nelson

REGION V (SOUTHEAST)
 Robert Story

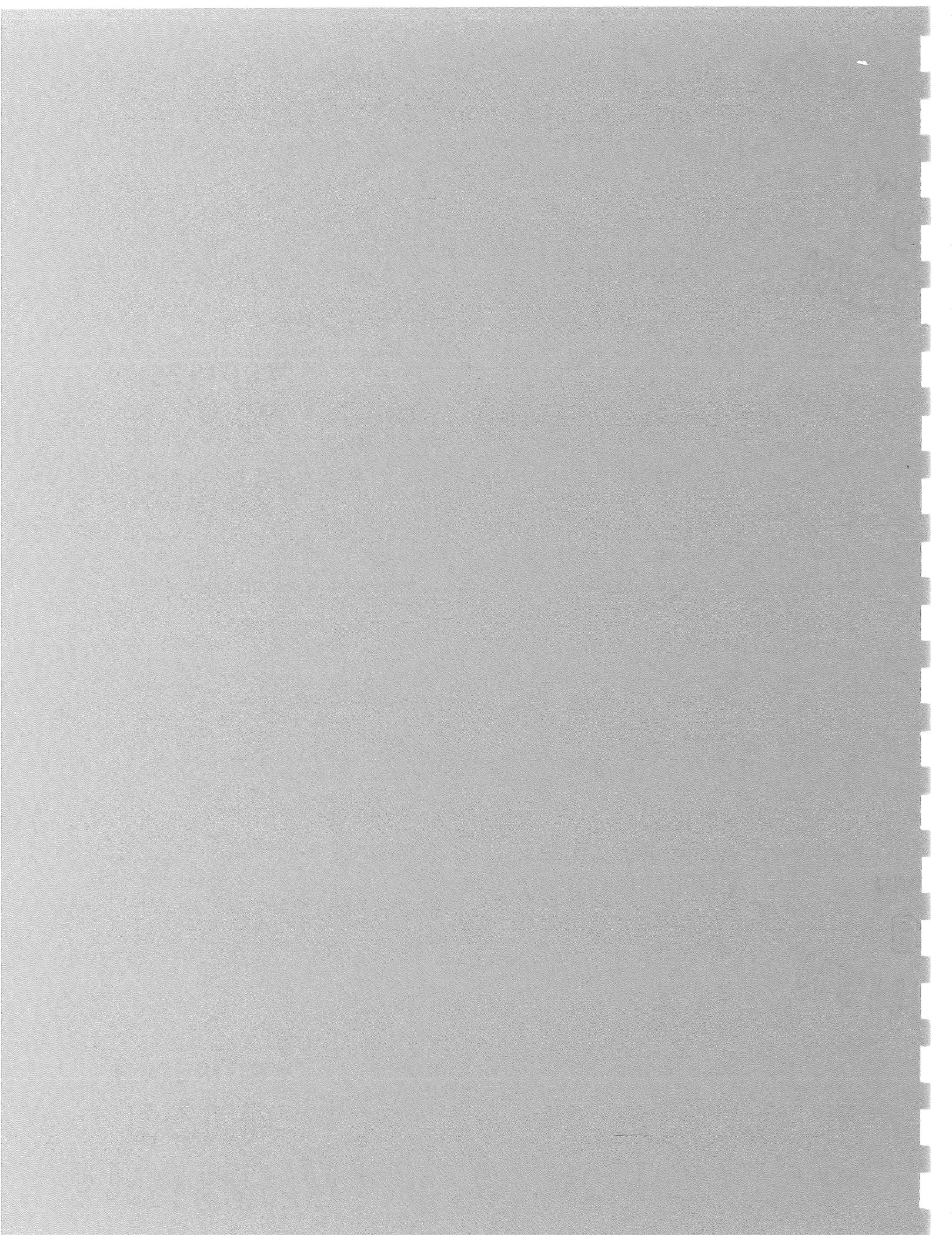
REGION VI (METRO)
 Lawrence Seymour, Acting

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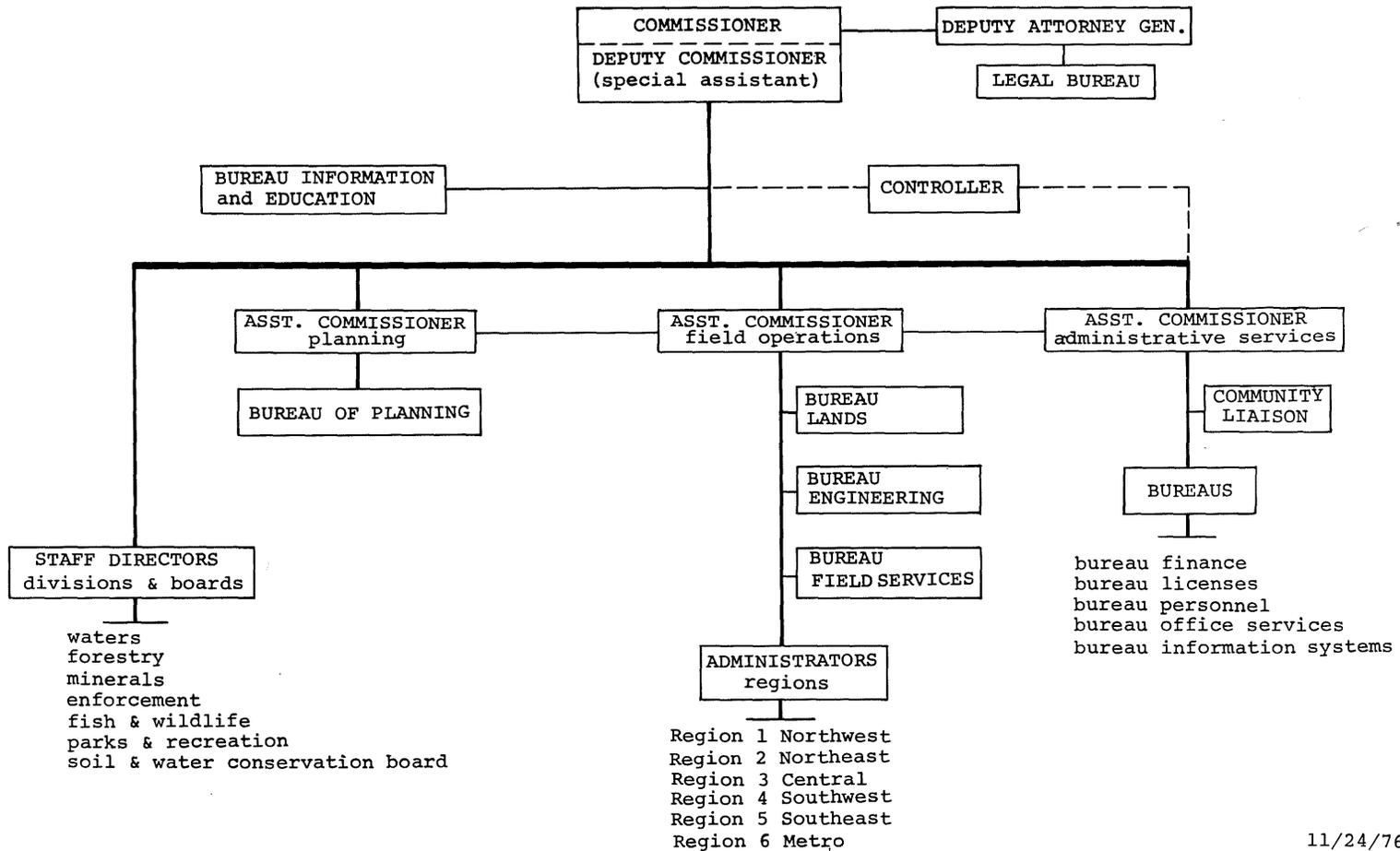
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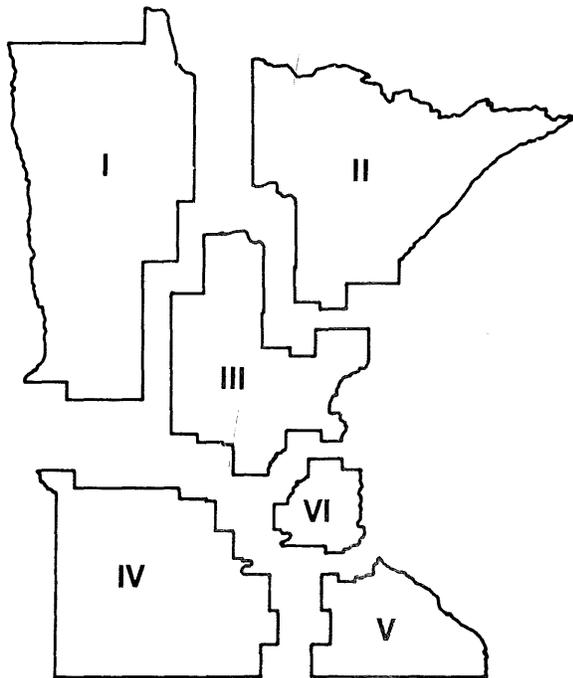


Minnesota Department of Natural Resources — Organization Chart



11/24/76

STATE OF MINNESOTA



D I R E C T O R Y

REGIONAL
ADMINISTRATORS

DNR

REGION I (NORTHWEST)

Merlyn Wesloh
Regional Administrator
Route 5, Box 41A
Bemidji, MN 56601

REGION II (NORTHEAST)

Milton Stenlund
Regional Administrator
E. Highway 2, Box 388
Grand Rapids, MN 55744

REGION III (CENTRAL)

Roger Lorenz
Regional Administrator
217 N.W. Fourth Street
Brainerd, MN 56401

REGION IV (SOUTHWEST)

Maynard Nelson
Regional Administrator
116½ No. Minnesota St.
New Ulm, MN 56073

REGION V (SOUTHEAST)

Robert Story
Regional Administrator
2300 Silver Creek Road
Rochester, MN 55901

REGION VI (METRO)

Lawrence Seymour
Regional Administrator
(Acting; effective 11-24-76)
1200 Warner Road
St. Paul, MN 55106

T A B L E O F C O N T E N T S
MINNESOTA DEPARTMENT OF NATURAL RESOURCES
BIENNIAL REPORT 1976-77

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PREFACE

Traditionally, this Department report has been based on "split" bienniums: the first year of the current biennium; the last year of the previous biennium.

Beginning with this publication, the Department has adopted a new chronological format, designed to make the reporting period more meaningful and relevant to our programs and objectives.

This report spans Fiscal Years 1976-77 — the current biennium. All subsequent Biennial Reports will be related to years corresponding to biennial budget periods. The revised format should enable the reader to obtain a clearer understanding of DNR activities, legislative action and fiscal procedures.

Fiscal Year 1975, the interim period not covered by the revised format, was a time of commitment to a most significant change in the character of the Department, the implementation of reorganization concepts. Reorganization represented a drastic departure from lines of authority which had evolved since the founding of the original "Department of Conservation" in 1931. The Minnesota State Legislature formally authorized decentralization of the Department in 1973, when five geographic regions were created. A sixth, "metro" region was authorized in 1974.

This transition period was marked by extensive work ranging from the physical development of regional headquarters, relocation and intensive training of personnel, and decentralizing of management activities.

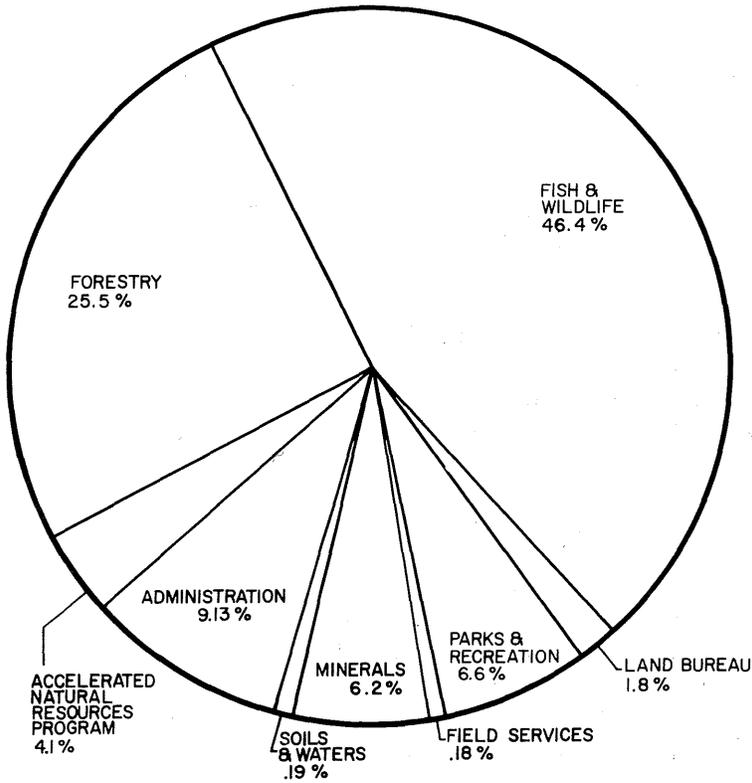
"Growing pains" were complicated by the changeover to a new accounting system. Installation of this system required considerable re-training and adjustment by and for personnel.

The logistics of reorganizational change has been a challenging experience for Department administrators, as well as personnel at all levels. Extensive progress has been made, especially in consideration of the complex issues confronting our personnel, including the Reserve Mining case and the dimensions of the fire crisis.

The following charts present a summary graphic picture of Department revenues and expenditures for fiscal year 1975.

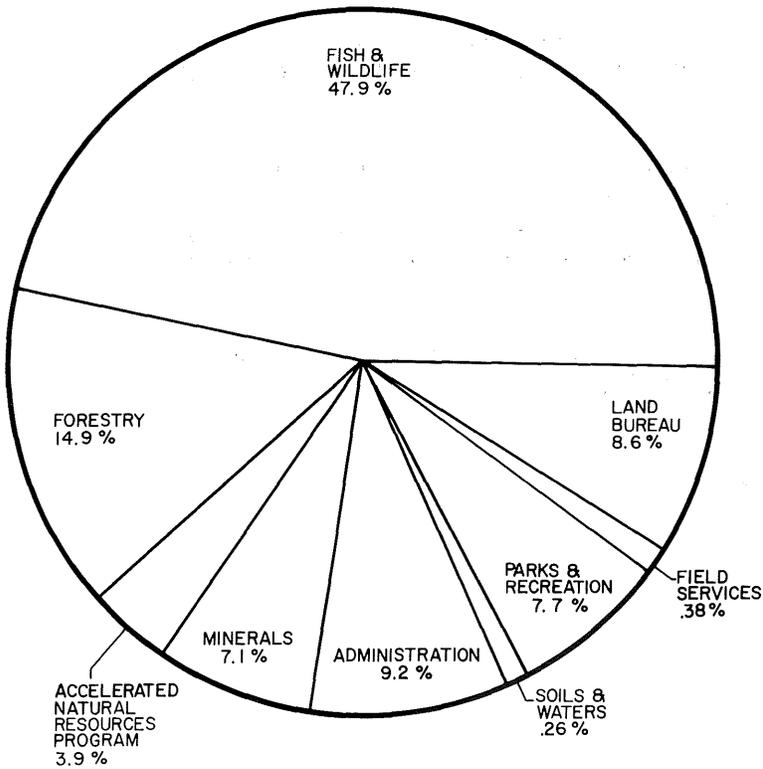
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WHERE YOUR NATURAL RESOURCE DOLLAR COMES FROM



RECEIPTS JULY 1, 1973 - JUNE 30, 1974

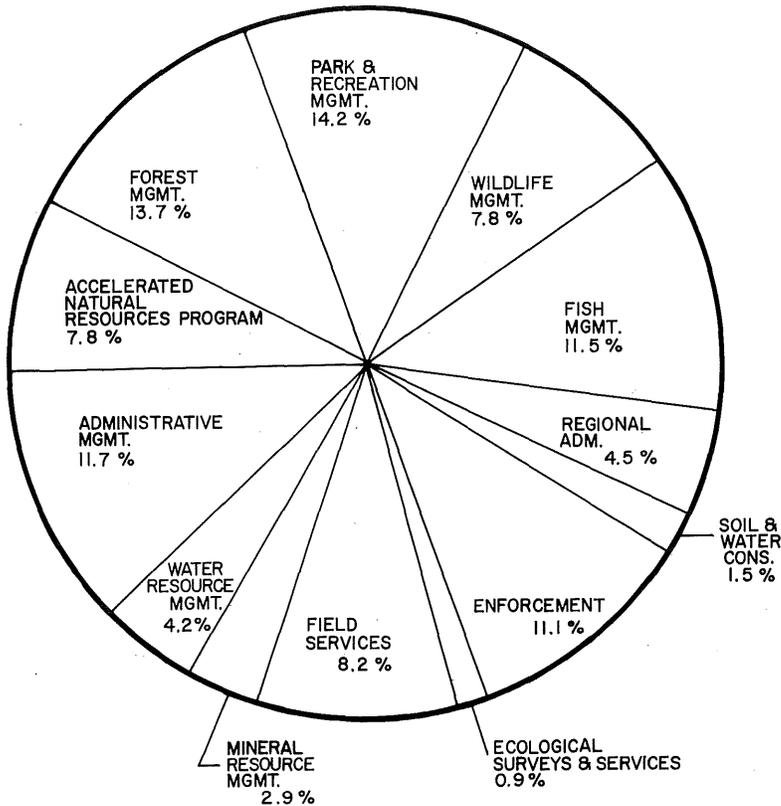
Administration	\$ 2,484,251.33
Field Services	48,452.30
Waters & Soils	52,115.00
Minerals	1,680,768.69
Land Bureau	475,544.79
Forestry	6,944,392.01
Fish & Wildlife	12,625,563.75
Parks & Recreation	1,802,573.21
Natural Resources Accounts	1,107,492.11
Total	\$27,221,153.19



