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LEGISLATIVE COMMISSION ON MINNESOTA RESOURCES

1986 BIENNIAL REPORT TO THE LEGISLATURE

NOVEMBER 15, 1986

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645 State Office Building
Saint Paul, Minnesota 55155

CONTENTS

| | |
|--|----|
| Chairman's Letter of Transmittal for 1986 Report to the Legislature. | 1 |
| Membership and Committee Structure through 1986 | 2 |
| Role of the Commission. | 4 |
| Funding Sources | 4 |
| Relationship with Other Committees. | 5 |
| Commission Operations | 5 |
| The LCMR Process. | 6 |
| Commission Recommendations for 1987 Minnesota Resources Fund Appropriations | 7 |
| Commission Recommendations to the Governor. | 8 |
| Funding Comparison of Selected Issue Areas. | 10 |

Appendix:

- A. Cumulative List of Programs: 1963 - 1987
Organized by Resource AreaA-1
- B. Total Appropriations and Matching Money Earned . .B-1

Legislative Commission on Minnesota Resources

ROOM 65 / STATE OFFICE BUILDING

• ST. PAUL, MINNESOTA 55155 •

(612) 296-2406

ROBERT E. HANSEN
Executive Director



November 15, 1986

Members of the Legislature:

The "1986 Report to the Legislature" is submitted as required under MS 86.11, Subdivision 5. This Report is a fulfillment of part of the Legislative Commission on Minnesota Resources (LCMR)'s responsibility to "provide the background necessary to evaluate programs proposed to preserve, develop and maintain the natural resources of this state." (MS 86.02) Working cooperatively with the appropriate standing committees, the Commission will continue to identify and research emerging resource issues facing the state. The LCMR recommends appropriations from the Minnesota Resources Fund for innovative and/or accelerative programs. The Commission will continue to monitor and evaluate programs funded from the Minnesota Resources Fund and other programs as directed by the Legislature.

The Commission requested the advice of a wide range of organizations and individuals, including the appropriate standing committees, as to which resource issues present the most pressing problems to the state and which, therefore, deserve the special consideration of the Commission. The 1986 LCMR Issues Seminar at Itasca State Park produced lively and thoughtful discussion of pressing problems in major issue areas, and served as the setting for establishing the Commission's priority issue areas. After over eleven days of hearings this summer, the Commission adopted recommended appropriations from the Minnesota Resources Fund for consideration and adoption by the 1987 Legislature.

The Legislative Commission on Minnesota Resources is now, and will continue to be, an effective resource for the Legislature in dealing with emerging natural resource issues.

Sincerely,

A handwritten signature in dark ink, appearing to read "Doug W. Carlson".

Representative Douglas W. Carlson,
Chairman, Legislative Commission
on Minnesota Resources

/mlk

LEGISLATIVE COMMISSION ON MINNESOTA RESOURCES

Present Members

| | |
|--|----------------|
| Representative Tony Bennett. | .Shoreview |
| Representative Douglas W. Carlson. | .Sandstone |
| Representative Gaylin Den Ouden. | .Prinsburg |
| Representative Virgil J. Johnson | .Caledonia |
| Senator Howard A. Knutson. | .Burnsville |
| Senator William Luther | .Brooklyn Park |
| Senator Gene Merriam | .Coon Rapids |
| Senator Roger D. Moe | .Erskine |
| Representative Willard Munger. | .Duluth |
| Representative Fred C. Norton. | .Saint Paul |
| Senator Clarence M. Purfeerst. | .Faribault |
| Senator Earl Renneke | .LeSueur |
| Representative John Rose | .Roseville |
| Senator Gerald L. Willet | .Park Rapids |

OFFICERS

| | |
|--|---------------|
| Representative Douglas W. Carlson. | Chairman |
| Senator Gene Merriam | Vice Chairman |
| Representative Willard Munger. | Secretary |

COMMITTEE CHAIRS

| | |
|--|------------------------------|
| Representative Douglas W. Carlson. | .Executive |
| Representative Douglas W. Carlson. | .Game and Fish |
| Representative Virgil J. Johnson | .Agriculture, Land and Water |
| Senator Gerald L. Willet | .Energy and Forestry |
| Representative Willard Munger. | .Recreation |
| Senator Gene Merriam | .Minerals |
| Senator Earl Renneke | .Public Lands |

STAFF

| | |
|------------------------------|---------------------------|
| Robert E. Hansen | Executive Director |
| David G. Flipp | Administrative Assistant |
| Linda C. Fitzgerald. | Assistant to the Director |
| Mary Lou Kendle. | Commission Secretary |

LCMR Subcommittee Assignments

OFFICERS

Rep. Douglas W. Carlson, Chairman
Senator Gene Merriam, Vice Chairman
Rep. Willard Munger, Secretary

EXECUTIVE COMMITTEE

Rep. Douglas W. Carlson, Chairman
Senator Gene Merriam, Vice Chairman
Rep. Willard Munger, Secretary
Senator Clarence M. Purfeerst
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Rep. Willard Munger
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Senator Gerald L. Willet

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Senator Gene Merriam
Senator Roger D. Moe
Senator Clarence M. Purfeerst

Role of the Commission

The role of the Legislative Commission on Minnesota Resources (LCMR), is to implement the purpose of Minnesota Statutes, Chapter 86.02:

. . . to provide the Legislature with the background necessary to evaluate programs proposed to preserve, develop and maintain the natural resources of this state.