RECEIPTS JULY 1, 1974 - JUNE 30, 1975

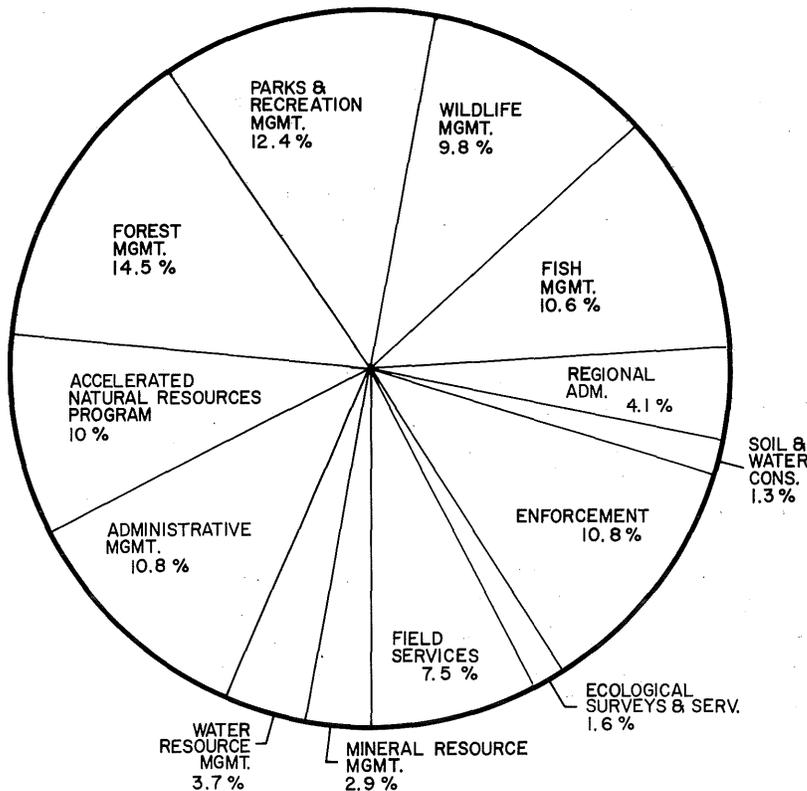
Administration	\$ 2,204,662.31
Field Services	92,170.27
Waters & Soils	62,709.00
Minerals	1,715,193.70
Land Bureau	2,065,832.97
Forestry	3,575,572.51
Fish & Wildlife	11,505,716.98
Parks & Recreation	1,845,181.26
Natural Resources Accounts	955,000.00
Total	\$24,022,039.00

WHERE YOUR NATURAL RESOURCES DOLLAR IS SPENT



EXPENDITURES JULY 1, 1973 - JUNE 30, 1974

Administrative Management	\$ 3,124,263.00
Regional Administration	1,187,908.00
Field Services	2,179,130.00
Water Resource Management	1,116,030.00
Mineral Resource Management	774,341.00
Forest Management	3,639,968.00
Fish Management	3,064,493.00
Wildlife Management	2,090,184.00
Ecological Surveys & Services	233,312.00
Parks and Recreation Management	3,770,299.00
Soil & Water Conservation Board	391,070.00
Enforcement	2,968,186.00
Natural Resource Accounts	2,075,328.00
Total	\$26,614,512.00



EXPENDITURES JULY 1, 1974 - JUNE 30, 1975

Administrative Management	\$ 3,202,229.00
Regional Administration	1,217,714.00
Field Services	2,233,511.00
Water Resource Management	1,105,636.00
Mineral Resource Management	858,421.00
Forest Management	4,287,382.00
Fish Management	3,140,968.00
Wildlife Management	2,919,204.00
Ecological Surveys & Services	465,141.00
Parks and Recreation Management	3,666,617.00
Soil & Water Conservation Board	376,576.00
Enforcement	3,214,171.00
Natural Resource Accounts	2,958,610.00
Total	\$29,646,180.00

SUMMATION OF 1976DROUGHT AND FIRE

Minnesota's Department of Natural Resources, which has a lineage dating to creation of the Department of Conservation in 1931, was confronted in Bicentennial Year 1976 with a series of unprecedented problems, including the most severe fire crisis in history.

While the fire threat, based on conditions which were the most critical in the annals of state weather forecasting, was the most visible and costly in terms of resources, manpower, and budgetary demands, three other areas greatly accentuated the stress on accounts payable and personnel:

(1) The on-going Reserve Mining case with its companion burdens on our personnel and finances.

(2) Extremely low water levels (resulting from prolonged drought), with associate resource-related repercussions on DNR response capacities; specifically:

- (a) greatly accelerated demands for water appropriation permits for irrigation needs in agricultural zones.
- (b) impact of drought on lake levels, communities dependent on lakes for water supplies, lakeshore properties, businesses and the associate demands on DNR water-related disciplines.
- (c) drought impact on river navigation; upon DNR wetlands and wildlife management units.
- (d) accelerating impact of Dutch Elm disease, occasioned by drought-related lessening of tree resistance to disease, and public demands for removal of dead or diseased trees.

(3) The fall crisis which necessitated DNR priority concern for protection of human lives, property and resources, and compelled the Commissioner to place unprecedented restrictions on hunting, fishing and outdoor recreation generally over approximately two-thirds of Minnesota's geographic area -- despite obvious, adverse financial implications for private enterprise and Department revenues alike.

The full impact of these developments is still being assessed. It would seem appropriate to document the fact that the general public, private enterprise, the news media, the National Weather Service and outdoor recreationists generally were most positive and cooperative in support of the Department's decisions and responsiveness.

Forest, prairie and grass fire demands on the Department -- (which has direct responsibility for fire protection of all forested and associate resources) may be summarized by 1976 records:

April and May, 1,480 fires on 36,500 acres; June, 150 fires involving 1,750 acres; July-August (driest period on record dating to 1894), 444 fires on 10,200 acres; September, 431 fires on 54,743 acres.

In total, 2,950 fires burned over 139,929 acres by November 11, 1976. It is our conviction that response efficiencies averted the real potential for historic disasters, typified by the Hinckley Fire (1894), and Cloquet-Moose Lake fire (1918), which together claimed almost 900 lives and did great property damage.

A case in point: the 1976 Huntersville Fire which, if not contained, could have destroyed several villages.

Responsibility for supplies and logistics, including coordinating emergency manpower needs over vast areas, was that of the Department. The DNR coordinated support from all of its own disciplines, and from the federal government, county level and various state emergency services, including the Minnesota National Guard and the National Weather Service.

The prolonged fire emergency, and companion drought impact on resources, seriously disrupted many DNR programs, and placed great strain on DNR personnel. Emergency funding measures upset normal budgeting processes. This area will require careful examination by our Minnesota State Legislature. Hopefully, a portion of our burdens will be alleviated via emergency federal assistance.

#

Department⁷ Activities

76/77

WATER RESOURCES MANAGEMENT

The Water Resource Management activity is concerned with the water resources of the state, including more than 15,000 lakes of ten acres or more, some 25,000 miles of streams, and many billions of gallons of underground water.

The management program consists of a number of major activities. These provide data, hydrologic collection and analysis, environmental effect evaluations, and regulatory control of water and related land uses. Management goal: to insure wise use and development of the water and surrounding land resource of the state within a framework of environmental protection and environmental quality enhancement.

The Division of Waters was established in Fiscal Year 76 by the Commissioner of Natural Resources by splitting the former Division of Waters, Soils and Minerals into a Division of Waters and a Division of Minerals, and Directors appointed to head each division.

The Division of Waters was also reorganized during FY 76 to form five functional units: Hydrology Section, Land Use Management Section, Development Section, Hydrographic Services Unit, and Administrative Services Unit.

Other principal administrative actions during FY 76 included: (1) the transfer of seven Central Office personnel to assist the six DNR Regions in dealing with waters matters on a regional level, resulting in a 15 percent reduction on the Central Office staff and a 43 percent increase in regional staff; and (2) the establishment (legislation, funding, staffing) of a program to delineate and classify public waters (water basins and watercourses) on a county-by-county basis, in response to a need for better public information on public waters and greater participation by local government.

Flood Plain, Shoreland and Water Surface Use Management

During FY 76, the previously separate land use management programs of the Division of Waters (flood plain and shoreland management) were joined in an integrated Land Use Management Section through reorganization. This freed three positions for transfer to the Regional Offices. These positions filled a gap in regional operations which existed in Regions IV (SW), V (SE), and VI (Metro).

St. Paul staff prepared comprehensive program operations manuals which detail Regional and Central Office responsibilities, procedures, and policies for flood plain and shoreland management programs. Regarding individual land use management programs (flood plain and shoreland management), FY 76 saw the following events:

Shoreland Management

A public hearing was conducted on DNR's proposed statewide municipal shoreland management standards on July 16, 1975, in St. Paul. These regula-

tions were finalized and subsequently promulgated on March 15, 1976, (NR 82 through 84), and ultimately will affect 615 municipalities. The city of Long Beach, Pope County, was the first municipality to have a municipal shoreland management ordinance reviewed and approved by the Division of Waters. By July 1, 1976, at least six additional municipalities had either adopted or were near adopting municipal shoreland management ordinances.

During FY 76 the former shoreland management unit also fulfilled Division of Waters involvement in the water surface use problems of the Lower St. Croix River. This included drafting proposed watercraft use regulations for the lower 51 miles of river and presenting these regulations at public hearings in Center City (Dec. 10, 1975) and Stillwater (Dec. 15 and 16, 1975).

Flood Plain Management

During FY 76, 18 cities and counties adopted state approved flood plain ordinances. A total of 75 Minnesota cities established initial eligibility for the National Flood Insurance Program, in compliance with federal regulations and Minnesota Statutes 104.08. Federal agencies completed three flood plain information reports, covering portions of a total of seven communities. Flood insurance studies were initiated in 40 cities and counties to define floodways and flood plains (a total of 103 studies are now underway).

Other projects during the year included the development of a standard format for technical appendices for flood plain information reports in conjunction with the Corps of Engineers. Drafts of a Flood Proofing Administrators Manual, done in cooperation with the Corps of Engineers and the State Building Code Division, and a Manual on Public Services Activities of the U. S. Army Corps of Engineers were also completed, and are scheduled for publication in FY 1977.

Section involvement with the Great River Environmental Action Team continued. A joint study was initiated (in conjunction with the State of North Dakota and federal agencies) on the impact of agricultural diking along the Red River of the North.

During the period from July 1 to September 1, 1976 (FY 77), major efforts involved transfer of shoreland and flood plain management operation responsibilities to the six DNR Regions. Policy making; major technical expertise on planning responsibilities; remain with the Central Staff, St. Paul.

For the remainder of FY 77, implementation of the programs will rest solely with Regional personnel, previously assigned to that responsibility. St. Paul staff is making available to Regional personnel all relevant past correspondence, data, etc., in order to maximize their efficiency in working with local units of government.

St. Paul staff will continue to provide for the orderly transition of program implementation by training of Regional personnel; development of reports, aids, guidelines, etc.; overall program planning and development. Review of staff responsibilities in the St. Paul office continues, with the goal of maximizing staff effectiveness to handle work load and assistance to Regional personnel.

Water Resources Development

Regulation

The major staff activity of the Water Resources Development Unit during FY 76 involved processing of some 2,300 permit applications under provisions of Minnesota Statutes, Chapter 105.

A total of 1,265 applications were received for appropriation and use of waters of the state, surface and underground, during the year. This included 745 permit applications for water for irrigation, and 290 applications for non-agricultural water use.

Considerable time was spent during the year on the development of guidelines for processing, analyzing, issuing and denying permit applications for changes in the course, current and cross-section of public waters. Efforts are now underway to transform these guidelines into rules and regulations to be promulgated by public hearings during FY 77. Upon completion of this effort, a large number of permit responsibilities will be delegated to the Regions for administration at the regional level.

The most involved permit matter during FY 76 was the review, analysis and data preparation concerning the Reserve Mining Issue, for which more than 35 different permit applications were made. The matter continues awaiting final resolution.

During the period June 30, 1976 to September 1, 1976 (FY 77) the development unit processed approximately 400 permit applications under provisions of Minnesota Statutes, Chapter 105. There has been a substantial increase in requests for permits for ground water appropriation for irrigation as a possible means of alleviating present and anticipated 1977 water shortages for crop production during the drought period now in progress.

Progress has been made in finalization of draft rules and regulations for permits for changing the course, current and cross-section of public waters.

During the period September 1, 1976 to June 30, 1977 (FY 77) it is anticipated that the Division will accomplish the following:

- *Process approximately 1,900 permits under Minn. Statutes Chapter 105.
- *Conduct approximately six public hearings throughout the state, on rules and regulations for permits for changes in the course, current or cross-section of public waters, with initial action to establish hearings beginning in December, 1976.
- *Finish guidelines for permits for appropriation and use of "Waters of the State" and begin drafting of rules and regulations for appropriation and use permits.

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*Draft legislation on suggested changes in Chapter 105 to clear up interpretations, and present the proposals to the 1977 Legislature for their consideration.

*Continue to work closely with the six DNR Regions to transfer more operational permit responsibilities to the Regions.

Lake Level Problems

Problems relating to abnormally high lake levels at a number of locations were dominant during FY 76. Some of the more publicized problems involved high water problems at Big Marine and Carnelian lakes in Washington County; Cormorant Lake in Otter Tail County; and the Chisago chain of lakes in Chisago County. Efforts continue underway to resolve these matters.

Watershed District Functions

Similar to review activities in connection with public drainage projects, the Division in FY 76 prepared seven Director's reports on watershed district projects, and two reports on change of boundary petition. Several watershed district project hearings and manager's meetings were attended in connection with review of overall plans, project proposals, and district rules and regulations.

Major efforts were required in review of the Cormorant Lakes Watershed District application to construct an artificial outlet and the associated public hearing.

During the period July 1 to September 1, 1976 (FY 77), the Division was involved with six Watershed District actions, including the public hearing on a major Cormorant Lakes Watershed District permit proposal.

It is anticipated that the Division will be involved in approximately 15 additional Watershed District actions during the period September 1, 1976 to June 30, 1977.

Public Drainage Functions

One of the Staff responsibilities is the review, analysis and comment on public drainage projects proposed under Minn. Statutes, Chapter 106. During FY 76, staff members prepared 25 preliminary and 30 final reports on public drainage proposals. The staff also attended 25 hearings on drainage matters.

During the period July 1 to September 1, 1976 (FY 77) a total of seven preliminary and six final Director's reports on public drainage were made.

It is anticipated that an additional 40 preliminary and 35 final Director's reports will be prepared during the period September 1, 1976 to June 30, 1977.

Hydrology Section

Hydrology Functions

A report on the general statewide and regional ground water availability, distribution, use and problems was edited and prepared by the Division during FY 76, in cooperation with the U. S. Geological Survey and it is anticipated that the report will be published in October 1976.

About four additional technical reports on ground and surface water hydrology will be published during September 1 - June 30, 1977. In addition, it is anticipated that new technical staff added during the remainder of Fiscal Year 1977 will enable the section to provide urgently needed technical hydrologic advisory services for the DNR regions and the general public.

Field Surveys

During FY 76 the Division Survey Crew made a total of 83 surveys in 43 counties. The majority of these surveys involved investigations of hydrologic and topographic conditions around lakes.

From July 1 to September 1, 1976 (FY 77) a total of 19 surveys and investigations of hydrographic and topographic problems around lakes were made.

From September 1, 1976 to June 30, 1977 (FY 77) it is anticipated that an additional 100 hydrographic surveys will be required. The increase over FY 76 is expected because of the probable continued drought and further worsening of low lake level problems. The Survey Crew will likely also be called upon to provide increased dam maintenance and repair assistance during FY 77 for many of the state-owned dams which may be adversely affected by ice action during the winter months.

It is expected that ice action will have a much greater and more harmful effect than normal on dam foundations and structures because of the low lake levels existing at the time of lake surface freeze up.

Lake Gaging Activities

A total of 89 lake gages were maintained by the Division during FY 76, including establishment of eight new gages and rehabilitation of eight existing gages. This involved 3,400 miles of travel and more than 120 hours.

Maintenance of the records on the 89 lake gages will continue during FY 77.

Public Waters Program

Delineation and Classification of Public Waters

Pursuant to Chapter 83, Laws of Minn. 1976, the Division has been working with representatives of many counties in implementing a program to identify and delineate waterbasins and watercourses in each county which qualify as public waters under provisions of Minn. Statutes Chapter 105.

Part of the process includes the delegation to the counties of permit responsibilities for certain public watercourses (Class 3).

A final draft of rules and regulations for the delegation of Class 3 watercourses was prepared during July 1 to September 1, 1976, in cooperation with the Association of Minnesota Counties, and is now available.

The draft is subject to further discussion as part of the individual county-state public waters inventory meetings and the county public hearings.

Grant-in-aid funds for county preparation of watercourses inventories are available to those counties requesting the funds. This payment is only a partial allotment, as the second half of the \$200,000 appropriated will be distributed at a later date, based upon the watercourse inventory itself.

For counties not yet participating in the Public Waters Program the following is a brief summary of the format that has been used to date:

First, the county contacts DNR and requests to participate; if necessary, an informal meeting can be held with the county board to explain the program and the county's involvement. The Department, already in the process of making a water basin inventory in most cases, will forward to the county a preliminary public water basin map, including a listing of reasons why the given basins should be public waters. The county is asked to review this preliminary inventory and when completed, notify DNR so that a meeting can be arranged to discuss any comments. At the time of initial contact with the DNR, the county is asked to prepare a public watercourse inventory and classification. The necessary work maps are provided by the DNR as are the appropriate grant-in-aid funds. When complete, a copy is forwarded to the DNR for review and comment. The meeting mentioned above can accommodate both basins and watercourses. Several meetings may actually be necessary to complete a public waters agreement, a delegation agreement, and provide for any public meetings the county may desire. The public waters designation becomes final upon completion of a public hearing, held in the county, by the state hearing examiner. Costs are covered by the DNR.

During September 1, 1976 to June 30, 1977 it is expected that the public waters program progress will be as follows:

- *Provide preliminary inventory and classification of public water basins for all 87 counties.
- *Provide advice and assistance to counties and attendance at meetings, as requested, for at least 44 counties.
- *Hold public hearings to promulgate rules and regulations establishing public waters in approximately 15 counties depending on county willingness to expedite the program.

Special Problems

The Division of Waters continues to be confronted with severe problems in adequately discharging its water resource management responsibilities, due to lack of sufficient staff.

Substantial new legislation has been enacted without necessary recognition of staff and financial commitments needed for implementation.

The 1976 drought has created a substantial demand for irrigation water and the accompanying investigations and permit processing.

MINERALS RESOURCE MANAGEMENT

The Department of Natural Resources is responsible for the administration of approximately 10,000,000 acres of State-owned mineral rights located mostly in the northern part of the State. These include School and University Trust Fund, Acquired and Tax Forfeited mineral rights.

The DNR is responsible for implementing and regulating the exploration and development of these mineral rights in order to provide equitable rental and royalty income for the State's Trust Funds, General Revenue Fund, and local taxing districts; and to help provide for a long-lasting, stable economy for the region and the State.

Under Minnesota's State mineral laws (M.S., Chapter 93), these mineral rights are not sold, but State lands believed to have mineral potential may be leased at public sale, or in certain cases, by negotiation; and royalty is paid to the State on each ton of ore mined. These mineral leases also provide for annual minimum rental or royalty when no ore is mined.

The Department provides for the exploration and leasing of these mineral lands, economic and environmental review, royalty accounting, and, primarily through its field office in the iron mining district at Hibbing, engineering and inspection support to insure permit and lease compliance, evaluation of mineral potential, metallurgic research and testing, and cartographic and chemical laboratory support.

Due to the intense interest in the State's mineral resources, both as to evaluation of the mineral potential, their development, and the environmental concerns regarding their development, a great deal of the Division's time must be devoted to the handling of public inquiries on mineral resources. In addition to its statutory responsibilities, the unit must also provide technical support to other State agencies, its federal counterparts and to the mineral potential counties.

Iron Ore and Taconite

Iron ore and taconite from the Mesabi Range have dominated the mining scene in Minnesota for some 90 years, and will probably continue to do so for 200 or more years to come. The State, through its Trust Fund and Tax Forfeited mineral ownership, owns approximately 19,600 acres on the Mesabi iron formation, or approximately 18½ percent of the total.

During Fiscal Years 1976-77, this unit has administered 154 existing iron ore and taconite leases, covering more than 13,000 acres of the iron formation. Three natural iron ore mining leases were negotiated in 1976 and approved by the State Executive Council.

During FY 76, six taconite plants were in operation and produced approximately 41½ million tons of taconite pellets. During this same period three of these existing operations are in the process of being expanded, and two new taconite plants are in the process of being constructed, representing a

50 percent increase in taconite pellet capacity and an additional investment of approximately one billion dollars. A substantial portion of this development will be completed during this biennium, and the remainder during the forthcoming biennium. When this expansion and new construction are completed, Minnesota will have eight taconite operations, with a capacity of 65,000,000 tons of taconite pellets per year. State-owned taconite represents a substantial portion of the reserves of all these operations.

The State's rental and royalty income for FY 76 totaled more than \$3,650,000. Of this amount, approximately two million dollars was returned to the counties for distribution to the local taxing districts, and the remainder was distributed to the School and University Trust Funds and to the State's General Revenue Fund. It is expected that during FY 76-77, approximately 25,000,000 tons of State-owned natural iron ore and taconite will be mined, and that the resulting rental and royalty income will total approximately \$6½ million.

Copper-Nickel

In addition to its Iron Ranges, Minnesota has several other formations that currently are receiving a great deal of attention for their metallic mineral potential. Since 1966 the Division has had an active exploration leasing program in the Duluth Gabbro complex, which involved portions of St. Louis, Lake, and Cook counties in northeastern Minnesota. Exploration activities in that area have resulted in announced finds of copper-nickel mineralization, which appear to have potential for possible development. Potential ore bodies are primarily copper-nickel sulphide deposits, associated in some instances with cobalt, gold, platinum or other valuable minerals. These minerals are generally found finely disseminated in the Gabbro, forming large tonnages of low grade deposits. Substantial occurrences of titanium-bearing minerals have also been found in this Gabbro complex.

The significance of these copper-nickel deposits in the Gabbro is of major importance to the State, considering the estimated mining life (based on the limited exploration to date) of about 150 to 200 years, calculated on a reasonable rate of extraction of 27 million tons of ore per year. Much of these ore reserves are held by the exploration companies under State leases. As of July 1, 1976, there were 94 copper-nickel leases in effect in the Duluth Gabbro complex, covering some 38,000 acres.

In 1967 interest also developed in Minnesota's Greenstone formations, which extend extensively throughout the north half of the State, and which are the host rock of much of the mineral wealth of the adjoining Canadian provinces. The interest here is for base and precious minerals such as zinc, lead, copper, gold, silver, etc. In Canada these Greenstone formations are typified by high grade, but relatively small deposits. Often, however, these deposits can represent very significant mineral values.

To date the DNR has issued a total of 699 exploration leases, covering more than 300,000 acres, in the Greenstone formation. Greenstone exploration, however, can best be described as "looking for a needle in a hay stack"; and since the DNR has been unable to conduct any copper-nickel lease sales since 1973, only five leases remain in the Greenstone areas,

covering some 1,700 acres. There is currently intense interest in renewed exploration activity in both the Greenstone and Duluth Gabbro areas, and numerous requests have been made of the Division for a continuation of these public lease sales. If the State Executive Council concurs, the Division will conduct at least a limited copper-nickel lease sale during the latter part of this biennium.

During FY 76 approximately 74,000 feet of iron ore, taconite, and copper-nickel exploration drilling was conducted on State-owned property. This exploration activity has been closely monitored by the Division's Hibbing field office, and a quarter portion of all drill core is obtained by the Division and placed on file in its drill core library. If a copper-nickel lease sale is held during the early part of 1977, it is expected that the amount of exploration drilling will increase significantly.

In addition to its administrative responsibilities in connection with copper-nickel exploration on State-owned lands, the Division has also been heavily involved with the regional Copper-Nickel Study being conducted through the Environmental Quality Council. This unit has supplied much of the input into the leaching studies and the aquatic biology monitoring programs under this study.

Minesite Study

The Minesite Study, a computer-based environmental review process developed by the Environment Section of this Division, is also being developed for on-going copper-nickel planning and could be incorporated into the EQC study.

The study was initiated in 1973 by the Division of Minerals. Interdisciplinary techniques are used to evaluate environmental values and resource development potential. These techniques can then be used with existing economic and social systems to develop resource management plans.

Minesite has three important objectives:

1. Determine natural resource management capability.
2. Assess environmentally sensitive areas.
3. Establish a mineral resource planning program. This includes an evaluation of mineral potential, and locates a series of mineral facility site alternatives. These evaluations will be used for land use management and evaluation of specific proposed projects.

The techniques and systems being developed will also be useful in land use and policy/management planning on the Iron Range, in the peat resource areas, and for planning in the copper-nickel areas in the Greenstone belts across Northern Minnesota.

Mineland Reclamation

The Department of Natural Resources is charged with the development and administration of the State's mineland reclamation program. The 1973 Mineland Reclamation Act requires the reclamation of all currently active and any future metallic mining operations in the State. A total of 22 existing operations must comply under this law and obtain a permit to mine -- once rules and regulations have been established. Each permit application must include a mineland reclamation plan for the review and approval of this unit.

This program had not previously been funded, but in 1976 the Legislature appropriated funds to the DNR so that the rules and regulations for mineland reclamation could be drafted and hopefully implemented by the end of FY 77. Using these funds, the DNR has hired a reclamation staff in order to complete the draft of these rules and regulations, prepare them for public hearing and initiate a program for administering the regulations.

During FY 77 the DNR is also continuing the existing mineland clean-up program for removing abandoned and dangerous foundations and structures left by past mining operations. It is also designing a mine model to define and demonstrate reclamation procedures, and is initiating the development of a Mesabi Range Land Use Plan, in order to serve as a basis for permit review and to coordinate activities of the mining companies with the general public, to promote land use diversity and compatibility. An inventory of historical sites associated with the Mesabi Range is also being conducted in connection with this land use study.

Reserve Mining Company Litigation

In connection with the State's continued attempt to find an on-land solution to the Reserve Mining Company's tailings disposal problem, the two regulatory agencies, DNR and PCA, were directed to prepare an EIS and hold hearings on the company's permit application for the proposed Milepost 7 site. During this biennium the Division of Minerals continued to coordinate the Department's input in supplying the technical and graphic support for the on-going Reserve Mining Company litigation. The EIS on the Reserve's Milepost 7 proposal, supplemented to include a suggested Milepost 20 site, was completed during the biennium.

The hearings on the permit applications were completed during June of 1976, and resulted in the hearing officer's recommendation for rejection of the Milepost 7 site, and the similar resulting decision of the regulatory agencies.

The DNR is continuing to coordinate and supply the DNR's technical and graphic support for the on-going litigation at both the Federal and State levels, in an attempt to solve this long-standing pollution and public health problem.

Registration of Severed Mineral Rights

Under the Registration of Severed Minerals Act, as amended in 1973, every owner of an interest in minerals owned separately from the surface of the property, was required to register such interest before January 1, 1975,

or such interest forfeited to the State -- in trust for the local taxing district. Such registered severed mineral interest is also subject to a tax at the rate of 25 cents per acre per year.

An action was brought against the State, challenging this Act. It was necessary for the Department Minerals staff to supply much of the technical and graphic support, as well as testimony, at the trial that was conducted in District Court in October of 1975. The Court ruled that the registration provision was invalid, but that the tax provision was constitutional. This decision is now being appealed to the Supreme Court.

More than 2 3/4 million acres were registered under this Act, and the tax generated in St. Louis County alone was approximately a quarter of a million dollars, with 80 percent going to the local taxing districts, and the remainder being apportioned to an Indian Development Fund.

Peat Resources

The Upper Great Lakes states, including Minnesota, Wisconsin and Michigan, have extensive peat areas which are virtually undeveloped. No accurate inventories of these peat lands have been made to date, but estimates indicate that these three states contain up to 15 million acres of peat. Minnesota alone contains approximately one-half of this total acreage -- more than 90 percent of which is State-owned, with several large deposits of more than 100,000 acres occurring in the northern part of the State.

During this biennium the DNR received a 200,000-acre request for a peat lease for the purposes of energy production (gasification), and an additional request for 26,000 acres for horticultural purposes. In view of the overall potential of peat and the large State ownership, the Department was engaged, during FY 76, in a one-year, \$94,000 Peat Study, funded by the Upper Great Lakes Regional Commission, and conducted by Midwest Research. The objectives of this study were to perform a preliminary environmental study of peat areas, and to assess the technology of the peat industry.

In addition to the environmental and socio-economic studies conducted in the State, this study included representation at the International Peat Society in Europe in September 1975 and 1976, and a tour of established energy and horticulturally-related peat developments in a number of European countries.

The 1976 Legislature provided funds for the Division to initiate a peat inventory program, and to obtain needed staff for the continuation of these and other studies which will be necessary to evaluate the lease requests the unit now has before it, and to help in formulating a State Peat Land Policy.

A proposal has been submitted during this biennium for a National Science Foundation Grant, supplemented by State funds, to continue and expand the peat mapping program; and a proposal has also been submitted to the Upper Great Lakes Regional Commission for the second phase of the peat program that was started at the beginning of this biennium. The United States Geological Survey and the Minnesota Cooperative Soil Survey have been, and will continue to assist the Division of Minerals with various phases of its peat inventory program.

FOREST MANAGEMENT

The Forest Management Activity covers all DNR forestry programs. The Department's goal is to achieve, through active leadership and in cooperation with other agencies and groups, effective management and protection of Minnesota's forest environment, an increasing yield of timber, quality recreational opportunities, improved wildlife habitat and land and water conservation practices that will contribute to Minnesota's economic and social well being.

Following are summaries of program accomplishments during FY 76-77.

Fire Protection

Minnesota experienced a warm, dry period starting late in July of 1975 and extending into late November, causing an increase in fire activity, mainly during the month of October.

The months of April and May, 1976, were, in many parts of Minnesota, the driest ever recorded in State history.

During the months of April and May of 1976, a total of 1,480 fires burned 36,500 acres. It is interesting to note that during the past ten years, each fire burned an average of 44 acres. During the months of April and May, 1976, the average acreage lost per fire was 25, even though the build-up of wildfire conditions was two and sometimes three times higher than it normally is during a spring fire season.

During the summer of 1976, the months of July and August were the driest in Minnesota since 1894.

During July and August 445 fires burned 10,200 acres. The major causes of these fires were agricultural equipment and electric fences (21 percent). Because these fires burned into peat, by early August there were several hundred acres of potentially dangerous ignition sources scattered mainly in central Minnesota. When humidities dropped and winds increased, the peat fires blew out of control burning several thousand additional acres including more peat.

This cycle repeated itself to varying degrees several times. The result was nearly 80 active fires in the state that required up to 200 men and a considerable amount of equipment each to try to keep under control.

By mid-September it was apparent that the Department's fire suppression resources were being taxed to the limit and drastic measures would have to be taken to prevent additional fires from starting. More than 150 fires were burning in the state -- the largest being the 23,000-acre Huntersville fire.

The Commissioner imposed an open burning ban that eventually included the northern two-thirds of the state. In addition he closed all hunting and fishing, banned smoking in the out of doors and closed all lands to the public that are under the Department's jurisdiction.

A total of 435 fires burned more than 54,500 acres during the month of September and by November 11 -- 2,950 fires burned 139,929 acres.

The combination of aerial attack along with the usual ground attack forces, provided the DNR with the most potent fire suppression attack force in the history of the Department, and is credited with saving thousands of dollars in damages to homes, resorts, and natural resources.

In addition to the aerial attack capabilities, foresters and equipment from the southern regions were detailed to more critical areas in the northern part of the state to supplement the district organizations and to allow some of the district personnel to get some rest. Department personnel from the Central Office were organized into overhead fire fighting teams, and personnel from all disciplines in the Regions were placed on emergency standby. The DNR Service Centers were manned seven days a week, and Department aircraft were scheduled for use by the fire organization as first priority. The Highway Department radio shops in the Northern part of the State were staffed seven days a week for necessary radio maintenance.

Arrangements were made through the Commissioner and Governor to activate the Minnesota Army National Guard, and fire fighting crews from other States and National Forests outside of Minnesota were brought in to help suppress major fires.

The relatively small average acreage lost per fire indicates efficiency and cooperation of the Department personnel in carrying out their assignments during this period of extreme fire danger.

The National Weather Service did an outstanding job by giving fire weather forecasts their special attention.

The total burning bans that were put into effect during the spring and fall critical periods as a multi-agency fire prevention measure, were the result of direct communications with the Bureau of Indian Affairs and the U.S. Forest Service, the DNR, and the National Park Service. The public awareness and interest in the fire situation that was made possible through the news media, contributed a great deal to the success of the burning ban and the overall fire protection effort.

The Fire Protection Unit plans to continue to use the services of the National Weather Service's wire loop on a daily basis for transmitting fire weather conditions and fire prevention announcements to the news media and local law enforcement agencies.

In addition, the Unit is going to follow the multi-agency (U.S. Forest Service, Bureau of Indian Affairs, National Park Service, etc.) approach in wildfire prevention. The purpose is to provide a uniform, coordinated effort in wildfire prevention that will be understandable and meaningful to the general public.

Minnesota's fire laws will be reviewed and proposals made for updating them.

Preliminary steps have been taken to implement the new Fire Danger Rating System statewide in Minnesota. The new system will provide better information in regard to the effects of prolonged dry weather on the forest and grass fuels.

Training programs in the use and management of air tankers and helicopters will be conducted for field and staff personnel so that the most effective use of these fire fighting tools can be obtained.

Other training will include such programs as organizing specialized 20-men fire fighting crews, cooperation with rural fire departments, equipment use and the fire simulator school.

There is a strong possibility that the current drought will extend into the spring and/or summer of 1977. If this does happen, the Department will again be faced with higher than normal fire occurrence and burned acreage. This means that the Department's fire protection program must be accelerated to meet its responsibilities as established by Minnesota law.

Rural Community Fire Protection Program

This program is designed to assist communities in fire protection and to aid rural fire departments in improving their fire fighting capabilities.

Thirty-six excess vehicles were assigned to rural fire departments in FY 76. We expect to assign another 40 excess vehicles to fire departments throughout the State during fiscal year 1977. These vehicles provide the fire departments with fire control units for wildfire and structure fire suppression.

In FY 76, matching funds in the amount of \$133,000 were distributed on a priority basis to rural communities for the purchase of fire fighting equipment.

From July 1 through September 1976 an added \$33,250 will have been allocated to 27 fire departments on a matching funds basis. This will bring the total to \$166,250 to 174 fire departments for the period July 1, 1975 through September 1976.

It is anticipated that another \$133,000 for FY 77 will be made available to Minnesota from the Federal Rural Development Act of 1972.

Forestry personnel provided fire fighting training sessions for more than 2,000 rural firemen during the biennium.

Environmental Studies

The Division of Forestry continues an active program of environmental study and review in connection with the forest land and related environment

of Minnesota. Approximately 200 major public and private projects are reviewed annually for impact upon the forest resources of Minnesota. All Division projects and activities are reviewed for environmental impact.

Major emphasis will be placed on forestry concerns and input from a forest management viewpoint into three ongoing programs. These are the Coastal Zone Management Program for Lake Superior, the nonpoint source pollution portion of Section 208 of Public Law 92-500, and the Copper Nickel Regional Study. Major emphasis will also be placed on Forestry concerns in regards to electrical generating plants, transmission lines, and pipelines.

The energy crisis and the anticipated phenomenal growth of electric power is making a dramatic impact on the forest land of Minnesota.

The construction of power plants, power lines, and pipelines -- along with the other land development programs -- are reducing the commercial forest land base of Minnesota which supports the third largest industry in the state.

As time permits, forestry inputs will also be directed to the Peat Study, DNR Pesticide Committee activities, PERT activities, Division of Waters-Inventory and Regulations of public waters, Endangered Species Act, Corps of Engineers and E.P.A. regulations, and U.S. Forest Service programs which affect State and Private Forest Management activities.

Forest Roads

Minnesota has 1,377 miles of forest roads, mostly within the boundaries of the 56 designated state forests.

These roads provide access for fire control, timber management, and recreational activities on about 1,298,000 acres of state land, and some two million acres of other public and other private lands.

Increased usage has brought about a need for an expanded maintenance program in order to provide year-round travel on most of the forest roads.

During the biennium the forest road program was not funded. Any maintenance work accomplished was through use of DNR manpower and equipment. Emergency repairs were made from monies diverted from other program items.