Thus, the Commission is an advisory, oversight and monitoring body for the Legislature. The LCMR acts as an information base for the Legislature regarding various resource programs. The Commission also has a role, implicit from the types of programs with which it is involved, to make inquiries and instigate action designed to examine potential innovative and/or accelerative approaches to State programs. The latter function has evolved from the basic orientation of the LCMR, expressed through its members, toward involvement with programs designed to meet future needs or to correct past program mistakes or shortfalls. The Commission focuses upon relatively new ideas and emerging natural resource issues, which are not otherwise to be considered as part of the regular budgets of State agencies.

The Commission is composed of fourteen Legislators: seven Senators appointed by the Senate Committee on Committees and seven Representatives appointed by the Speaker of the House. Vacancies which may occur do not affect the authority of the Commission. Members serve until a successor is appointed.

Funding Sources

The Commission performs a substantial part of its advisory role by recommending that certain programs be supported with appropriations. It recommends that those appropriations be provided from the Minnesota Resources Fund which is supported by: 1) One mill per cigarette pursuant to M.S. Ch. 297.13; 2) anticipated federal reimbursements earned through expenditure of state money on eligible activities; 3) anticipated cancellations from past appropriations. That amount is estimated to total approximately \$16.5 million for Fiscal Years 1988-89.

Relationship with other Committees

The LCMR maintains an effective liaison relationship with the appropriate standing committees of the Legislature. This is accomplished in two ways. First, the membership of the Commission traditionally includes the Chair and/or key members of the Senate Finance and House Appropriations Committees, the Senate Natural Resources and Agriculture Committee and the House Committee on Environment and Natural Resources. In addition, the other members of the LCMR are also key members or chair one or more standing committees. Thus, the standing committees are informed of the actions and recommendations of the Commission through the direct participation of their Chair and members in the LCMR activities. Secondly, the staff of the LCMR maintains communication with the staff of those standing committees. Informal contacts by telephone and in person complement the periodic formal communications. Frequently, one or more of the staff from the standing committees are invited to participate in discussions between the LCMR staff and the various organizations, agencies and persons interested in the Commission. The staff of the Finance, Appropriations and the Senate and House Committees on Natural Resources receive all the material and communications prepared by the LCMR staff at the same time as the LCMR members.

Commission Operations

The Commission holds meetings as required in order to complete its responsibility to develop advice for the Legislature regarding various resource issues. When the LCMR or one of its subcommittees holds a meeting, the liaison officers from the various agencies and departments, as well as the general public, are informed as far in advance as feasible. The meetings are held at the State Capitol or on the site of programs which have received Minnesota Resources Fund appropriations, or which require on-site review for development of LCMR background information. The Commission or subcommittee Chair frequently request State agency officials to appear and present testimony and appropriate data regarding the subject matter at hand. The Commission also uses written correspondence with various agencies of the State and Federal Government. After receiving testimony, correspondence and by conducting its own intensive discussions, the Commission develops recommendations to the appropriate persons, agencies and Legislative committees. Essentially, there are three alternative recommendations available to the Commission regarding the various programs under review. The Commission may recommend that a particular program receive Minnesota Resources Fund support. A second alternative might be to conclude that a particular program is appropriate and effective and to recommend that the program should therefore be financed through the regular budget of the appropriate agencies. The third alternative is for the Commission to review its own evaluation of a given program and recommend that the program be no longer conducted by the State.

The LCMR Process

During the summer of 1985 the members spent 21 days touring a significant portion of the state. The purpose was to observe the results of past programs and to collect firsthand information on the nature of a wide variety of resource management problems. The LCMR customarily notifies local legislators of pending LCMR visits. In several cases, local Senators or Representatives joined the LCMR for part of the local tours and briefings. The experience and knowledge gained by these visits were very beneficial.

In January of 1986 an Issues Response letter was widely distributed to individuals, organizations, agencies, local units of government, and legislators, requesting opinions concerning the status and opportunities of our State's natural resources. We received 160 responses that helped clarify resource issues.

In late May, the Commission held its Issues Seminar at Itasca State Park. It heard from nationally recognized figures in the areas of water, fisheries, wildlife, forestry, recreation and minerals. Then with the assistance of a facilitator, the Commission established its priority issue areas for recommending funding.

During June the Commission requested and received proposals from a number of agencies and organizations. Below is listed the priority issue areas in descending order, the total number of proposals received and the number recommended for funding.

| ISSUE AREA | PROPOSALS | | RECOMMENDED FOR FUNDING | |
|--------------------------|-----------|--------------|-------------------------|--------------|
| | # | \$ | # | \$ |
| Water | 82 | \$22,169,642 | 15 | \$ 4,642,000 |
| Soil/Land Use | 16 | 5,053,000 | 5 | 2,125,000 |
| Recreation | 16 | 12,892,000 | 4 | 1,391,000 |
| Fisheries | 9 | 3,358,000 | 1 | 643,000 |
| Wildlife | 10 | 4,939,500 | 5 | 2,666,000 |
| Agriculture | 8 | 2,256,150 | 2 | 560,000 |
| Minerals | 8 | 2,110,000 | 3 | 1,400,000 |
| Forestry | 7 | 1,068,000 | 3 | 364,000 |
| General | 23 | 6,053,200 | 9 | 950,000 |
| LCMR Administration | | 500,000 | | 500,000 |
| Fed. Reimbursement Acct. | | 1,000,000 | | 1,000,000 |
| TOTAL | 179 | \$61,399,492 | 47 | \$16,241,000 |

The process of reviewing and taking testimony on the proposals involved eleven days of meetings. A summary of the proposals being recommended by issue area and by agency involved follows, as well as a letter to the Governor recommending that certain programs submitted to the Commission be considered in his budget recommendations.