There is need for 260 miles of road reconstruction. This would consist of reshaping, cleaning ditches, repair of bridges or replacing old bridges with large tank car culverts.

In addition, at least 30,000 cubic yards of crushed road materials are needed to surface about 60 miles of roadway.

Forest Pest Control

A total of 12 major planned surveys were made in FY 76 covering more than 25,000,000 total acres. Like activities are scheduled for FY 77. These problem areas include: oak wilt, spruce budworm, Dutch elm disease, jack pine budworm, and black spruce dwarf-mistletoe. Evaluations of specific problems were made as dictated by survey results or need.

Direct control operations in FY 76 included insecticide applications at Finland and Sullivan Lake campgrounds in Finland State Forest, in Bearhead Lake State Park to control spruce budworm, and in several white spruce plantations in Region II (NE) to control yellow-headed spruce sawflies. Work in FY 77 will include: work on spruce budworm at Finland State Forest, Bearhead Lake and George H. Crosby Manitou State parks campgrounds; yellow-headed spruce sawfly control in several white spruce plantations; dwarf-mistletoe control work on 1,500 acres of black spruce regeneration area (residual overstory removal); and disposal of Dutch elm diseased trees on DNR lands near towns and in public use areas.

Informal surveys, pest identification, and assistance in providing pest management expertise to forest land managers and landowners are other major functions of this unit.

Nursery Operations

The Department of Natural Resources tree seedling nurseries shipped 11,719,000 tree seedlings for planting in the spring of 1976. There were 3,339 individual tree seedling applications filled during fiscal year 1976.

Of the seedlings produced, 58 percent were shipped for planting on public lands. Individual and private land owners purchased 38 percent of the production and the remaining four percent was distributed to various industries. It is expected that these seedlings will reforest some 13,780 acres of land.

Tree improvement activities, which is the application of forest genetics to bring about heritable improvement in trees, was conducted. The purpose of this is to provide long range improvements in timber grown in Minnesota. This will provide greater quality and quantity of timber from all forest lands in the state. Approximately 2,500 white spruce were grafted from a superior strain of trees originating in Ontario. Another 2,500 black spruce were grafted from materials obtained from superior native black spruce. Work was continued with hybrid poplar production. This program is still in a state of selecting which of the trees would be most productive under Minnesota conditions.

The DNR tree seedling nurseries expect to ship 14,000,500 seedlings during FY 77. This should total some 4,000 individual sales.

Distribution of these seedlings is expected to be more heavily weighted to private sales and industry sales than to state land use during FY 77. This is due to lack of funds for reforestation of State land in FY 77. The total sales should provide for the reforestation of approximately 16,000 acres.

Tree improvement activities will continue. Approximately 2,500 white spruce and another 2,500 black spruce will be grafted at the forest nurseries. Additional selection work will be continued with hybrid poplar. Also it is expected that a program initiating the selection of walnut for superior production will be carried out in cooperation with Wisconsin Department of Natural Resources.

Forest Development of State Lands

Forest development of state lands continue to center on two major programs; reforestation and timber stand improvement.

There were 2,920,000 seedlings planted on some 3,400 acres of DNR forestry administered land.

Timber stand improvement, consisting mainly of the release of conifer reproduction from competing vegetation, was conducted on some 2,900 acres of state land during FY 76.

It is expected that during FY 77 approximately 4,500 acres of state land will be reforested through planting and direct seeding. Probably this will be entirely on trust fund lands within state forests, due to lack of funds for development activities in other lands. Timber stand improvement, which will consist mainly of the release of conifer reproduction from competing vegetation is expected on 2,600 acres of state land during FY 77. Again, this will be almost entirely centered on trust fund land in state forests because of the lack of funds to conduct activities on other types of land.

Timber Sales and Harvest

The timber sales and harvest activities of the Department during FY 76 showed a slight upward trend over the activities of fiscal year 1975:

Volume of Timber Sold and Cut (in cords)

	<u>FY 1974</u>	<u>FY 1975</u>	<u>FY 1976</u>	<u>FY 1977</u>
Volume Sold	435,500	356,000	340,000	400,000 (Anticipated)
Volume Cut	430,000	401,182	435,000	435,000

Value of Timber Sold and Receipts

	<u>FY 1974</u>	<u>FY 1975</u>	<u>FY 1976</u>	<u>FY 1977</u>
Value Sold	\$1,740,348	\$2,133,047	\$1,707,752	\$2,100,000 (Anticipated)
Volume Cut	\$1,518,956	\$1,685,902	\$1,948,963	\$2,200,000

The volume and value of timber sold decreased in FY 76. However, the volume actually cut returned to the record FY 74 level, and receipts reached an all-time high of \$1,948,963. The decrease in the volume and value of timber sold is due to the following factors: 1) Operators had relatively large volumes of previously purchased timber on hand; 2) The maximum life of auction sales was reduced from ten to five years in 1975, causing a slowdown in buying until old sales are completed; and 3) The economic situation during FY 76 was not optimistic.

The timber market will continue to improve in FY 77, according to market indicators. Anticipated volumes and values are indicated in preceding tables.

Private Forest Management Assistance

Small landowners in Minnesota own about seven million acres of forest land. These tax-paying holdings, owned by 150,000 small landowners, comprise about 40 percent of Minnesota's forest land.

The big problem with many of the small forest ownerships is their poor condition. They are in need of reforestation and improvement of existing stands of trees.

The DNR is concerned with the condition of these small forested properties, and consequently is helping landowners better manage their small forests. Some of the services provided by foresters include examination of woodlands, and the preparation of forest management plans. After that, it's up to the landowners to follow the plan and improve the forest.

In 1976, DNR foresters helped about 5,000 small landowners improve their forest properties. More than 108,000 acres of forest land was improved.

Together, small landowners and DNR foresters are building quality forests of the future.

The forest management assistance program continued at a little lesser rate because of the terrible 1976 fire season.

Program goal is to improve the management of these small ownerships and bring them into increased and sustained production. This is necessary to meet the increasing demands for wood, water, wildlife, and recreation.

During FY 77 DNR foresters helped 4,500 small owners improve management on 90,000 acres of forest land. Owners installed proper forest practices, with the technical assistance of foresters.

The DNR is not only interested in the dollar value of the timber; but is concerned with the wildlife habitat, watershed protection, and scenic beauty the forests provide.

School Forests

The school forest, an outdoor classroom, continues to grow.

In 1971, there were 45 school forests in Minnesota; now, in FY 77, there are 71. These forests are well distributed throughout the state, with eight in the Metro Area.

Here, in these "classrooms in the woods", students study trees, water, soil, plants, and wildlife and their interrelationships. School forests provide students with a better understanding of the environment.

Foresters provide technical services and supervision, while students develop the forests and wildlife and water areas. Together, they build laboratories for the environmental education of thousands of individuals.

This activity helps develop the highest quality product in the world -- the Human Resource.

State Forest Acquisition Program Summary

Two million dollars in Resource 2000 money and \$350,000 in LCMR money was appropriated for State Forest acquisition for FY 76 and FY 77. Of the total \$2,350,000 appropriation, \$340,995 (approximately 17 percent) will be used for professional services during the biennium, leaving \$2,009,005 for actual land purchase.

The two approved State Forest acquisition positions located in St. Paul and Rochester were filled in FY 76. These positions were funded from the Resource 2000 appropriation.

By the end of FY 76, a total of 21 new tracts of land totaling 2,025 acres were deeded to the State of Minnesota. Of the 21 tracts, 18 were purchased with Resource 2000 funds and three with LCMR funds. A total of 1,319 acres were purchased with Resource 2000 funds, and 706 acres with LCMR funds.

A total of \$486,965 of the Resource 2000 appropriation was expended, leaving a balance of \$1,242,795; \$141,472 of the LCMR funds was expended, with a balance remaining of \$137,773. Total money expended was \$628,437 leaving a balance of \$1,380,568 for the remainder of the biennium.

By the end of FY 76, 52 tracts of land totaling 10,015 acres (with a monetary value of \$2,696,580) was in the process of being appraised, negotiated, optioned, or studied by the Attorney General's Office. If all these tracts were to be purchased this biennium, Forestry would need an additional \$1,316,012; since the total funds available equals only \$1,380,568. Twenty-four additional fact sheets have been prepared which have not been submitted to the Land Bureau due to lack of acquisition funds. These tracts total 3,190 acres -- with a value of \$1,740,000. This pushes our possible deficit spending to \$3,056,012.

Twenty-nine tracts that have been submitted to the Land Bureau are being held in abeyance, or are presently owned by unwilling sellers.

In summary, 97 tracts of land were in the process of being purchased or had been purchased by the DNR's Division of Forestry during FY 76. These tracts total 15,230 acres and are valued at \$4,923,545.

It is expected that the Division of Forestry will expend its Resource 2000 and LCMR funding balance of \$1,380,568 by the end of FY 77. Approximately 39 additional tracts, totaling approximately 4,619 acres, are expected to be purchased with our present funding balance.

Forest Products Utilization and Marketing

The forest products utilization and marketing (U & M) program provides technical assistance and services designed to improve the utilization and marketing of Minnesota's forest resources. Improved utilization of harvested trees will increase the volume of usable products produced by each tree and reduce the volume of material left in the forest, burned or otherwise wasted. Improved markets provide the economic incentives to landowners, loggers, and wood processors to implement improved forest management and wood utilization practices.

A total of 1,038 U & M assists were provided to private landowners, loggers, wood processors, and others involved with the growing, harvesting, processing, and marketing of the state's forest resources in 1976, and 830 in FY 77. These assists included providing marketing information, resource data to expanding and new industries, and complete sawmill analysis programs designed to improve mill efficiency.

The utilization of 13 million board feet and 30,000 cords of wood killed annually by the Dutch Elm disease, oak wilt disease, and normal tree mortality within the seven-county Metropolitan Region has been the objective of a special U & M project. The specialist and field foresters assigned to this project are working with the Metropolitan Inter-County Council, State Department of Agriculture, local units of government, and forest product industries to develop facilities that will economically convert the disease-killed trees into usable products.

Sawmill clinics in Bagley, Walker, and Duluth; a hardwood lumber grading short-course; and a softwood lumber grading short-course were cooperatively conducted in FY 76 by the University of Minnesota Extension Service and the DNR Utilization and Marketing Program. Similar clinics and short courses are planned for FY 77. A Utilization and Marketing workshop and a hardwood tree grading session are planned for DNR personnel in FY 77. The Department of Natural Resources and University of Minnesota School of Agriculture and Extension Service, are cooperatively conducting a program to promote the utilization of aspen bark for cattle feed. The feeding of aspen bark to cattle will provide a use for what is presently a waste product, and also would help alleviate the shortage of hay caused by the unseasonably dry spring and summer weather.

Increased emphasis is planned for Utilization and Marketing in FY 77, with the placement during the year of Regional U & M Specialists at Cloquet, Bemidji, Brainerd, and Metro.

Forest Inventory

Good forest resource information is essential to effective forest management and proper utilization of the forest resource. This resource data must be up to date, and provide reliable resource information by county units.

Funds for a study of Minnesota's total forest resource were authorized by the 1975 Legislature. This study, called the Statewide Forest Inventory, is being carried out in cooperation with the North Central Forest Experiment Station of the U. S. Forest Service. The total forest resource on the more than 17 million acres of federal, state, county, and privately-owned commercial forest land in Minnesota is included in the Study.

For this survey, Minnesota was divided into four forest inventory units: the Northern Aspen-Birch, the Northern Pine, the Central Hardwoods and the Prairie Unit. A total of about 10,000 permanent plots are to be established and measured in the study. Approximately 20 percent were completed in FY 76. The Northern Aspen-Birch unit will be completed by January 1, 1977 and 80 percent of the total plots completed by June 30, FY 77.

Another, more intensive survey, which is an on-the-ground examination of all forest types on state and county lands, is also in progress. This survey will obtain the basic type information which is necessary for forest management decisions which must be made for each forest type. The DNR in cooperation with the various counties, completed survey on 212,000 acres of state and 16,000 acres of county tax-forfeited lands in FY 76, and will complete 250,000 acres of state and 50,000 acres of county lands in FY 1977.

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FISH MANAGEMENT

The State of Minnesota contains about 2.5 million acres of fishing water which requires management to satisfy its 1.8 million anglers. This is the job of the Division of Fish and Wildlife's Section of Fisheries whose field force operates from six regional and 26 area and sub-station offices. It is accomplished through improvement of the habitat for game fish, propagation and distribution of fishes, rough fish control, and lake rehabilitation.

A large survey program is maintained to provide current information on the status of the fish populations and a basis for the distribution of the management effort; and a fisheries research program conducted to develop new management methods, improve techniques, and supply the basic information for understanding of the problems.

Habitat Acquisition and Development

Habitat development is preceded by acquisition for control of fisheries management sites through the purchase of land in fee title or perpetual easements for the necessary rights. In FY 76, five tracts on four streams were optioned for easement, and one tract of 24.2 acres was purchased (Knife River, Lake County) to provide for stream habitat development, protection of the watershed in some degree, and for angler access. Seven tracts on six areas were optioned for northern pike spawning. In preparation for building rough fish control structures, 16 tracts on four sites were optioned for purchase or easement.

Access to Trout Streams:

<u>Unit</u>	<u>County</u>	<u>No. of Tracts</u>	<u>Acres</u>	<u>Type</u>
<u>Optioned</u>				
Cory Brook	Cass	1	2.0	Easement
Torkelson Creek	Fillmore	2	11.8	Easement
Coolridge Creek	Winona	1	49.0	Fee
Clearwater River	Beltrami	1	2.0	Easement
<u>Purchased</u>				
Knife River	Lake	1	24.2	Fee
	Totals	6	89.0	

Northern Pike Spawning Areas Optioned:

<u>Unit</u>	<u>County</u>	<u>No. of Tracts</u>	<u>Acres</u>	<u>Type</u>
Prior Lake	Scott	1	8.4	Easement
Big Fish Lake	Stearns	1	5.3	Fee
Ripley Lake	Meeker	1	30.0	Fee
Manuella Lake	Meeker	1	.1	Fee
Minne Belle Lake	Meeker	1	12.0	Fee
Cedar Creek (Mille Lacs Lake)	Mille Lacs	2	5.0	Fee
	Totals	7	60.8	

Rough Fish Control Sites:

<u>Project</u>	<u>County</u>	<u>No. of Tracts</u>	<u>Acres</u>	<u>Type</u>
Lobster-Eiseland Lakes				
- Trap	Douglas	2	1.5	Fee
Big Chippewa Lake				
- Barrier	Douglas	2	1.62	Easement
Maple Lake				
- Barrier	Douglas	1	4.0	Fee
Maple Lake				
- Barrier	Douglas	3	8.0	Easement
Stahlis Lake				
- Barrier	Douglas	1	0.3	Easement
Mill Creek				
- Barrier	Stearns	4	8.0	Easement
Minnewaska Lake				
- Trap	Pope	1	12.0	Easement
Silver (Locke) Lake				
- Barrier	Wright	1	4.3	Fee
	Totals	15	39.72	

In FY 77, the planned acquisitions are 17 easements for trout stream access, 12 areas purchased for northern pike spawning, and ten sites purchased for rough fish control.

Stream improvement through habitat development was performed on 17 streams in FY 76, benefiting 49 miles. These streams are located in southeastern and northeastern Minnesota. Construction contracts were let for development of one spawning area and five rough fish control sites (one barrier, two new traps and two trap reconstructions) in FY 76. The Fisheries Field Construction Crew made improvements at four spawning areas and five rough fish barriers.

<u>Streams Improved</u>	<u>County</u>	<u>Miles Benefited</u>
1. Onion River	Cook	0.5
2. Indian Camp Creek	Cook	1.0
3. Knife River	Lake	1.0
4. Knife R. - McCarthy Ck.	Lake	1.0
5. Gooseberry River	Lake	1.5
6. Sucker River	St. Louis	8.0
7. Tower Creek	St. Louis	0.5
8. No. Branch Creek	Fillmore	3.0
9. Gribben Creek	Fillmore	2.0
10. Etna	Fillmore	1.0
11. Duschee Creek	Fillmore	7.4
12. So. Fork Creek	Fillmore	4.0
13. Rush Creek	Winona-Fillmore	4.0
14. Trout Run Creek	Winona-Fillmore	11.0
15. East Beaver Creek	Houston	2.5
16. Bee Creek	Houston	1.5
17. Crooked Creek	Houston	3.0
	Total	52.9

Northern Pike Spawning Areas

County

FY 76 - (Contract Construction)

1. Pelican Lake Pope

FY 76 - (Fisheries Construction Crew)

2. The Trees (Cass Lake) Beltrami
 3. Grace Lake Beltrami
 4. Sunset Lake St. Louis
 5. Ida Lake Becker

<u>Rough Fish Controls</u>	<u>Type</u>	<u>County</u>
Mary Lake	Trap (Reconstruction)	Douglas
Minnewaska Lake	" "	Pope
Rush Lake	" "	Chisago
Mill Creek	Barrier	Stearns
Waconia Lake	Trap	Carver

Plans for FY 77 include improvements on 15 streams, the development of three northern pike spawning areas, and the construction of five carp barriers or traps.

Fish Propagation

In Calendar Year 1975, a total of 182,397,582 fish were raised and distributed from the following facilities:

- 18 Walleye Spawning Stations
- 7 Muskellunge Spawning Stations
- 20 Sucker Spawning Stations (to supply food for muskellunge growth)
- 13 Walleye Hatcheries (seven of which also hatch sucker eggs and four of which also hatch muskellunge eggs)
- 5 Trout Hatching and Rearing Stations
- 190 Walleye Rearing Ponds
- 146 Controlled Northern Pike Spawning Areas
- 15 Muskellunge Rearing Ponds

Fish Stocking:

Listed below are the numbers of fish by species and sizes for calendar year 1975.

<u>Species</u>	<u>Adults</u>	<u>Yearling</u>	<u>Fingerling</u>	<u>Fry</u>
Walleye	9,201	99,251	2,995,171	139,491,320
Northern Pike	34,523	115,727	4,094,531	422,800
Crappie	112,851	48,267	12,936	
Bluegill	297,486	31,396	42,390	
Sunfish	42,107	24,457		
Largemouth Bass	1,286	2,922	96,383	620,000
Smallmouth Bass	18	97	28,720	
Silver Bass	1,361			
Muskellunge	28	1,182	19,968	491,000
Saugers				200,000

<u>Species</u>	<u>Adults</u>	<u>Yearling</u>	<u>Fingerling</u>	<u>Fry</u>
Bullhead	19,250			
Perch	648			
Catfish	113	21	3,408	
Herring				31,270,568
Rainbow Trout	84	78,072	452,492	98,750
Brown Trout	1,023	164,931	112,544	
Brook Trout	7	40,213	96,297	
Lake Trout	9	364,907	329,196	21,090
Splake			6,580	
Totals	519,995	971,443	8,290,616	172,615,528

Production and distribution of fish in calendar year 1976 is expected to be about 250,000,000 fish of all sizes.

Improvements are being made at nine hatchery facilities and 11 fish rearing sites. The hatchery improvements include new incubators, improved water supply and construction of raceways. The new French River Hatchery was nearing completion and was already in partial production by the end of FY 76.

Projects for FY 77 include: strengthening a seawall at the Waskish spawning station; remodeling of the Cutfoot, Lanesboro and St. Paul hatcheries; repairs at the Hinckley muskie ponds; and completion of remaining construction at French River.

Rough Fish Removal

Rough fish removal will average six million pounds per year in this biennium, with a value of just over \$400,000 each year. From this, the Game and Fish Fund will receive about \$135,000 for the biennium--from direct sales of fish by the state and from payments from contract fishermen. An average of 440 lakes are benefited each year.

Rough Fish Removal, FY 1976

<u>Species</u>	<u>Pounds</u>	<u>Value</u>
Buffalofish	515,859	\$ 103,171
Bullhead	1,721,498	172,149
Bowfin (dogfish)	12,188	-
Carp	2,572,486	77,174
Catfish	369	147
Eelpout (burbot)	34,047	1,021
Perch	12,287	614
Shad	2,400	-
Sheepshead	413,303	20,665
Sucker	153,809	7,690
Tullibee	5,441	1,360
White Bass	58,345	20,420
Totals	5,502,032	\$ 404,411

Lake Rehabilitation

Six lakes were treated with chemicals in FY 76 to rehabilitate the fish population towards a more desirable sport fishery. Four are managed as trout lakes and two are managed for warm water species. One of the warm water lakes was only partially treated, with the objective of reducing the number of stunted panfish in order to let the survivors grow more rapidly.

Twelve lakes will be rehabilitated in FY 77.

Lake and Stream Surveys

Comprehensive biological surveys were made on 198 lakes and 39 streams in calendar year 1975. These surveys aid fish managers in the programming of fish stocking and other measures that increase the productivity of our waters for the fisherman.

A similar number of surveys are being conducted in FY 77.

Commercial Fishing

Commercial fishing is permitted in Lake of the Woods, Rainy Lake, Namakan Lake, Lake Superior, and parts of the St. Croix and Mississippi rivers, with an average of more than three million pounds of fish valued at more than \$400,000 marketed each year. This activity provides the public with a source of valuable food fish, and is supervised to prevent damage to sport fishing.

Fisheries Research

The fisheries research program is conducted to obtain information directly related to current and anticipated fisheries problems. During the biennium, there were seven studies on trout, 13 studies on warm water fish, and special assignments dealing with the DNR copper-nickel study, sonic depth recorder impacts, and lake aeration benefits. Fifteen reports were published and five more are in preparation.

Capital Improvements

The major capital improvement projects in this biennium were the construction of the trout hatchery at French River, storage sheds at Bemidji and International Falls, and a new garage at Lanesboro.

In addition to the foregoing, an option was taken on 18.8 acres at the Spire Valley Hatchery to provide for proper handling of discharge from the hatchery ponds. Also, easements were obtained from Itasca County for a northern pike rescue site, and from two private landowners at Ida Lake, Becker County, for channel maintenance to prevent winterkill.

Land at ten rough fish control sites will be purchased in FY 77.

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WILDLIFE MANAGEMENT

Wildlife Land Acquisition

The Department of Natural Resource's Section of Wildlife during FY76 brought into state ownership 55 tracts of wildlife lands, comprising 10,634 acres. The cost of this acquisition was \$870,120. The acquired lands were located in 39 Wildlife Management Areas in 34 counties. Of the total funds available for acquisition through the Resource 2000 Program, the Legislative Committee on Natural Resources, and the surcharge on small game licenses, it is estimated that 85 to 90 percent will be committed by the end of December, 1976.

Wildlife Development

The improvement and protection of state-owned lands and water for wildlife habitat involves various wildlife management techniques. To provide cover during winter storms, 48 dense plantings of trees and shrubs were planted and 104 previous plantings were maintained in FY 76. To provide food for wintering wildlife such as pheasants, squirrels and songbirds, 465 food plots are established annually. During the next biennium, 100 new cover plantings are planned with more food plots.

A total of 8,530 acres were planted to various grasses and forbs to provide cover for ground nesting birds. Plans for 1978 and 1979 will include the planting and management of 13,000 acres.

Limited controlled burning was performed in FY 77 due to the fire dangers which existed; however, 10,500 acres was burned in FY 76. Burning rejuvenates new grass growth and reduces woody invasion of trees and shrubs.

Management on state-owned wetlands included the repair and maintenance of 85 established waterfowl impoundments totaling 37,100 acres. A total of 142 small wetlands were dug out, and 11 wetlands were created -- for a total of 313 acres. During the next biennium, new projects totaling 7,400 acres are planned, provided funds become available. Water level management on seven designated wildlife lakes totaled 14,656 acres with plans to manage more lakes in the future. In addition, more than 600 nest boxes are placed and maintained each year to improve nesting conditions for wood ducks.

Forest habitat improvement, primarily for deer and grouse, included 1,000 acres disturbance, 200 new forest openings and the establishment of 100 forest food plots. The forest is disturbed to maintain a mixture of young and older forest stages required by many wildlife species. Forest management objectives will strive for 4,000 acres of disturbance during the next two years, plus 500 new permanent openings for creating and maintaining diverse habitats.

Wildlife managers constructed and maintained 144 miles of fence, and established or replaced signs on 550 miles of wildlife area and refuge boundaries. Roads and trails constructed and maintained total more than 800 miles.

Other Key Wildlife Programs

Under the Private Land Development Program the cost-sharing of about \$50,000 during FY 76 provided landowners with incentives to develop 83 winter woody cover plantings, 195 food plots, 20 acres of nesting cover, and 120 acres of waterfowl impoundments. Limited funding to help private landowners has slowed this program.

Approximately 21,000 acres have been enrolled under the "Minnesota Acres for Wildlife Program" on 450 projects since the program was started four years ago. This program provides recognition and information to landowners who undertake wildlife habitat development on their own.

The traditional day-old chick program is now known as the Habitat-Pheasant Chick Program. Nearly 300 participating groups enrolled habitat projects qualifying them for about 100,000 chicks. The new objectives of the program are to educate and provide habitat.

Wildlife managers are involved in various environmental investigations--from evaluating oil spills to providing information for the preparation of Environmental Assessments. Reviewing highway, pipeline, and transmission line routes and providing recommendations is commonly performed. Other environmental review includes sewage disposal plans, dredging plans, ditch proposals, water permit applications, watershed projects, and many construction projects. An ever increasing amount of effort is placed on these programs, with less time available for other programs.

Hunting Seasons

In 1975, the deer hunter, for the fourth consecutive year, had the opportunity to choose his own season. Hunters had a choice of nine zones and from one to 16 days of hunting time. About 328,000 firearms hunters registered 63,604 deer. An additional 2,265 deer were taken by 32,615 archers.

A third moose hunt in recent times was held in the fall of 1975; 750 permits were issued to Minnesota residents in parties of four hunters each. A total of 676 moose were taken for a 90 percent hunter success rate.

Hunting seasons for small game are established to provide maximum hunting recreational opportunity without harming wildlife populations. Ducks harvested during the fall of 1975 totaled 1,578,000 birds, an increase of more than 400,000 from the year before. Even with a higher harvest, the breeding mallard population in the spring of 1976 has shown an increase from the previous spring. The harvest of Canada geese doubled from 35,000 birds in 1974 to 71,000 birds in 1975, which parallels the growth trend of the Canada geese population. The harvest of small game species also has shown an increase for ruffed grouse, Hungarian partridge, cottontail rabbits, and raccoon.

Waterfowl and upland game hunting opportunities were greatly decreased due to the hunting ban in the northern two-thirds of Minnesota (as a result of fire danger in the fall of 1976). Reduced hunting opportunity is expected to reduce the harvest of surplus game species. Fire danger will result in delaying the 1976 deer firearms season until November 13. Deer harvest for 1976 was estimated at 28,000.

Forest Wildlife Research

Population monitoring for deer, moose, grouse, beaver and forest predators was continued during the biennium. The spring pellet count census of deer provides data used extensively for establishing hunting seasons. Aerial moose censuses and summer productivity surveys are undertaken annually to determine population levels, productivity, and survival of the herd. Sharp-tailed grouse are censused each spring by dancing ground surveys; and ruffed grouse by drumming log counts. Aerial transects are flown to determine changes in abundance of beaver in northern Minnesota.

Research focuses on deer physiology, deer habitat requirements, forest predator ecology, long term effects of fire on wildlife populations, and development of an effective deer barrier.

Findings from studies of deer habitat requirements show the need for providing and maintaining herbaceous stands of green forage during the transition period from fall to winter. The impact of coyote predation on deer in northern Minnesota is being investigated.

Research on the long-term effects of fire on vegetation and wildlife populations has been conducted on the Red Lake Wildlife Management Area for several years. Surveys show that burned areas now support three to four times the number of deer as do nearby unburned (control) areas.

Wetland Wildlife Research

Breeding ground surveys are conducted to estimate the number of breeding waterfowl in the state. In 1976 there were 152,000 breeding

mallards in the state, an increase of four percent from 1975 -- the highest number since the surveys began in 1968. Ring-necked ducks continue to provide an unusually high proportion of the state duck bag -- ranking third behind mallards and wood ducks.

For the past 25 years, very little development work has been done on purchased wetlands. Research is currently underway to (1) determine methods and equipment most useful in wetland development work, (2) to evaluate the effect of wetland development on waterfowl populations and (3) to develop a workable wetland management plan which can be employed statewide.

Farmland Wildlife Research

Annual roadside counts provide valuable information on the population status of pheasants, Hungarian partridge, cottontail rabbit, jack rabbit, mourning dove, deer, and red fox.

Research is underway to determine the feasibility of managing roadside cover for nesting pheasants, prairie song birds, and small mammals. Roadsides make up two percent of the total land in the agricultural area, and in most cases are the only areas left for wildlife. The importance of roadsides in the past 15 years has increased 300 to 400 percent, and they now provide from 18 to 24 percent of the available nesting cover of southwestern Minnesota.

Haying or grazing before July 30 can reduce the production of most ground nesting wildlife by 25 to 50 percent. Removal of nesting cover may be even more critical to wildlife production the following year. Roadside management appears to hold considerable promise as a means of partially offsetting losses of nest cover on agricultural land.

The stocking of wild turkeys in southeastern Minnesota during the late 1960's and early 1970's has proven highly successful. These transplants have resulted in the establishment of two separate populations of wild turkeys estimated to currently number up to 1,000 individuals. Plans for the next biennium include trapping and transplanting of some birds to five new sites in southeastern Minnesota. Stocking of prairie chickens in and around the Lac Qui Parle Wildlife Management Area is also planned in the immediate future.

Elk Management Plan

Minnesota's elk herd, which consists of approximately 12 animals, has caused problems recently due to conflicts with agricultural uses. The Department's objectives are to manage the herd in a wild free state and retain the herd at a low level until such time as conflicts with agriculture have been resolved. Landowners in the affected area will be contacted in regards to the elk management plan and requested to enter into a cooperative food plot program.

ECOLOGICAL SERVICES

The Department's Fish and Wildlife Ecological Services Section provides the six regions and the Central Office staff diversified support and technical services essential in carrying out effective fish, wildlife, water, and other natural resource programs. These services fall into three major areas: surveys and investigations, technical services, and laboratory services.

Surveys and Investigations

Lake Mapping

Fewer lakes are being sounded annually by the two crews in recent years because some very large border waters are on the project schedule. During the biennium 175 lakes were sounded, including collecting other limnological information, and 212 lake maps were prepared. One hundred were sounded the first year (FY 76) and 73 the second. During the first year 73 maps were prepared, and 139 the second (FY 77).

Fish and Wildlife Habitat Evaluation

Investigations of ten small watershed projects (P.L. 566), four the first year and ten the second, were conducted on the fish and wildlife aspects. Investigations of 24 Corps of Engineers projects, nine the first year and 15 the second, were made. Surveys were completed on 18 shallow waterfowl-muskrat lakes, seven the first and 11 the second. Environmental assessments and impact statements were reviewed and recommendations were provided on the fish and wildlife aspects of 173 projects, 83 the first year and 90 the second.

Major River Surveys

Fish and wildlife surveys were conducted on the following rivers: In FY 76 the Mississippi River from Lake Itasca to Lake Winnibigoshish, Dunka River and Langley Creek, and the Roseau River. In FY 77 studies were finished on the Roseau, and surveys were also conducted on the Wild Rice, Red Lake, and St. Louis rivers, with some work being started on the Cannon and Clearwater rivers.

Monitoring the Fish Populations Below Power Plants

The long term study to assess effects of the Prairie Island nuclear power plant on the fish populations and fishing success in the Mississippi River continued through FY 76 and into FY 77. In FY 76, the alternate year assessment of fish populations in the St. Croix River near the A. S. King power plant continued.

Statewide Creel Census

A five-year statewide creel census on 75 lakes and 30 trout streams, started in April, 1971, was terminated in September, 1975. In 1975, a total of 12,479 anglers were interviewed. They had fished a total of 34,181 hours, catching 21,801 fish at an average rate of 0.64 fish per hour.

Other Studies and Monitoring

Water quality monitoring on five of 15 representative fish lakes on a three-year rotation was done each year of the biennium. A study to evaluate the effects of the Wrenshall oil refinery on trout populations was continued through the biennium.

Technical Services

Aquatic Nuisance Control

The statewide aquatic nuisance control permit system was partially decentralized (Regions I, II, IV, and V) in FY 76 and will be totally by the end of FY 77. During the biennium, a total of 1,143 aquatic nuisance control permits were issued, 518 permits the first year (FY 76) and 625 permits the second year (FY 77).

Pollutional Spill and Kill Investigations

Eighty-one pollution complaints involving potential fish and/or wildlife were investigated, 41 in FY 76 and 40 in FY 77. About 27 percent of these were associated with fish and wildlife kills.

Technical Assistance and Data Analysis

Technical assistance was provided to Department personnel on making fish population estimates, on estimating fishing potentials of reservoirs, and analyzing fish net catch and tagging data. For both years of the biennium, lake basin physical characteristics and statewide fish net catch data is in the process of being punched on IBM cards. Water chemistry data from lakes and streams surveyed around the state will also be processed and summarized on IBM cards and printouts.

Resource Information Service

Approximately 2,400 requests (1,200 each year) by telephone calls and personal visits, for information on the physical, chemical, and biological characteristics of lakes and streams were processed in FY 76 and FY 77.

Statistical Services

Statistical services were provided to Department personnel on a variety of jobs. The most complex included a sampling plan for a survey of state parks, a survey of boats on the St. Croix River, and a statewide survey of households for the statewide recreation plan.

Laboratory Services

Biological Laboratory Services

Disease prevention and control has been carried out on a continuing basis at all state fish hatcheries and rearing facilities. Cooperative efforts were maintained with the University of Minnesota Veterinary Diagnostic Laboratory, Department of Health, PCA, FDA, and EPA on problems of mutual interest. Recommendations on nutrition and formulation of medicated diets were provided to trout hatchery managers. Identification and aging of animal tissues has been provided to enforcement personnel. Investigations and input of the laboratory as a member of the Great Lakes Disease Control Committee and the Tri-State Fish Medication Clearance Committee will also continue. Autopsies, examinations, and tests, 3,450 for the biennium (1,650 in FY 76, 1,800 in FY 77) were made on 1,496 fish (610 in FY 76 and 886 in FY 77) and wildlife specimens for diagnosing diseases and parasites infecting them, and recommending methods of prevention, control, and treatment.

Chemical Laboratory Services

During FY 76 and 77, analytical work was carried out in the following areas: water quality in relation to fish and wildlife and ground water management; toxic substances affecting fish and wildlife nutrients of game animals; and baselines for metals in wild animal tissues in the copper-nickel region. The analysis included 2,040 samples (925 in FY 76 and 1,115 in FY 77).

Reports and Publications

Twenty one reports and publications were or will be completed during the biennium, six during FY 76 and 15 in FY 77.

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PARKS AND RECREATION MANAGEMENT

Park Development

The Park Development Program within the 61 State Park and Recreation areas during Fiscal Year 1976-77, consisted of developing new facilities and remodeling old facilities for \$3,336,000. Approximately one-half of these projects were handled by force account in the field. The balance of the projects are being handled through the Bureau of Engineering with construction contracts. These are in various stages of implementation. They also correct some noticeable health problems, such as: water and sewage problems, provide additional toilet buildings, and repair safety problems such as the Tower Soudan Mine. It is anticipated that all projects will be under construction or completed in FY 77.

Park Maintenance & Operation

All 98 Park and Recreation Units continued to maintain and operate at the same rate as the previous biennium with the exception that the '76 legislature deleted Birch Coulee from the system to Minnesota Historical Society and transferred the jurisdiction of Split Rock Lighthouse to the Historical Society. Another park that was established in 1963 became operational in 1976 -- O. L. Kipp, Houston County, in the southeastern part of the state. The land acquisition program, under Resource 2000, although it acquired 7,000 acres into the system, in many cases made the park easier to operate because of removal of the in-holdings. The calendar year 1975 attendance showed a temporary leveling off with the approximately 6.6 million visitors. The calendar year 1976 was a banner year for the spring and summer, but the fall fire season had a detrimental effect on park attendance. The income from park permits, campground registration fees and materials sold is headed for an all time record of \$2,097,830 for the 1976 calendar year.