LCMR RECOMMENDED FUNDING
AS OF SEPTEMBER 30, 1986

BY ISSUE AREA

IN BILL ORDER

| | | | | | |
|--|----------------|------------|--|--|------------|
| <u>MINNESOTA RESOURCES FUND 1987</u> | | 16,241,000 | <u>MINNESOTA RESOURCES FUND 1987</u> | | 16,241,000 |
| <u>LCMR Administration</u> | | 500,000 | <u>LCMR Administration</u> | | 500,000 |
| <u>Issue Area WATER</u> | | 4,642,000 | <u>Department of Natural Resources</u> | | 5,737,000 |
| Pilot Comprehensive Local Water Planning | SPA/EOB | 900,000 | Groundwater Management | | 600,000 |
| Support for Soil and Water Management | SPA/Intl.Co. | 125,000 | Water Allocation and Conservation | | 400,000 |
| Handbooks of Best Management Practices | PCA | 60,000 | Accelerated Land Exchange | | 250,000 |
| Nonpoint Source Pollution Model | PCA | 80,000 | Marketing Department Services | | 270,000 |
| Garvin Brook Final Evaluation | PCA | 150,000 | Ridgeline Trail | | 380,000 |
| Lake Runoff Management Evaluation | PCA | 393,000 | Mississippi River Management | | 271,000 |
| Optimize Winter Lake Aeration | DoDM/SAFEL | 98,000 | Brighton Beach Breakwater | | 470,000 |
| Mercury Toxicity | PCA | 300,000 | Fish and Wildlife Comprehensive Planning | | 260,000 |
| Gas Permeable Membrane Water Treatment | DoDM/CWE | 175,000 | Forest/Wildlife Habitat Intensification | | 160,000 |
| Dioxins in Bleached Kraft Pulp | DoDM/NRRI | 300,000 | Swan Lake Area Wildlife Project | | 1,951,000 |
| Groundwater Management | DNR | 600,000 | County Biological Survey | | 175,000 |
| Water Allocation and Conservation | DNR | 400,000 | Glacial Drift Geochemistry | | 200,000 |
| Engineering Solutions to Water Problems | DoDM/SAFEL | 700,000 | Regeneration Growth Inventory | | 50,000 |
| Groundwater Quality Impacts from Agriculture | DoDM/SCILS | 311,000 | Conservation Corps | | 300,000 |
| Simple Water Assay | DoDM/GPBI | 50,000 | | | |
| <u>Issue Area SOIL AND LAND USE</u> | | 2,125,000 | <u>Pollution Control Agency</u> | | 983,000 |
| Accelerated Soil Survey | DoDM/AgExpSta | 1,400,000 | Handbooks of Best Management Practices | | 60,000 |
| Biomass Cash Crop Nursery Establishment | DoDM/Crockston | 184,000 | Nonpoint Source Pollution Model | | 80,000 |
| Undrained Peatlands for Short Rotation Forestry | DoDM/NRRI | 116,000 | Garvin Brook Final Evaluation | | 150,000 |
| Compost/Co-Compost Research | DoDM/SCILS | 175,000 | Lake Runoff Management Evaluation | | 393,000 |
| Accelerated Land Exchange | DNR | 250,000 | Mercury Toxicity | | 300,000 |
| <u>Issue Area RECREATION</u> | | 1,391,000 | <u>State Planning Agency</u> | | 1,025,000 |
| Marketing Department Services | DNR | 270,000 | Pilot Comprehensive Local Water Planning | | 900,000 |
| Ridgeline Trail | DNR | 380,000 | Support for Soil and Water Management | | 125,000 |
| Mississippi River Management | DNR | 271,000 | | | |
| Brighton Beach Breakwater | DNR | 470,000 | <u>Department of Agriculture</u> | | |
| <u>Issue Area FISHERIES</u> | | 643,000 | <u>Biological Control of Pests</u> | | 490,000 |
| Gamefish Growth Enhancement | DoDM/F&H | 643,000 | <u>Minnesota Historical Society</u> | | 350,000 |
| <u>Issue Area WILDLIFE</u> | | 2,666,000 | <u>Historical Data Base</u> | | 100,000 |
| Fish and Wildlife Comprehensive Planning | DNR | 260,000 | Environmental Oral History | | 45,000 |
| Forest/Wildlife Habitat Intensification | DNR | 160,000 | Geographic Resource Marking | | 45,000 |
| Swan Lake Area Wildlife Project | DNR | 1,951,000 | Heritage Trails | | 45,000 |
| County Biological Survey | DNR | 175,000 | Indian History Grants in Aid | | 70,000 |
| Evaluation of Mosquito Control Activities on Waterfowl | DoDM/F&H | 120,000 | Farm Economy Record | | 45,000 |
| <u>Issue Area AGRICULTURE</u> | | 560,000 | <u>University of Minnesota</u> | | 6,056,000 |
| Biological Control of Pests | AG | 490,000 | Optimize Winter Lake Aeration | | 98,000 |
| Ash as a Lime or Fertilizer Source | DoDM/Ext | 70,000 | Gas Permeable Membrane Water Treatment | | 175,000 |
| <u>Issue Area MINERALS</u> | | 1,400,000 | Dioxins in Bleached Kraft Pulp | | 300,000 |
| Aeromagnetic Mapping | DoDM/MGS | 800,000 | Engineering Solutions to Water Problems | | 700,000 |
| Glacial Drift Geochemistry | DNR | 200,000 | Groundwater Quality Impacts from Agriculture | | 311,000 |
| Industrial Minerals: Clay | DoDM/MRCC | 400,000 | Simple water assay | | 50,000 |
| <u>Issue Area FORESTRY</u> | | 364,000 | Accelerated Soil Survey | | 1,400,000 |
| Future Timber Supply Scheduling Techniques | DoDM/POR | 146,000 | Biomass Cash Crop Nursery Establishment | | 184,000 |
| Biotechnology Applications in Forestry | DoDM/POR | 168,000 | Undrained Peatlands for Short Rotation Forestry | | 116,000 |
| Regeneration Growth Inventory | DNR | 50,000 | Compost/Co-Compost Research | | 175,000 |
| <u>Issue Area GENERAL</u> | | 950,000 | Gamefish Growth Enhancement | | 643,000 |
| Conservation Corps | DNR | 300,000 | Evaluation of Mosquito Control Activities on Waterfowl | | 120,000 |
| Non-Energy Peat Development | State U Bd | 100,000 | Ash as a Lime or Fertilizer Source | | 70,000 |
| Sludge Ash Pilot Project | DoDM/MRCC | 200,000 | Aeromagnetic Mapping | | 800,000 |
| Historical Data Base | MES | 100,000 | Industrial Minerals: Clay | | 400,000 |
| Environmental Oral History | MES | 45,000 | Future Timber Supply Scheduling Techniques | | 146,000 |
| Geographic Resource Marking | MES | 45,000 | Biotechnology Applications in Forestry | | 168,000 |
| Heritage Trails | MES | 45,000 | Sludge Ash Pilot Project | | 200,000 |
| Indian History Grants in Aid | MES | 70,000 | | | |
| Farm Economy Record | MES | 45,000 | <u>State University Board</u> | | |
| <u>Federal Reimbursement Account</u> | | 1,000,000 | <u>Non-Energy Peat Development</u> | | 100,000 |
| | | | <u>Federal Reimbursement Account</u> | | 1,000,000 |

Legislative Commission on Minnesota Resources

ROOM 65 / STATE OFFICE BUILDING

• ST. PAUL, MINNESOTA 55155 •

(612) 296-2406

ROBERT E. HANSEN
Executive Director



September 30, 1986

Honorable Rudy Perpich
Governor
State of Minnesota
Room 122 Capitol
St. Paul, Minnesota 55155

Dear Governor Perpich:

We developed our recommendations to the Legislature for expenditures from the Minnesota Resources Fund this summer. The Commission decided in several instances to recommend that you include certain projects in your budget recommendations.

The projects are listed below with the dollar amounts which were proposed for LCMR funding. The cigarette tax receipts have fallen off in recent years, so the Commission has a smaller working financial basis. Some projects address needs which go far beyond the ability of the Commission to address.

We recommend inclusion in your budget:

1. State Park Development and Major Rehabilitation -
\$4,000,000

The overall list of needs approaches \$14 million. This activity has been supported by several different sources of funding in the past, including LCMR, a portion of the water recreation account and Resource 2000 bonding. The members feel the full list of needs should be addressed through a more centralized approach which would focus more attention on the issues.

2. Forest Recreation Development and Rehabilitation -
\$400,000

Again, the overall list of forest needs approaches \$3.5 million and the other comments above apply here, too, including past support from Resource 2000 bonding.

3. Local Park and Recreation Grants - \$4,000,000

This is a long standing program which is highly popular with local government. The need level, as expressed through FY 86-87 applications by local units with a 50% local match requirement, approaches \$32 million. The members felt this program would readily fit in a Resource 2000 type bonding program with few, if any, modifications.

Honorable Rucy Perpich
September 30, 1986
Page 2

4. Clay Boswell Aquaculture Facility - \$1,000,000

This is a joint venture between Minnesota Power and DNR to develop a fish rearing facility at the Minnesota Power generating plant in Cohasset.

5. Purple Loosestrife Control Project

The Department of Agriculture has indicated it will place the plant on the secondary noxious weed list. However, members feel a great deal more must be done to educate people about the rapid spread of this plant which crowds out vegetation of great value to wildlife. A significant effort must be undertaken to develop effective control strategies which do not themselves cause environmental degradation.

Thank you for your consideration. Please feel free to call upon the Commission for additional information or advice on these or other natural resource issues.