State Park Land Acquisition Program Under Resource 2000

The \$7 million dollar program for land acquisition inside of State Park and Recreation areas is being administered by the Bureau of Lands, and to date has acquired 7,000 acres. It is anticipated all of these funds will have been expended on land purchased or committed to purchase of lands.

Handicapped Accessibility Program

The year 1976 marked the beginning of a program to serve all individuals of Minnesota, including the handicapped and elderly. An Interpretive Specialist for the Handicapped, on a nine-month basis, was employed to plan and coordinate facility, and educational/recreational programming accessibility, for the handicapped and elderly. Approximately 10 percent of Minnesota's total population is handicapped in mobility. This figure does not include the elderly with mobility problems nor those with sensory handicaps, thus the need for outdoor accessibility in Minnesota definitely is present.

Eight state parks along with a few recreation areas throughout Minnesota are now in the beginning stages of becoming physically accessible. Physical accessibility within these areas includes providing such facilities as ramps rather than stairs, accessible picnic tables, and nature trails with manueverable surfaces.

Accessible educational/recreational programming is also a valuable area of the total accessibility program. It provides major opportunities for involvement with the varied disciplines of the Department of Natural Resources, such as Interpretive Services, the Trails Program, the Bureau of Information and Education, Environmental Education, ORA - Park Planning, and the Division of Forestry. The interpretive specialist for the handicapped also provides knowledge and resource services to other units served by the Department, agencies affiliated with handicapped, and others who are interested in the program, such as special education instructors.

In-service training has also become an important portion of the Handicapped Accessibility Program. Key natural resource managers, as well as other involved employees of the Department, have been in-serviced to provide responsibility in meeting the program and facility requirements of all visitors, and to work toward our major concerns of attitudinal barriers and integration versus segregation; thus, developing a better understanding of the needs of the disabled.

The value of the Handicapped Accessibility Program within the Division of Parks and Recreation is growing, due to the increasing demand to provide accessibility in the out of doors for all individuals, including the handicapped and elderly.

Scientific and Natural Areas

Thirteen Scientific and Natural Areas were established through a free lease from The Nature Conservancy. The Wacouta Pond will be established as a Scientific and Natural Area by a free lease in 1977. The Clay County Bicentennial Prairie was dedicated in 1976, after Clay County Commissioners requested that this be made a Scientific and Natural Area.

The Advisory Committee (to the Commissioner of Natural Resources) on Scientific and Natural Areas held 12 meetings in two years, discussing and reviewing approximately 400 sites which are being considered as Scientific and Natural Areas. At the end of the fiscal year there will be 20 designated Scientific and Natural Areas.

Interpretive Services

Through a combination of facilities, programs, information and staff, the Interpretive Services attempted to serve the visitors of all the Parks and Recreation divisional resources. Surveys revealed that about two million of the seven million state park visitors benefited from this program each year.

The five full-time regional naturalist positions authorized by the 1975 Legislature were filled early this biennium. The sixth region, the Metro, has a nine-month seasonal position to serve as their regional naturalist. Sixteen state parks are now staffed with a seasonal naturalist including one nine-month person at the Pike Island Nature Center in Fort Snelling State Park. The seven mine guides at Tower Soudan continued the excellent underground mine tours serving more than 30,000 visitors per year. Fifty-five seasonal naturalists were recruited for 38 state parks through the Volunteers in Parks, Governor's Youth, Work Study, CETA and college intern programs.

There are 22 operative interpretive centers including recent dedications of interpretive centers at Upper Sioux Agency State Park, Blue Mounds and Helmer Myre state parks. Minnesota crafts are being demonstrated at Brower Inn in Itasca State Park as a new interpretive effort using more than 40 volunteers and paid help from local government and other sources.

Many visitors were served through self-guided trails, radio broadcasts within the park, park handouts, tape tours and other interpretive media. Schools, the Regional Environmental Education Council, and other civic groups were assisted by the regional and park naturalists throughout the year. Progress was made toward the completion of the interpretive centers at Tower Soudan and Wild River state parks.

Youth Conservation Corps

The first residential (live-in camp situation) YCC Program was in operation from June 16 - August 22, 1975. The two five-week sessions employed 40 (20 per session) 15 through 18-year-old young people from all areas of Minnesota. The camp was located at Sundog Environmental Learning Center, near Bemidji. In addition to the great amount of work accomplished for the DNR, the young people received a minimum of ten hours per week of Environmental Education.

In the fall of 1975, Minnesota ran a non-residential (live at home) program in cooperation with the work study program in 13 schools throughout Minnesota, employing 50 youths. This was a pilot program for the nation.

The 1976 summer residential program was operated in DNR Regions I, III and IV from June 14 - August 20, 1976, and employed 94 young people.

Upper St. Croix Project

The joint Federal/State Environmental Impact Statement on the Upper St. Croix National Scenic Riverway was completed August 8, 1976. The "Upper St. Croix Summary Report", published in April, summarizes the proposals of the National Park Service, Northern States Power Company, and Wisconsin and Minnesota Departments of Natural Resources, for the St. Croix.

Federal funding assistance to Minnesota of \$4,004,000 from the Land and Water Conservation Fund was announced by the Interior Department Secretary on a visit to the St. Croix River September 24, 1976. These funds will enable acquisition of land and development of recreational facilities in accordance with the Department's Resource Management Plan for the Upper St.

Croix which encompasses St. Croix and St. Croix Wild River state parks and the St. Croix and Chengwatana state forests.

Northern States Power Company, as part of their land donations program on the Upper St. Croix, gave to the state 1,025 acres of land valued at \$1,294,800. This land is within the boundaries of St. Croix Wild River State Park.

Trail Programs

The DNR's Trails Section currently has two programs directly related to trail implementation on a statewide basis. These are the Corridor Trails Program and the Grants-In-Aid Program. In the 1976-77 biennium, the combination of the two has resulted in the Legislative authorization and/or development of 12 multiple-use corridor trails totaling more than 1,200 miles, and 3,500 miles of Grants-In-Aid trail projects. The latter has expanded to include approximately 66 of Minnesota's 87 counties.

Listed below are the individual program statistics:

CURRENT CORRIDOR TRAIL SYSTEM

<u>NAME</u>	<u>COUNTIES</u>	<u>LENGTH OF TRAIL MILES</u>	<u>MILEAGE COMPLETED</u>
Casey Jones	Pipestone and Murray	37	14
Heartland	Cass and Hubbard	48	27
Minnesota Valley	Hennepin, Dakota, Scott, Carver, Sibley, Nicollet and LeSueur	72	34
Minnesota-Wisconsin Boundary	Ramsey, Anoka, Washington Chisago, Pine, Carlton and St. Louis	210	100
Luce Line	Hennepin, McLeod, Kandiyohi and Chippewa	104	104
Root River	Fillmore and Houston	50	
Sakatah Singing Hills	Blue Earth, LeSueur and Rice	42	26
Taconite	St. Louis and Itasca	110	70
Douglas	Olmsted and Goodhue	12	12
Glacial Lakes	Kandiyohi, Pope and Douglas	100	
Arrowhead	St. Louis, Lake, Cook and Koochiching	<u>450</u>	<u>50</u>
	TOTALS:	1,235	437

GRANTS-IN-AID PROJECTS, BY COUNTY - 1976

<u>COUNTY</u>	<u>NEW</u>	<u>Miles Maintained</u>	<u>No. of Projects</u>	<u>STATE COST</u>	<u>TOTAL COST</u>
1. Aitkin	36	277	5	\$56,813.84	\$36,929.00
2. Anoka		58	1	21,538.46	14,000.00
3. Becker	99	117	3	35,346.15	22,975.00
4. Carlton	60	110	4	52,076.92	33,850.40
5. Cass	59	105	5	39,176.92	25,465.00
6. Chisago	10	14	2	3,338.46	2,170.00
7. Crow Wing	118	149	8	51,629.23	33,559.00
8. Dakota	25		1	10,035.38	6,523.00
9. Dodge	66	15	2	11,012.00	7,158.00
10. Douglas	53	39	3	21,669.23	14,085.00
11. Faribault		18	1	3,500.00	2,275.00
12. Freeborn		104	1	20,349.23	13,227.00
13. Hennepin	1	31	2	16,833.84	10,942.00
14. Houston	85	161	7	48,176.92	31,315.00
15. Hubbard	40	53	4	16,749.23	10,942.00
16. Isanti	25	87	4	27,140.00	17,641.00
17. Itasca	15	92	2	24,615.38	16,000.00
18. Lake	25	123	5	52,603.07	34,192.00
19. Lake of the Woods	10	24	1	5,000.00	3,250.00
20. Meeker	5	147	3	24,018.46	15,612.00
21. Mille Lacs		30	1	2,307.69	1,500.00
22. Olmsted		17	1	3,400.00	2,210.00
23. Pennington		75	2	4,701.53	3,056.00
24. Pine		53	4	11,396.92	7,408.00
25. Scott	16	10	2	6,500.00	4,225.00
26. Sherburne	15	20	2	5,538.46	3,600.00
27. Stearns		23	2	2,769.23	1,800.00
28. Steele		59	1	1,538.46	1,000.00
29. St. Louis	15	35	2	27,692.31	18,000.00
30. Wabasha	87		1	27,692.31	18,000.00
31. Wadena		87	1	10,000.00	6,500.00
32. Waseca	<u>42</u>	<u> </u>	<u>1</u>	<u>19,100.99</u>	<u>12,415.00</u>
TOTAL	907	2,175	84	\$666,568.30	\$433,269.40

Wild and Scenic Rivers Program

Kettle River: Designated July 18, 1975, the 52-mile stretch of the Kettle River in Pine County is the state's first Wild and Scenic river segment. Pine County is expected to adopt this year land use ordinances which comply with the river management plan. The DNR received donations of scenic easements on 80 acres, 500 acres of land and a lease on more than 800 acres which eventually will be given in fee title.

Mississippi River: The 52-mile stretch of the Mississippi River from St. Cloud to Anoka was designated June 25, 1976. The Rivers Section is now helping counties and municipalities draft land use ordinances which should be adopted by April 15, 1977. The Nature Conservancy has donated 180 acres to the state. Northern States Power Company is considering donating scenic easements on 400 acres. The Rivers Section is negotiating for scenic easements on about 200 acres. Development of recreational facilities has already begun, with the construction of a canoe and boat access near Monticello.

Crow River: The 41-mile segment of the North Fork of the Crow River in Meeker County was designated a Recreational river on August 24, 1976. Local land use ordinances should be adopted by May 15, 1977. The River Section is now talking to landowners about the sale of land and easements. Recreational development should begin next spring.

Crow Wing River: Public meetings on a DNR proposal to designate the 51.4-mile stretch of the Crow Wing River in Wadena County were conducted in April, 1976. A citizen advisory council of local officials, landowners and other area citizens began meeting in June to revise the management plan for the river. A revised plan should be completed by the end of the year. The public hearing on the proposal should be conducted in the spring of 1977. The river may be designated by July 1, 1977.

Minnesota River: The Rivers Section has completed a management plan for the 95.5-mile stretch of the Minnesota River from Lac qui Parle to Franklin and is now meeting with area groups and officials. Public hearings should be completed in November, 1976. Designation is expected in March, 1977.

Rum River: A citizens advisory council is studying the DNR's management plan for the Rum River. The council's work should be finished by December, 1976. Public meetings will probably be conducted in February, 1977.

Canoe and Boating Route Program

Site Development: The Rivers Section has worked with regional DNR staff, area organizations and landowners in developing recreational management plans, buying land and leases and developing recreational sites along the state's 18 canoe and boating route rivers. The section will continue to plan, develop, and maintain facilities along these rivers.

Public Services: The river level reporting service, which has operated for many years, will be improved. A brochure on the Canoe and Boating Route Program has been printed. New pocket-sized canoe route maps for all designated canoe and boating routes will be available to the public free of charge for the 1977 canoeing season. A revised Voyageur Trails canoe guide will also be available in 1977.

Implementation of the Outdoor Recreation Act of 1975

The Park Planning staff has continued to implement the Outdoor Recreation Act of 1975 during the Fiscal Years 1976-77 by preparing detailed resource management plans for 20 major recreational units. These plans will determine the units' best recreational uses and how to best manage their resources. The procedure in preparing these plans has required the staff to have at least two public meetings per plan, and final public informational hearing at their completion.

The staff has also completed the requirement of classifying each of the units, and has prepared a summary of each decision for legislative review. Rules and regulations have been established for the administration of Natural and Recreational state parks. The parks planning staff has also been responsible for preparing a State Registry that lists the name, location, size and administration of all units within the State Recreation System. This registry is now complete and has been computerized for convenience and flexibility.

The North Shore Systems Study

The North Shore Systems Study is a recreation study financed with matching funds from the Coastal Zone Management Program. The purpose of the recreation system study is first, to assess the recreation potential (opportunities and limitations) of certain local, state, federal and private lands on the North Shore; second, to tie together existing and proposed recreational units through a North Shore recreation system plan which can easily be incorporated into the Coastal Zone Management Program; and third, to provide a framework for preparing individual master plans for units of the State Outdoor Recreation System located in the Coastal Zone.

The study is divided into two parts. Part one analyzes all those elements that make up a recreation system. They are as follows: The user and his relationship to the economy of the region; the networks that make the backbone of the system; the existing and proposed facilities for recreation and the ability of the natural resources to provide and tolerate recreational activities. Part two will be an analysis of DNR and Highway departments' properties on the North Shore, and their relationship to the elements studied in part one.

An effort has been made to involve the public, to the extent possible, in the planning process. Initially, public input was solicited to pinpoint problem areas. Data collection was then organized to provide the information needed to effectively deal with these specific problems. At this point, management alternatives are being formulated. When complete, these

alternatives will be presented to the public for a discussion of the relative merits of each alternative. The results of these public meetings will be considered in formulating the final management plan for the North Shore.

Interpretive Services Under ORA 1975

Regional naturalists have prepared comprehensive interpretive management plans for 20 state parks. These plans are designed to provide for the optimal use of state parks for interpreting geological, biological, archaeological, and historic values commensurate with compatible use and preservation of park natural and cultural features.

DIVISION OF PARKS AND RECREATION

<u>General Revenue</u>	<u>1976</u>	<u>1977</u>
Parks - Maintenance and Operations	3,414,002	3,414,002
Interpretive Services	158,556	158,556
Trails - Corridor and Grants-in-Aid	1,045,000	1,045,000
Parks & Recreation - Labor Service (1976 Session)	50,000	50,000
Bicycle Trail Program (1976 Session)	100,000	
Trails - Unrefunded Gas Tax (1976 Session)	1,300,000	
Canoe and Boating River Sites	300,000	
Youth Conservation Corps	150,000	
Land Acquisition-State Parks & Recreation Areas	7,000,000	
Land Acquisition-State Trails	1,000,000	
Land Acquisition-Wild, Scenic & Recreational Rivers	500,000	
<u>Total - General Revenue</u>		<u>\$19,685,116</u>

LCMR

Acquisition of State Park & Recreation Areas	2,500,000
Acquisition of State Recreational Trails	800,000
Acquisition of Wild & Scenic Rivers	250,000
Acquisition of Canoe & Boating Sites	75,000
Acquisition of Scientific & Natural Areas	100,000
Acquisition of scenic easements-St. Croix Riverway	275,000
Acquisition of Land-Helmer Myre State Park	350,000
State Land Recreation Development (\$1,800,000 from State Parks Development Account - Sticker Income)	3,336,000

LCMR - (Cont'd.)

Management Upper St. Croix	93,900
Planning for Wild, Scenic & Recreational Rivers	300,000
Implementation of Minnesota Outdoor Recreation Act of 1975 - Classification & Management Plans	408,000
	<hr/>
<u>Total - LCMR</u>	\$ 8,487,900
	<hr/>
<u>Grand Total</u>	\$28,173,016

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PLANNING AND ENVIRONMENTAL PROTECTION

Long-range planning, environmental review and administration of federal grants for outdoor recreation are the major activities of this Bureau. This biennium witnessed an abnormal increase in activity centered around environmental review of proposed federal, state, and private projects. The Bureau represented the state on the Great River Environmental Action Team (GREAT) as this multi-agency effort to protect the environment of the lower Mississippi River Valley from indiscriminate dredging disposal practices.

Land Use Planning

Another accomplishment was preparation of a Wildlife Management Area Long-Range Acquisition Plan with the Wildlife personnel. The Bureau completed draft Rules and Regulations, which were adopted after public hearings and which provide certain restrictions on land use along the St. Croix River below Taylors Falls.

Land use planning activities centered around the perimeter of Voyageurs National Park under study by a special inter-agency committee. Coordination of land classification of state lands was active in certain sections of the state, and much time was spent in meetings concerning the northwestern county public lands. A remote-sensing study initiated in 1974 indicated ways that modern techniques can be applied to land use data gathering.

Outdoor Recreation Planning

A technical report, "Minnesota 1974 State Park Users Survey" was printed and distributed. Preparations are under way to conduct a public survey of outdoor recreation participation required to prepare the 1979 State Outdoor Recreation Plan.

Environmental Review

Federal project proposals, including the Garrison Diversion, Voyageur Park Plan, Roseau River Flood Control, and many others as well as state and county highway project proposals, required staff review and comment. A total of seven environmental documents were prepared and distributed.

Water and Related Land Resources Planning

1. The State Water and Related Land Resource Framework Plan: During the last year, the staff has started work on Phase I of the State Water Plan.
2. Minnesota Water Resources Council: The Council was reconstituted during the year to include all of the major state agencies. The Council is charged, by the Governor, with the coordination of water and related land resources planning and its activities are of major importance in the development of the State Water Plan.
3. River Basin Commissions: Major activities in this area during the past year have been the GREAT Study; The Twin Cities Level B Study; National Assessment; Program Review and Priorities Reports. The additional staff has allowed the State of Minnesota to take a more active role in the River Basin Commissions.

Federal Aid Coordination

Federal Aid Programming Unit: The unit has been instrumental in obtaining additional federal funds for the Department from sources such as the Upper Great Lakes Regional Commission. The following table represents activity on the Land and Water Conservation Program for the two-year period July 1, 1974 to June 30, 1976:

Land and Water Conservation Fund: Active State Agency and Contingency Reserve projects totalled 135.