Sincerely,



Representative Douglas Carlson,
Chairman, LCMR

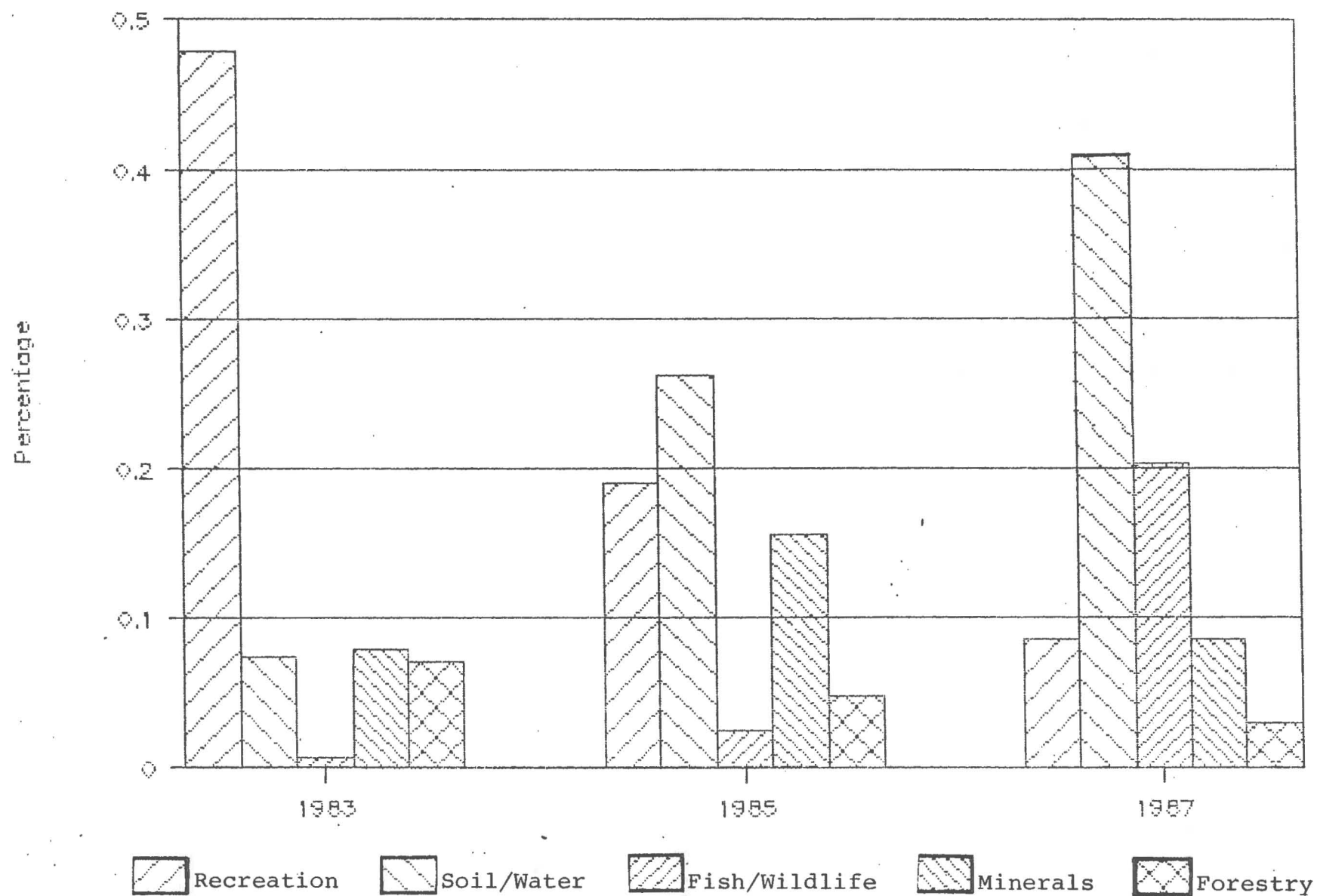
DC/mlk

cc: House Appropriations
Senate Finance

Once the set of programs submitted by the LCMR to the Legislature is finally adopted in appropriation laws, the Commission implements its responsibility to closely monitor the programs in order to insure that the correct problems are addressed, in a manner consistent with the intention of the Legislature. The appropriation laws require the LCMR to review for approval a detailed work program submitted by the agencies which describes the proposed implementation of the program, before the actual implementation can begin. Thus, the LCMR has an opportunity to supervise closely the program once it is approved by the Legislature. The Commission also reviews, on a regular basis, semi-annual status reports submitted on each of the programs. In those cases where a program appears to be straying from Legislative intent or suffering from lack of direction or initiative, the Commission calls upon the State agency involved to rectify the problem.

The process described has enabled the Commission to change its focus and direct its resources where most appropriate. The following chart reflects the changes that have occurred over the past three bienniums.

FUNDING COMPARISON
OF SELECTED ISSUE AREAS
Expressed as a Percent of Total Funding



CUMULATIVE LIST OF LCMR FUNDED PROGRAMS

1963 - 1985 & Proposed 1987

| SOIL and WATER | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Red River Basin Study | 70,000 | 70,000 | 35,000 | | | | | | | | | | | 175,000 |
| Hydrologic Research | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | | | | | | | | 900,000 |
| Watershed Improvements | 150,000 | | | | | | | | | | | | | 150,000 |
| Aquatic Nuisance Control | | | | | | | | | | | | | | 0 |
| Water Resources Planning | | | 60,500 | 50,000 | | | | 657,674 | 288,000 | 262,000 | | | 1,025,000 | 2,343,174 |
| Limnological Research | | | 50,000 | 75,000 | 50,000 | 35,000 | | | | | | | | 210,000 |
| Groundwater/Irrigation Studies | | | | | | | | | | | | | | 0 |
| Eagle Lake Pollution Control | | | | | | | | | | | | | | 0 |
| Dam Inventory/Assessment/Repair | | | | | | | | | | | | | | 0 |
| Chisago Lakes Study | | | | | 10,000 | | | | | | | | | 10,000 |
| Abandoned Well Program | | | | | | 10,600 | 11,000 | | | | | | | 21,600 |
| Lake Shore Dev. Trends | | | 87,400 | 50,600 | | | | | | 238,000 | | 100,000 | | 476,000 |
| Weather Gauge Program | | | | | | | 15,000 | | | | | | | 15,000 |
| Mississippi River Study | | | | | | | 50,000 | | | | | | | 50,000 |
| Erosion Control Grants | | | | | | | 300,000 | 501,000 | | | | | | 801,000 |
| S.E. MN Groundwater Contamination | | | | | | | | | | | | | 150,000 | 150,000 |
| Lake Improvement Grants | | | | | | | | 1,385,626 | 1,286,300 | | | | | 2,741,926 |
| Water Use Data System | | | | | | | | | 82,000 | | | 70,000 | | 286,200 |
| Red River Floodwater | | | | | | | | | | 67,000 | 137,200 | | | 0 |
| Retention Grants | | | | | | | | | 1,062,800 | 768,000 | | | | 1,830,800 |
| River Mile Index | | | | | | | | | 137,400 | | | | | 137,400 |
| Well Log Data Base | | | | | | | | | 204,500 | | | | | 204,500 |
| County Ditch Study | | | | | | | | | | 35,000 | | | | 35,000 |
| Lake Classification Study | | | | | | | | | | 110,900 | | | | 110,900 |
| Groundwater Mgt. | | | | | | | | | | | 300,000 | | 600,000 | 900,000 |
| Soil/Watershed Acidification | | | | | | | | | | | 186,000 | | | 186,000 |
| Groundwater Analysis Near Dumps | | | | | | | | | | | 145,000 | 160,000 | | 346,000 |
| Survey Organics in Monitor Wells | | | | | | | | | | | 100,000 | | | 145,000 |
| Survey Organics in Community | | | | | | | | | | | | | | 100,000 |
| Water Supplies | | | | | | | | | | | 130,000 | | | 130,000 |
| Computer Analysis of | | | | | | | | | | | | | | 0 |
| Contaminant Spreading | | | | | | | | | | | 180,000 | 200,000 | | 380,000 |
| Research on River & Lake Mgt. | | | | | | | | | | | 140,000 | 190,000 | 700,000 | 1,030,000 |
| Water Allocation & Mgt. | | | | | | | | | | | | 1,285,000 | 400,000 | 1,685,000 |
| Groundwater Investigations & | | | | | | | | | | | | | | 0 |
| Data Automation | | | | | | | | | | | | 800,000 | | 800,000 |
| Effects of Copper Sulfate | | | | | | | | | | | | | | 0 |
| Treatments | | | | | | | | | | | | 75,000 | | 75,000 |
| Lanesboro Watershed Mgt. Tech. | | | | | | | | | | | | 255,000 | | 255,000 |
| Age, Residence Times & Recharge | | | | | | | | | | | | | | 0 |
| Rates of Groundwater | | | | | | | | | | | | 100,000 | | 100,000 |
| Dev. Biological Approaches | | | | | | | | | | | | | | 0 |
| to Lake Restoration | | | | | | | | | | | | 140,000 | | 140,000 |
| Groundwater Monitoring Techniques | | | | | | | | | | | | 100,000 | | 100,000 |
| Leaking Underground Storage Tanks | | | | | | | | | | | | 165,000 | | 165,000 |
| Household Hazardous Waste | | | | | | | | | | | | | | 0 |
| Collection Pilot Project | | | | | | | | | | | | 150,000 | | 150,000 |
| Organic Chemicals Survey | | | | | | | | | | | | 365,000 | | 365,000 |
| Evaluation of Soil & Water | | | | | | | | | | | | | | 0 |
| Conservation Programs | | | | | | | | | | | | 45,000 | | 45,000 |
| Handbooks of Best Mgmt Practices | | | | | | | | | | | | | 60,000 | 60,000 |
| Nonpoint Source Pollution Model | | | | | | | | | | | | | 80,000 | 80,000 |
| Lake Runoff Mgmt Evaluation | | | | | | | | | | | | | 393,000 | 393,000 |
| Optimize Winter Lake Aeration | | | | | | | | | | | | | 98,000 | 98,000 |
| Mercury Toxicity | | | | | | | | | | | | | 300,000 | 300,000 |
| Gas Permeable Membrane | | | | | | | | | | | | | | 0 |
| Water Treatment | | | | | | | | | | | | | 175,000 | 175,000 |
| Dioxins in Bleached Kraft Pulp | | | | | | | | | | | | | 300,000 | 300,000 |
| Groundwater Quality Impacts | | | | | | | | | | | | | | 0 |
| from Agriculture | | | | | | | | | | | | | 311,000 | 311,000 |
| Simple Water Assay | | | | | | | | | | | | | 50,000 | 50,000 |
| | 370,000 | 220,000 | 382,900 | 325,600 | 210,000 | 195,600 | 376,000 | 2,544,300 | 3,061,000 | 1,480,900 | 1,318,200 | 4,200,000 | 4,642,000 | 19,326,500 |