Projects Submitted and/or Approved: 25 projects --*\$5,194,081.00 (Federal Share)

Acquisition:	11 projects totaling	\$ 865,641.00
Development:	12 projects totaling	302,500.00
Acquisition & Development:	1 project totaling	4,003,000.00
Planning:	1 project totaling	22,940.00

*This total includes \$4,003,000 federal share for the Upper St. Croix Scenic Riverway Project, which involves acquisition and development within two state forests, two state parks, and one wildlife management area.

More than \$500,000 was obtained from the Department of Commerce's Title 10 Program administered through the Upper Great Lakes Regional Commission.

New Proposals Pending Funding This Biennium

The Department of Natural Resources intends to initiate a comprehensive, strategic plan for establishing its current goals or missions, objectives (targets), and policies to be followed to achieve these objectives.

A long-term "look" toward future needs in providing the public lands and waters for fish and wildlife, mineral resources, forests and state recreation areas will be required.

This strategic plan will be followed by program planning in each major discipline area within the Department. Comprehensive long-range plans for management of the natural resources, including fish and wildlife, minerals, forests and outdoor recreation would be included in program plans.

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ENFORCEMENT

The Department of Natural Resources is responsible for carrying out the enforcement of game and fish laws, snowmobile, boat and water laws.

The Conservation Officers are responsible for assisting in the training of youths in the safe use of firearms and snowmobiles. They carry out extensive public relations work, and participate in many meetings with local sportsman clubs, schools, and other organizations.

Arrests and Confiscations

During the two year period ended December, 1975, a total of 15,846 arrests were made by conservation officers, with a two percent dismissal rate.

A total of 626 letters were sent to big game violators informing them of their loss of hunting privileges one year from the date of conviction.

Confiscations received, reviewed, and processed totalled 16,688 -- of which 10,609 were car-killed deer, 803 deer illegally taken or poached, 242 deer killed by dogs, 191 deer diseased or crippled, and 216 confiscated on miscellaneous death.

A total of 113 moose were reported killed by car; 75 moose were illegally taken or poached; 12 reported diseased or crippled; and 19 moose confiscated for unknown causes of death.

Twenty-one bear were confiscated because of car kill; nine illegally taken or poached; and 29 bears taken doing damage.

The sale of these perishable confiscations totalled \$38,493.49.

A total of 2,065 confiscations of various pelts were made. These were offered at a fur sale, grossing \$17,297.62.

Confiscated firearms and miscellaneous sporting equipment totalled 735, with gross sales of \$19,883.82.

Public Access

Accomplishments included acquisition of 23 parcels at a cost of \$83,497; development of 52 sites at a cost of \$107,005; and maintainance of 280 public access sites at a cost of \$32,131.00.

Safety Training

During FY 76, there were 27,838 firearms students certified; and 14,922 were certified for snowmobiles. It is anticipated that there will be approximately the same number of students trained in FY 77. As of July 1976, a total of 440,298 firearms safety students had been certified, and 144,149 certified in snowmobile safety since the beginning of the programs.

During FY 76, some 450 firearms safety and 600 snowmobile instructors were certified. It is anticipated that the same number will be certified in FY 77. This continues to maintain the volunteer instructor corps at approximately 3,000 for each of the two programs.

Enforcement has and will continue to purchase the necessary supplies to provide the training required by state law for the firearm and snowmobile safety program.

During FY 76, a total of 46 films were purchased for use by instructors in the two safety programs. Purchased and to be distributed during FY 77 are: 600 sets of the "Hunter Safety Flip Charts", and an equal number of Bow Hunter safety educational posters. The majority of the 5, 10, and 20-year firearms safety instructors recognition awards have been distributed and will be completed during FY 77.

During the past eight months, the Safety Training Section has undergone a 100 percent turnover in personnel. This has impeded the planning, development, and updating of the various programs administered by this section. Hopefully, with the filling of these positions, substantial progress will have been made by the end of FY 77 in the areas of developing new programs, updating present programs, and setting long range goals.

Shooting Range Construction

Agreements have been entered into for construction of ranges at Crookston, East Grand Forks, Breckenridge, and White Bear Lake. These projects should be completed within the next few months. At the present time, exploration is underway of the possibility of entering into agreements for the construction of three additional ranges.

Shooting Safety Sports Program

Work is continuing with the Department of Education on development of a Shooting Safety Sports Program--participating in workshops and working with the pilot schools involved.

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SOIL AND WATER CONSERVATION BOARD

Board operations during the first half of the current biennium covered a broad spectrum of general and project specific resource concerns. As mandated, the State Soil and Water Conservation Board provides the administrative leadership and guidance necessary to carry out a coordinated and effective statewide soil and water conservation program. In order to coordinate such a program with the 92 soil and water conservation districts and the 460 elected district officials, a close working relationship is maintained with the Board of Directors of the Minnesota Association of Soil and Water Conservation Districts (a non-partisan, non-profit organization) and the seven Area Associations within that structure.

To more effectively serve districts, the 1975 Legislature authorized six new positions to be located, one in each of the six Regional offices of the Department of Natural Resources. These staff positions, through coordination with the Central Office, provide for more effective and efficient exercise of district and Board responsibilities and capabilities in implementing soil and water conservation programs. A comprehensive leadership development program is developed to expand the capabilities of these public officials, and assist them in proper and efficient allocation of district resources.

A number of special projects and responsibilities have resulted in an expanded Board program in the areas of erosion control and water resource management.

By sponsoring the Southern Minnesota Rivers Basin Commission and its research of water management needs in Southern Minnesota, the Board has stimulated a program that will provide great benefits to a large population over a broad geographical area. The value of this activity is reinforced by the program established in Study Area II of the Southern Minnesota Rivers Basin, a 1,515 square-mile area. Utilizing a legislative appropriation and working closely with the local action committee, an engineer has been placed in this study area to design and supervise construction of flood control structures critical to the protection of 300,000 acres of valuable cropland. Plans call for expansion of the program in future years, and ultimately for construction of the 81 structures necessary for total protection of the area from periodic and destructive flooding.

The sediment and erosion control efforts of the Board were considerably expanded by an appropriation through the Legislative Commission on Minnesota Resources. The total of \$300,000 allocated to this program, administered by the Board, is used to match local and federal funds for the development and construction of erosion control demonstration projects. To date, 18 project contracts have been signed with soil and water conservation districts that have generated \$1.3 million in matching funds, and stimulated development of innovative methods of controlling soil erosion and resultant sediment. The Board intends to seek additional funds for expansion of this program to further efforts to control lakeshore, streambank, and roadside erosion.

As directed by the Governor, the Board reviews all applications for watershed projects filed under provisions of the Watershed Protection and Flood Prevention Act (PL 566). In an effort to simplify and accelerate watershed protection under this Act, the Board has developed a new system for handling applications which utilizes a "priority pool" concept. Under the program, planning priorities can be shifted to accommodate those watersheds where work is progressing at the fastest rate. Currently, 77 watersheds are in various stages of development, while construction is complete on seven.

The purpose, intent and long-range plans of the Board point toward effective utilization of the existing soil and water conservation district structure, with its strength in local self-government and voluntary cooperation, to carry out its legislative mandate of protecting the public welfare, health and safety through sound management of the soil and water resources of Minnesota.

Soil and Water

Conservation in Minnesota

1975

<u>Soil and Water Conservation Districts</u>	<u>1975</u>
Technical Services (Land Owner Contacts)	63,097
Conservation Plans Prepared	1,677
Conservation Plans Revised	411
Units of Government Assisted	1,002
Groups Assisted	758
<u>Conservation Practices Applied for Erosion Control</u>	
Conservation Cropping System	273,223 Acres
Contour Farming	16,396 Acres
Critical Area Planting	4,903 Acres
Crop Residue Management	212,441 Acres
Diversion	233,114 Feet
Grassed Waterway or Outlet	1,259 Acres
Minimum Tillage	66,438 Acres
Mulching	231 Acres
Streambank Protection	2,300 Feet
Stripcropping	7,862 Acres
Terraces	247,405 Feet
<u>Woodland Treatment and Tree Planting Practices</u>	
Farmstead and Feedlot Windbreak	2,320 Acres
Field Windbreak	1,600,000 Feet
Tree Planting	3,270 Acres
Woodland Improvement	586 Acres

Soil and Water Conservation in Minnesota, 1975 (Cont'd.)

Practices for Improvement Wildlife Habitat

Ponds Installed	2,717
Wildlife Wetland Habitat Management	20,150 Acres
Wildlife Upland Habitat Management	38,758 Acres
Land Converted to Wildlife and Recreation	9,306 Acres

Erosion Control and Water Management Structures

Floodwater Retarding Structure	10
Grade Stabilization Structure	513
Structure for Water Control	149

Assistance on Recreation Development

Recreation Area Improvement	765 Acres
Recreation Trail and Walkway	72,990 Feet

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INFORMATION AND EDUCATION

Organizationally, the Department's Bureau of Information and Education reports directly to the Commissioner's office.

Functionally, the Bureau is structured to be responsive to public informational/educational needs and demands related to 41 major activities administered by the DNR's Central and six Regional offices.

Two Bureau programs, Environmental Education and Boat and Water Safety (the latter federally funded) are legislatively mandated.

The Bureau's state-authorized complement (15 professional and clerical personnel) provides supportive services for DNR seasonal activities (fishing-hunting regulations, recreational trail status information, assistance on various synopses preparation/distribution, public hearings, fire-status reports, State Parks informational advisories, etc.), and for on-going programs related to major DNR disciplines.

Bureau programs and objectives were reviewed and endorsed by LEAP, and, subsequently, by the current Commissioner's Adhoc Committee on Information and Education. (This Committee also recommended consolidation of certain DNR I and E related functions with this Bureau, with special emphasis on the approval of six Regional Information-Education officer positions.)

(Note: on a per capita basis, the Bureau has the smallest I and E staff in the United States. Source: American Association for Conservation Information.)

News Section

Prepares, edits and disseminates releases to 408 Minnesota newspapers, wire services, radio and television media outlets. Provides technical assistance to DNR Regions on communications. Prepares daily radio spot announcements, and a weekly five-minute radio feature for 62 participating Minnesota stations. (Note: during prolonged fire crisis, one I and E staff member was assigned full-time to the Forestry Division.) Produces the Communicator (employees monthly newsletter) and Environmental Focus, an in-depth report on resource concerns for Minnesota's 500-plus conservation/environmental organizations.

Publications Section

Responsible for developing, editing and production of materials on DNR resource activities, including brochures, maps, environmental education curriculum units, technical publications/reports, editing assistance, including legally required synopses on outdoor recreational activities.

Publishes the nationally recognized Minnesota Volunteer magazine; supervises circulation (81,000). (Note: 28 per cent of circulation dedicated to public and parochial school systems.) Section responds to great volume of public inquiries -- written, walk-in and call-in requests for informational materials.

Environmental Education

While this program is shared jointly, via Legislative mandate, with the Department of Education, the Bureau has primary responsibility for program development and implementation, including: production and dissemination of teaching materials, films, film strips and recorded tapes for Minnesota's kindergarten through twelfth grade classrooms. To date, approximately 5,000 teachers, in over 200 school districts, have participated in formal in-service training, and have been provided with Bureau instructional materials.

This program, which received a first place International Award (American Association for Conservation Information) also provides technical assistance in the identification, acquisition and utilization of outdoor education sites; Bureau provided training for 41 DNR resource specialists to serve in technical liaison capacities with School Districts; coordinates its program via the Minnesota Environmental Education Council, Regional level councils, and the technical advice and consultation of educational specialists, including contract writers as required for curriculum units. A central committee, in consort with the councils, sets basic program policy within the confines of the Minnesota Environmental Education State Plan.

Boat and Water Safety

This program is mandated by State and Federal law for all youths, 13 through 18 years, who operate watercraft powered by motors of over 24 horsepower. Made effective January 1, 1975, over 24,000 youths have been trained and certified to date via courses developed and administered by the Bureau, in cooperation with DNR Regions, Sheriffs offices and concerned agencies. Structured on workbooks, manuals and self-testing units, the course is designed as a practical, efficient unit; has received excellent public acceptance and commendations.

General Public Education

To responsibly react to literally thousands of public-area requests annually, and to provide essential services to DNR formal training programs in other disciplines, the Bureau maintains a Publications Library, and a Film Library with multiple units of 112 titles, ten firearms safety training films, a number of films designed for the Interpretive Services program, 19 filmstrips designed as environmental education supportive material, and

slide series related to various DNR programs and objectives. Materials are utilized heavily throughout Minnesota's public schools and college systems, and by private organizations, in literally thousands of showings annually.

The Bureau's audio-visual facilities are designed to respond to the in-house educational and publication needs, public requests, and for public service television programming on seven Minnesota television stations. (Note: The Bureau's North Star Report TV series this year received the first place International Award -- a fisheries management program -- from the American Association for Conservation Information.

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LEGAL

Legal matters of the DNR are handled by a Deputy Attorney General, and assistants appointed by the State Attorney General. Among the services provided during the biennium were the following:

- * Litigation in State District Courts consisting of 110 cases, of which 63 were closed and the balance pending at the end of the biennium.

- * Litigation in Federal Courts (including District Courts, Courts of Appeal, and the Supreme Court) and state tribunals other than district courts consisting of 83 cases, with eight closed.

- * Acquisition of lands for the Department consisting of 166 tracts for the Division of Fish and Wildlife (wetlands, spawning areas, and public accesses to lakes); 101 for Parks and Recreation; 45 for Forestry, and 30 for trails; for a total of 342 tracts for which abstracts were examined, title opinions written and deeds prepared.

- * Various legal services necessary for the preparation and accomplishment of 62 public hearings before the Commissioner of Natural Resources.

- * Collection of 29 delinquent timber accounts.

- * Disposition of 59 legislative claims.

- * Completion of four of 19 pending land exchanges.

- * Approval as to form and execution of 4,008 documents including various contracts, permits, deeds, leases, licenses and federal aid documents.

- * Preparation of 97 Commissioner's Orders.

- * Preparation of four formal Attorney General's Opinions, and numerous written advisory opinions to the various agencies and offices served by the staff.

In addition to these specific, quantifiable legal services, the Legal Bureau staff has provided legal services to the Department in connection with continuing land transfer matters relating to Voyageurs National Park; the drafting of more than 45 legislative bills for introduction in the 1975 and 1976 Legislative Sessions; the drafting of rules and regulations relating to wild and scenic rivers, drainage, water permit fees, water surface use zoning, scientific and natural areas, recreational trails, captive wild animal exhibits, water permits, emergency public water designation, and mined land reclamation; appearances before legislative commissions and committees;

preparation of pamphlets containing the laws administered by DNR (such as the handbook of Game and Fish laws); and drafting, amendment and administration of the several hundred mineral leases currently in effect.

The staff also provided legal services to the State Soil and Water Conservation Commission; the Land Exchange Commission; the Land Exchange Review Board; and the State Executive Council.

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REGIONAL ADMINISTRATION

The period from July 1, 1975 through June 30, 1976 will be remembered by those associated with the Department of Natural Resources by such terms as "decentralization," "regionalization," and "improved responsiveness".

It was a fiscal year in which the concept of regional administration of the Department programs attained maturity, and the function of the Regional Administrator became known to the clientele he serves. It was a period of time when the new organizational concept underwent some fine tuning adjustments to improve resource management techniques and business functions. It was the time the public found doing business on the local level vastly improved.

Under the regional concept the Regional Administrator serves as a "mini" commissioner for his particular region, solely responsible for accomplishing the goals and objectives formulated by the Commissioner's staff and approved by the Commissioner. The administrator is directly responsible for managing the resources of the Region. Coordinating and maximizing the utilization of the budget, manpower, equipment and facilities are prime functions.

Enforcement of the rules and regulations that are enacted to protect human life, property and the natural resources is an assigned task. Department regulatory responsibilities in leases, permits, and sales are regional responsibilities.

Providing greater opportunities for the public seeking recreation, environmental interpretation, hunting and fishing as determined through comprehensive long range planning are delegated to the Administrator. The Regional Administrator and staff serve as the sources for local information as well as one of the sources for statewide information. The Regional Administrator heads a team of resource managers and business specialists to provide efficient and effective public service.

For these reasons the functions of the Regional Administrator are that of a "mini" commissioner and the terms decentralization, regionalization, and improved responsiveness are therefore so closely identified with field operations.

Construction of one new Regional Headquarters building and the remodeling of two others will be completed during Fiscal Year 1977.

In Region IV (Southwest), the new Regional headquarters building under construction on the south bluff of the Cottonwood River at the south edge of New Ulm will be ready for occupancy this winter. The 79-acre site was donated by the City of New Ulm and Brown County.

In Region VI (Metro), remodeling of the St. Paul Fish Hatchery into the Metro Regional Headquarters, Southern Service and Area Fisheries Headquarters is scheduled for completion in December, 1976.

In Region V (Southeast), remodeling of the Headquarters building at Rochester is set for completion by January 1, 1977.

LAND

Acquisition and Exchange Section

The Bureau of Land's Acquisition and Exchange Section has two basic functions.

Land acquisition involves the acquiring of land for state parks, trails, forest management, game management, fish management, public access, scenic areas, and other purposes of the Department. This involves obtaining the rights to the land whether it is in fee title, easement, lease, gift, etc. To carry out the acquisition, the Section is responsible for obtaining appraisals; negotiating with land owners; relocation problems; obtaining surveys; and working with legal staff, private interest groups, and local political subdivisions. This includes maintaining files on all land acquisition transactions, whether in process or completed, and preparing progress reports and other reports relative to the land acquisition program.

During the biennium ended June 30, 1976, 236½ parcels of land were acquired in fee title totaling 28,717.152 acres at a cost of \$4,241,952.69. A total of 25½ parcels of land were acquired by easement, totaling 173.65 acres at a cost of \$15,657. In addition, three parcels of land were acquired by lease totaling 2,072.0 acres at no cost; one temporary limited use permit was acquired on 1.0 acres at no cost; a special use permit was acquired on 0.8 acres at no cost; and one license was acquired on an unestimated number of acres, at no cost.