| RECREATION | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|--|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-------------|
| State Park Acquisition | 1,857,609 | 1,264,445 | 1,000,000 | 2,500,000 | 2,000,000 | 1,705,000 | 2,850,000 | | | | | | | 13,177,054 |
| State Park Development | 1,531,000 | 1,249,450 | 890,000 | 1,825,000 | 1,750,000 | 1,965,500 | 1,536,000 | 1,433,250 | 6,889,000 | 1,408,000 | 2,609,000 | 326,600 | | 23,412,800 |
| State Forest Campground Dev. | 100,000 | | | | | | | | | | 800,000 | 400,000 | | 1,300,000 |
| River Studies/Planning | | 50,000 | | | 100,000 | 100,000 | 300,000 | 455,000 | 455,000 | 316,000 | 325,000 | | | 2,101,000 |
| State Park Planning | | 75,000 | | | 10,000 | | 387,500 | 579,592 | 600,000 | 500,000 | 220,000 | | | 2,372,092 |
| Local & Regional Park Grants | | 1,000,000 | 1,976,000 | 6,500,000 | 9,769,500 | 8,840,000 | 8,500,000 | 8,000,000 | 8,000,000 | 5,000,400 | 3,500,000 | 1,760,000 | | 62,845,900 |
| Local & Regional Planning Grants | | | | | 14,700 | 60,000 | | 90,000 | | | | | | 164,700 |
| Tourism Promotional Material and Programs | | 50,000 | 50,000 | 50,000 | 50,000 | 50,200 | | | | | | | | 250,200 |
| Economic Impacts of Tourism Dev. | | | 50,000 | | | | | | | | | | | 50,000 |
| Vegetative Mgt. Research in State Parks | | | 30,960 | 60,000 | 25,000 | | | | | | | | | 115,960 |
| Landscape Arboretum Acquisition | | | 30,000 | | | | | | | | | | | 30,000 |
| Cedar Creek Acquisition | | | 103,000 | 45,650 | | | | | | | | | | 148,650 |
| State Trail Acquisition | | | 65,000 | | | 570,000 | 800,000 | | | | | | | 1,435,000 |
| Resort Reservation & Facility Identification System | | | | 30,000 | 23,000 | | | | | | | | | 53,000 |
| Project 80 Report | | | | 50,000 | 50,000 | | | | | | | | | 100,000 |
| Planning of State Zoo | | | | 500,000 | | | | | | | | | | 500,000 |
| Mississippi River Metro Corridor & St. Croix River Studies | | | | | 35,000 | | | | | | | | | 35,000 |
| Voyageurs Natl. Pk. Seminar, Peripheral Plan, Advisory Comm. | | | | | | 120,000 | 35,000 | | | | | | | 155,000 |
| Planning & Dev. of Bike Trails | | | | | 30,000 | | | | | | | | | 30,000 |
| Lower St. Croix River Acquisition | | | | | | 310,000 | | | | | | | | 310,000 |
| Interpretive Services Program DNR | | | | | | 134,800 | | | | | | | | 134,800 |
| Lower St. Croix Mgt. Plan | | | | | | 40,000 | | | | | | | | 40,000 |
| Rivers Acquisition | | | | | | | 325,000 | | | | | | | 325,000 |
| Scientific & Natural Areas Acq. | | | | | | | 100,000 | | | | | | | 100,000 |
| Upper St. Croix Project | | | | | | | 93,900 | 750,000 | | | | | | 843,900 |
| Outdoor Rec. Act Implementation | | | | | | | 70,000 | 85,000 | 65,000 | 74,000 | | | | 294,000 |
| Statewide Comprehensive Outdoor Recreation Plan | | | | | | | | 330,000 | 50,000 | | | | | 380,000 |
| Public Access Acq. & Dev. | | | | | | | | | 500,000 | 1,000,000 | 1,480,000 | 555,000 | | 3,535,000 |
| Great River Road Grant | | | | | | | | | 400,000 | | | | | 400,000 |
| Rainy River Navigation | | | | | | | | | | 88,000 | | | | 88,000 |
| Upper Mississippi Plan | | | | | | | | | | | | | | 0 |
| Implementation Grant | | | | | | | | | | 160,000 | | | | 160,000 |
| Parks Info. System | | | | | | | | | | | 150,000 | | | 150,000 |
| Marketing Department Services | | | | | | | | | | | | | 270,000 | 270,000 |
| Ridgeline Trail | | | | | | | | | | | | | 270,000 | 270,000 |
| Mississippi River Mgmt | | | | | | | | | | | | | 271,000 | 271,000 |
| Brighton Beach Breakwater | | | | | | | | | | | | | 470,000 | 470,000 |
| TOTAL | 3,488,609 | 3,688,895 | 4,194,960 | 11,560,650 | 13,857,200 | 13,895,500 | 14,997,400 | 11,722,842 | 16,959,000 | 8,546,400 | 9,084,000 | 3,041,600 | 1,391,000 | 116,428,056 |

| MINERALS | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|--|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Geologic & Mineral Mapping | 200,000 | 75,000 | 140,000 | 160,000 | 232,000 | | | 100,000 | | | | | | 907,000 |
| Copper Nickel Study | | | | | | 100,000 | 920,000 | 2,042,000 | 133,400 | | | | | 3,195,400 |
| Iron Range Info. Analysis | | | | | | | | 100,000 | 50,000 | | | | | 150,000 |
| Mines Directory | | | | | | | | 25,000 | | | | | | 25,000 |
| Copper Nickel Process Tech. | | | | | | | | 400,000 | | | | | | 400,000 |
| Aeromagnetic Mapping | | 75,000 | | | | | | 200,000 | 750,000 | 818,000 | 693,000 | 800,000 | 800,000 | 3,336,000 |
| Heavy Metals Release Study | | | | | | | | | 37,500 | | | | | 37,500 |
| Uranium Information | | | | | | | | | 25,000 | | | | | 25,000 |
| Minerals Directory | | | | | | | | | 20,000 | | | | | 20,000 |
| Direct Reduction Technology Evaluation | | | | | | | | | 115,000 | | 98,000 | | | 213,000 |
| Test Drilling Equipment | | | | | | | | | | 50,000 | | | | 50,000 |
| Environmental Technology | | | | | | | | | | 488,000 | | | | 488,000 |
| Cement Project Equipment | | | | | | | | | | 250,000 | | | | 250,000 |
| Evaluation/ Mineral Potentials | | | | | | | | | | | 170,000 | 200,000 | 200,000 | 370,000 |
| Strategic Minerals Research | | | | | | | | | | | 530,000 | 390,000 | | 920,000 |
| Hibbing Drill Core Repository | | | | | | | | | | | | 100,000 | | 100,000 |
| KORP | | | | | | | | | | | | 1,000,000 | | 1,000,000 |
| Industrial Minerals: /Clay | | | | | | | | | | | | | 400,000 | 400,000 |
| TOTAL | 200,000 | 150,000 | 140,000 | 160,000 | 232,000 | 100,000 | 920,000 | 2,867,000 | 1,130,900 | 1,606,000 | 1,491,000 | 2,490,000 | 1,400,000 | \$12,886,900 |