Land exchange involves working with all disciplines of the Department, Regional Administrators, counties, federal government, corporations, and private individuals. Approximately 70 exchange proposals are received per biennium, which are reviewed to determine whether they are in the best interest of the state, and feasible as well as legally possible. Land exchange provides the only real means of adjusting state ownership patterns; consequently, exchange proposals are carefully reviewed. Proposals having merit are reviewed by the Regional Administrator and his staff for recommendation to the Land Exchange Board, which is the final authority on all land exchanges.

During the biennium ended June 30, 1976--14 land exchanges were completed -- involving 6,686.21 acres valued at \$306,463.30.

Record Section

The primary responsibility of this Section is to provide ownership status and other pertinent data to all who request it, for each parcel of

state owned DNR administered land. This land comprises approximately 95 percent of the state owned, state administered land. The records are kept in abstracts, maps, card files, and two data processing systems, which cover all the above lands and also tax-forfeited land in all counties which administer a significant acreage. The state ownership records contain 5,208,000 acres owned, and 3,484,000 acres which have been sold.

The field offices, regions and areas, are provided annually with updated sets of microfiche which list every description of land which is either all or partly state owned DNR administered.

The tax-forfeited land totals approximately 2,900,000 acres. Lieu tax payments from Game lands to the counties are calculated by this Section. Payments for '74 and '75 totalled \$269,384.00.

State Land Leases

The purpose of leasing land is to provide a means for the public to make use of State Lands for private or commercial purposes when by law or by policy the Department is restricted in the sale of the land.

DNR's Bureau of Land is charged with the responsibility of the administration of the surface leasing of state lands. (State land is defined as those state lands which are under the control of the Commissioner of Natural Resources.)

State lands are leased for various purposes, the most common being for: utility right-of-ways, lakeshore and hunting cabin sites, agricultural purposes, gravel removal, and roadways. Before any leases were issued, future development of the land was considered.

At the end of the biennium the Bureau of Land was administering a total of 5,780 leases. This is an increase of 380 leases from the previous biennium. Revenue from state land leases amounted to almost \$582,000.00. Revenue increased 76 percent from the previous biennium. This increase is due to more active leases being administered, updating lease fees, collecting 50-year fees for utility crossings, and increasing lakeshore fees to more realistic values.

State Land Sales

The purpose of sale of state lands is to provide for the disposal of state lands that are considered better suited for private development, and are surplus to state needs for conservation purposes.

There were no trust fund land sales during fiscal year 1974. In fiscal year 1975, 400 acres were sold for \$47,900.

During fiscal year 1974, a total of 1,066 acres of consolidated conservation area land was sold for \$45,160; and in fiscal year 1975--3,466 acres were sold for \$214,380 -- for a total valuation of \$259,540.

Gross revenue from the sale of state land, condemnation of state land, and renting of road right-of-way easements for Fiscal Year 1974 was \$4,474,010. The gross revenue from the same sources in 1975 was \$652,500.

Normally, expectations for sale in future years will be lower. The money for the Voyageur's National Park Condemnation appeared during fiscal year 1974.

DNR LAND INTERESTS ACQUIRED
JULY 1, 1974 - JUNE 30, 1976

<u>Project</u>	<u>Parcels</u>	<u>Acres</u>	<u>Amount</u>
Wildlife Management Areas	(Fee Title) 90½	16,472.45	\$ 1,223,413.49
	(Easement) 4½	18.80	-99.00
Fisheries Areas	(Fee Title) 11	111.66	58,021.00
	(Easement) 16	96.62	12,796.00
Public Access Areas	(Fee Title) 35	57.203	116,361.00
	(Easement) 1	(-)	-50.00
	(Temporary Limited Use Permit) 1	1.0	- 0 -
	(Special Use Permit) 1	0.8	- 0 -
Parks & Recreation Areas	(Fee Title) 71	9,705.949	2,222,827.20
	(Easement) 3	56.23	3,000.00
	(License) 1	(+)	- 0 -
	(Lease) 3	2,072.0	- 0 -
Forestry Areas	(Fee Title) 28	2,366.54	621,330.00
	(Easement) 1	2.0	10.00
DNR Management Areas	(Fee Title) 1	3.35	- 0 -
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Total	(Fee Title) 236½	28,717.152	\$4,241,952.69
	(Easement) 25½	173.65	15,657.00
	(Lease) 3	2,072.0	- 0 -
	(Temporary Limited Use Permit) 1	1.0	- 0 -
	(Special Use Permit) 1	0.8	- 0 -
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GRAND TOTAL	267	30,964.602	\$4,257,609.69

LAND EXCHANGES COMPLETED DURING FISCAL YEAR JULY 1, 1974 - JUNE 30, 1975

Exchange No.	Name	Class A,B,C	State		County		Private		Federal		Date File Completed
			Acres	Value	Acres	Value	Acres	Value	Acres	Value	
288	Mark Kilen	A&C	80	\$ 3,418.25			120	\$ 3,426.25			8-21-74
289	Dr. Ronald Christianson	A	320	7,670.00			120	8,233.00			9- 4-74
272	Louis Green	A	12.3	2,214.00			12.4	1,760.00			10- 2-74
309	D.E.W. Farms	A	40	960.00			40	1,000.00			10-22-74
328	LeRoy Hagen	A&C	.2				.6				
218	Hanna Mining Co.	A&C	2,124.98	109,339.35			3,017.91	109,892.95			2-24-75
310	James G. Hoffman	A	80	2,821.00			80	3,487.00			4- 9-75
312	Herbert Hanson	A	15.2	3,368.00			34.1	3,371.00			6- 3-75
299	Clifford Lien	A&C	80	2,071.50			40	2,768.75			6-24-75
B-49	Itasca Co. & Barlow Reality	B			77.25	\$5,194.00	110.74	5,354.00			9-16-74
B-50	Cass Co. & Howard Sawyer	B			40	1,912.62	40	2,053.63			4-29-75
B-51	Koochiching Co. & Chester & Diane Frenzel	B			40	1,006.00	40	1,063.00			4-29-75

Class "A" Land

Total exchanges completed	5
Total acreage of state land exchanged	467.5
Total value of state land exchanged	\$17,033.00
Total acreage of private land exchanged	286.5
Total value of private land exchanged	\$17,851.00

Class "B" Land

Total exchanges completed	3
Total acreage of county land exchanged	157.25
Total value of county land exchanged	\$ 8,112.62
Total acreage of private land exchanged	190.74
Total value of private land exchanged	\$ 8,470.63

Class "A&C" Land

Total exchanges completed	4
Total acreage of state land exchanged	2,285.18
Total value of state land exchanged	\$114,829.10
Total acreage of private land exchanged	3,177.54
Total value of private land exchanged	\$116,087.95

Class "C" Land

Total exchanges completed	0
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LAND EXCHANGES COMPLETED DURING FISCAL YEAR JULY 1, 1975 - JUNE 30, 1976

Exchange No.	Name	Class A,B,C	State		County		Private		Federal		Date File Completed
			Acres	Value	Acres	Value	Acres	Value	Acres	Value	
322	Gordon Forbes	A	20	\$9,810.00			40	\$9,879.00			5-5-76
F-17	US Fish & Wildlife Serv.	S-Fed	40	2,180.00					21.5	\$2,210	4-29-76

Class "A" Land

Total exchanges completed	1
Total acreage of state land exchanged	20
Total value of state land exchanged	\$9,810.00
Total acreage of private land exchanged	40
Total value of private land exchanged	\$9,879.00

State-Federal Land

Total exchanges completed	1
Total acreage of state land exchanged	40
Total value of state land exchanged	\$2,180.00
Total acreage of federal land exchanged	21.5
Total value of federal land exchanged	\$2,210.00

Class "B" Land

Total exchanges completed	0
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Class "C" Land

Total exchanges completed	0
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ENGINEERING

The Bureau of Engineering, comprising a staff of professional engineers, land surveyors and landscape architects supported by architectural and engineering draftsmen, technicians, clerical and stenographic personnel, provides professional service support for DNR programs. The Bureau has put together a team of professionally trained people to provide for feasibility studies; designs, plans, and specifications for a wide variety of natural resource developments; to conduct land surveys; prepare property plats and legal descriptions for land acquisition; and to provide graphic services for the preparation of signs, displays, charts, and maps.

During the first 18 months of the biennium, the Bureau completed 134 contract construction projects valued at about \$3.9 million. These figures are expected to grow to 190 contract projects with a value in excess of \$6 million by the end of FY 77. In addition to the contract construction work, the Bureau contemplates providing the requested professional services on more than 500 other projects during the biennium -- for land acquisition surveys, graphic services, feasibility studies, etc.

In addition to providing its normal professional service to the Department, the Bureau has been involved in providing professional services for several significant new programs and projects this biennium:

- * Development of a new DNR regional headquarters at New Ulm and major remodeling of regional facilities at Rochester and St. Paul.
- * Initiation of the major "Resource 2000" land acquisition program.
- * Accelerated acquisition and development of the Upper St. Croix National Wild and Scenic River as a result of a significant federal grant.
- * Initiation of a joint DNR/SCS fish control program in West Central Minnesota.

The Bureau is continuing its attempt to improve the professional services to the Department, and thus to the citizens of the State.

FIELD SERVICES

The Bureau of Field Services is the "support" unit for the Department of Natural Resources. Accomplishments for FY 76 and FY 77 included the following:

Equipment

Purchase of equipment and supplies; equipment fabrication, repair and overhaul; equipment scheduling; acquisition of Federal Excess Property; and equipment disposal.

All self-propelled equipment was surveyed; 61 vehicles were upgraded by switching between disciplines prior to disposal; eight equipment pools were established; support provided to forest fire control; and six equipment auction sales were conducted.

Buildings

Activity and progress included building maintenance and repair; coordination of new buildings; and building disposal.

Disposal was accomplished on 60 surplus inventoried buildings, and 105 were acquired incidental to the purchase of land.

FINANCE MANAGEMENT

Due to a recent change in the role of the Finance Agency Controller, the direct supervision and management of the Fiscal Services Section has been returned to the Department's Accounting Director. This shift in line supervision and authority will enable the Department to manage its own internal fiscal affairs, while at the same time allow the Finance Agency Controller to concentrate more of his effort on fiscal policy issues, communications, financial monitoring, performance standards, activity/program evaluation, etc.

Also, the DNR accomplished a major breakthrough during the biennium by abandoning its unworkable Executive Program Budget request document that contained 93 separate activities and more than 1,180 pages of supporting documentation. On April 21, 1975, with the close help and cooperation of the Legislative Analysts, the Department identified and reconstructed its Executive Budget request based on the following 12 programs:

- * Administrative Management Services
- * Regional Administration
- * Field Services Support
- * Water Resources Management
- * Mineral Resources Management
- * Forest Management
- * Fish Management
- * Wildlife Management
- * Ecological Services
- * Parks and Recreation Management
- * Soil and Water Conservation Board
- * Enforcement and Safety Training

With the adoption of these new programs, the Department was able to once again receive appropriations that paralleled its organizational structure. This very basic principle is essential if an organization or department is to maintain any degree of management and control over its budget.

During this biennium, the DNR also abandoned the original program budget "gross funding concept" (allowed co-mingling of funds within an activity) for the Department of Finance's "Clean Fund Accounting System" (does not allow funds to be co-mingled). The "Clean Fund Accounting System" was implemented in the DNR at the beginning of FY 76 and it has proven to be beneficial in strengthening the financial management function.

INFORMATION SYSTEMS

A major portion of the Information Systems effort in FY 76 and FY 77 was directed toward the monitoring of daily operations, monthly operating cost analysis and budget projections for 60 ongoing computer programs covering all disciplines within the structure of the DNR.

New projects included a pilot study on parks usage, utilizing the camping permit as the input vehicle; and an hours analysis for enforcement, utilizing the conservation officer's daily activity report sheets to accumulate hours spent by activity-type, with generated reports at the individual, area, region and division levels. Data entry on these projects was accomplished within the Department, and programmed output was obtained, using the Report Generator capabilities of Strata.

A major overhaul of the computer procedures for game and fish licensing was also accomplished during the biennium -- providing better accounting, auditing and license distribution capabilities, while structurally aligning the procedures with State Wide Accounting requirements.

Participation in statewide systems development was maintained at the intra-department level by active participation in the Systems Advisory Committee (SAC); membership on a Report Generator Panel (an intra-agency committee to select a more efficient report generator for agency use); and participation on a committee studying better payroll cost analysis capabilities for all state agencies and to which the DNR is committed to contributing \$150,000.

OFFICE SERVICES

During Fiscal Year 1976 the Section of Office Services continued to provide the essential services and assistance to the various operational units of the DNR, and to provide informational assistance to the public.

With the cooperation and assistance of the Field Service supervisors and coordinators, the Section established a Department-wide policy and a uniform procedural system for inventory of state personal property.

PERSONNEL

The Bureau of Personnel is continuing to decentralize certain of its functional responsibilities to the Regions while accepting additional delegated responsibilities from the State Department of Personnel. The net effect should provide for a system of personnel services that is more timely and responsive to the needs of the Department and its employees. The decentralization to the Regions is expected to be completed before the end of the 1976-77 biennium.

The introduction of collective bargaining into state service under the Public Employment Labor Relations Act as amended in 1973 has had a direct impact on the Bureau of Personnel, with approximately 1,200 employees of the Department of Natural Resources coming under provisions of agreements between the State of Minnesota and exclusive representatives of the employees -- effective July 1, 1975. The Bureau of Personnel was directly involved in the negotiation of agreements affecting terms and conditions of employees represented by the Minnesota Conservation Officers Association and the Minnesota State Employees Union AFSCME, Council No. 6, AFL-CIO, and its affiliated locals.

The Department's new and expanding role in labor relations has resulted in a significant portion of the Bureau's staff time being spent in educating Department manager/supervisors in contract administration, interpreting and administering provisions of the contracts, handling grievances over terms and conditions of employment of employees covered by contract, and in performing various administrative tasks associated with collective agreements. The period of adjustment from an informal relationship with unions and employee associations to the new atmosphere of exclusive representation of employees by these groups and formal agreements has not been without problems and "growing pains." However, the transition period thus far has been relatively free of grievances with the prevalence of a continued harmonious relationship between the Department and its employees.

The 1975 Legislature approved the addition of a Training Officer position to the Bureau's staff. The purpose of the position is to develop and maintain a comprehensive Department-wide training program in order to assure efficient employee performance, facilitate employee development, and improve Department proficiency in meeting its objectives. An operational order in training, a training policy, and training standards for the Department have been prepared and approved for implementation.

During the first year in the position the training officer has been instrumental in facilitating training programs in a variety of areas -- with the total training budget for FY 76 expended on technical training. A major portion of the position's time during the first months was spent on the development and implementation of a system for comprehensive Department-wide training. More specifically -- the development, promulgation and implementation of the Department training plan, policy, and liaison network to communicate training needs and recommendations have been accomplished to date.

A position of Affirmative Action Officer has been established in the Bureau to be assigned the responsibility of directing the Department's affirmative action program on a full-time basis. Plans are to have a person in this position by January 1, 1977. This person will be responsible for maintaining established affirmative action goals and timetables through an accelerated minority recruiting program.

COMMUNITY LIAISON

During the biennium, the Department's Community Liaison Officer (CLO) has worked with all six Indian Reservations which comprise the Minnesota Chippewa Tribe. Work has also been done with the Red Lake Tribal Council and some contact has been made with the four Sioux Communities located in the southern part of the state.

These projects have ranged from assisting Red Lake with a special moose season; evaluating the possibilities of limited commercial lake trout taking at Grand Portage; assisting Nett Lake with a study of wild rice on the Reservation; identifying and marking Indian land within Kathio State Park for Mille Lac; assisting Fond du Lac Reservation Business Committee in identification cards for Tribal enrollees; helping White Earth governing body in securing community fire protection through the DNR, and assisting Leech Lake Conservation Commission in ongoing training for the Leech Lake conservation officers, and upgrading equipment for the officers.

The limited contact with the Sioux Communities included assisting the communities in selling pottery and pipestone to State Parks.

Affirmative Action

As Affirmative Action Officer the CLO works with an eight-member committee with each DNR Region represented, and two members chosen from the Central Office. Bi-monthly meetings are held on a rotating basis in each Region and the Central Office to make the program more visible throughout the Department.

The Affirmative Action Officer and the Affirmative Action Committee worked together to revise the Affirmative Action Plan and the Internal Grievance Procedure.

The Committee also set up a two-day training session with Control Data titled "Minority Group Dynamics for Regional Administrators", and with business managers and the Committee.

The Committee has also been active in recruiting, and is responsible for the recruitment of the minorities now on staff, and an internship program the Department has recently initiated for minorities.

The Affirmative Action Officer has also been active in career development -- attending Career Days held at schools with large minority enrollment, and recruiting minorities for the Department's Youth Conservation Corps (YCC).

LICENSING

DNR's License Center, located at 625 North Robert Street, St. Paul, has been completely remodeled. The improved working conditions are providing more efficient service to the public, and faster and accurate service

to all enforcement officers.

With the cooperation of 137 Deputy Registrars throughout the state, the License Center furnishes boat and snowmobile owners 30-day permits so that they can operate their boats or snowmobiles as soon as they apply for their licenses or registrations. These applications are then processed at the Center and mailed back to the owner with a copy of the laws and regulations. Turn-around time has been reduced to ten days or less. The Center processes approximately 192,000 boat registrations, and 50,000 snowmobile license applications, annually.

The Center's counter service averages about 200 customers per day; and as high as 600 daily during peak periods.

The License Center also handles fish and wildlife licenses (fishing, hunting, trapping, etc.) These are sold over the counter at the Center, and also are available through the 87 County Auditors and their 3,000 agents. DNR's output of fish and wildlife licenses totals about two million annually. The Center has just completed putting all game and fish records on computer. This will improve all service to County Auditors and accounting procedures for the public examiners.

The Center produces about \$11 million in annual revenue: \$9 million from fish and wildlife licenses; \$2 million from snowmobile registrations and boat licenses.

The License Center's records are now on microfilm, making the information readily available to Enforcement. There also are microviewers at the six regional offices; at the Crime Bureau in St. Paul; and at the Hennepin County Water Patrol Office. Snowmobile and boat licenses and registrations can be checked on short notice at any of these locations.

The Center also is geared to furnish copies of license applications in five minutes upon demand, and not longer than a day by mail; another aid to law enforcement people.

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