| FISH AND WILDLIFE | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|---|---------|---------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|-----------|------------|
| Wildlife Land Acq. | 400,000 | 400,000 | 475,000 | 500,000 | 500,000 | | 250,000 | | | | | | | 2,525,000 |
| Wildlife Area Dev. | 200,000 | | 150,000 | 250,000 | 250,000 | | | | | | | | | 850,000 |
| Spawning Area Acq. | 150,000 | 325,000 | 300,000 | 50,000 | 50,000 | 56,000 | | | | | | | | 931,000 |
| Spawning Area Dev. | 100,000 | | 50,000 | 50,000 | 75,000 | 50,000 | | | | | | | | 325,000 |
| Duck Depredation Study | | | 25,000 | | | | | | | | | | | 25,000 |
| Lake of the Woods/Rainy Lake | | | | | | | | | | | | | | 0 |
| Research | | | | 25,000 | | | | | | | | | | 25,000 |
| Operation Pheasant | | | | 200,000 | 200,000 | 260,000 | 75,000 | | | | | | | 735,000 |
| Deer Yard Acquisition | | | | | | 34,000 | | | | | | | | 34,000 |
| Stream Improvement | | | | | | 50,000 | | | | | | | | 50,000 |
| Artificial Walleye Spawning Reefs | | | | | | 40,000 | | | | | | | | 40,000 |
| Game Lake Mgt/Heron Lake | | | | | | | 200,000 | | | | | | | 200,000 |
| Wildlife Mgt. Area Inventory | | | | | | | | | 58,600 | 147,000 | | | | 205,600 |
| Natural Heritage/Scientific | | | | | | | | | | | | | | 0 |
| and Natural Area Program | | | | | | | | | | | | | | 0 |
| Wildlife Mgt. Area Planning | | | | | | | 142,500 | 223,300 | 69,800 | 175,000 | 81,000 | 90,000 | 175,000 | 590,800 |
| Survey of Aquatic Invertebrates | | | | | | | | | 80,900 | | 45,000 | | | 446,700 |
| Fish & Wildlife Planning | | | | | | | | | | | | | | 45,000 |
| Anaplasmosis Study | | | | | | | | | | | | 200,000 | 260,000 | 460,000 |
| Forest/Wildlife Habitat Intensification | | | | | | | | | | | | 100,000 | | 100,000 |
| Swan Lake Area Wildlife Project | | | | | | | | | | | | | 160,000 | 160,000 |
| Evaluation of Mosquito Control | | | | | | | | | | | | | 1,951,000 | 1,951,000 |
| Activities on Waterfowl | | | | | | | | | | | | | | 0 |
| Gamefish Growth Enhancement | | | | | | | | | | | | | 643,000 | 643,000 |
| TOTAL | 850,000 | 725,000 | 1,000,000 | 1,075,000 | 1,075,000 | 490,000 | 667,500 | 223,300 | 209,300 | 322,000 | 126,000 | 390,000 | 3,309,000 | 10,462,100 |

| ENERGY | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|---------------------------------|------|------|------|------|--------|---------|------|---------|---------|-----------|---------|---------|---------|-------------|
| Energy Extraction/Solid Waste | | | | | | 90,000 | | | | | | | | 90,000 |
| Alternative Energy Grants | | | | | | | | 550,000 | | | | | | 550,000 |
| Peat Inventory | | | | | | | | 250,000 | 193,000 | | | | | 443,000 |
| Solar Tech. Assistance | | | | | | | | | 193,200 | | | | | 193,200 |
| Timber & Wood Residue | | | | | | | | | 105,200 | | | | | 105,200 |
| Hydropower Dev & Coordination | | | | | | | | | 10,000 | 228,000 | 100,000 | | | 338,000 |
| Ice Airconditioning | | | | | | | | | 85,000 | | | | | 85,000 |
| Engineering Geology/Twin Cities | | | | | | | | | 100,000 | | | | | 100,000 |
| Underground Space Design | | | | | | | | | 173,400 | | | | | 183,400 |
| Peat & Biomass Energy | | | | | | | | | | 57,000 | 10,000 | | | 707,000 |
| Wind Energy Monitoring | | | | | | | | | | 44,000 | | | | 44,000 |
| Bagley District Heating | | | | | | | | | | 355,000 | | | | 355,000 |
| Industrial Cogeneration | | | | | | | | | | | | | | 0 |
| Potential | | | | | | | | | | 77,000 | | | | 77,000 |
| Combustion Turbine Capacity | | | | | | | | | | 85,000 | | | | 85,000 |
| Energy Impact Analysis | | | | | | | | | | 75,000 | | | | 75,000 |
| Solar Performance Monitoring | | | | | | | | | | 146,000 | | | | 146,000 |
| S.W. State College | | | | | | | | | | | | | | 0 |
| Environmental Program | | | | | 50,000 | 50,000 | | | | | | | | 100,000 |
| Assess/Alt. Energy Business | | | | | | | | | | | 179,000 | | | 179,000 |
| Groundwater Heat/Public Bldgs. | | | | | | | | | | | | 100,000 | | 100,000 |
| TOTAL | | | | | 50,000 | 140,000 | 0 | 800,000 | 859,800 | 1,067,000 | 589,000 | 450,000 | 184,000 | \$4,139,800 |

| FORESTRY | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|---|-----------|---------|---------|---------|---------|---------|---------|------|---------|-----------|-----------|---------|---------|------------|
| Memorial Hardwood Forest Acq. | 300,000 | 350,000 | 200,000 | 350,000 | 350,000 | 400,000 | 350,000 | | | | | | | 2,300,000 |
| Forest Road Development | 300,000 | 325,000 | 150,000 | 100,000 | 100,000 | 114,000 | | | | | | | | 1,089,000 |
| Tree Nursery Production | 200,000 | | | | | | | | | | | | | 200,000 |
| Tree Planting on State Lands | 300,000 | 215,000 | 100,000 | 100,000 | 100,000 | | | | | | | | | 815,000 |
| Aerial Photography | 100,000 | | 25,000 | | 25,000 | | | | | | | | | 150,000 |
| Memorial Hardwood Forest Study | | 25,000 | | | | | | | | | | | | 25,000 |
| Nursery-Refrigeration | | | | | | | 75,000 | | | | | | | 75,000 |
| Private Forest Mgt/Grants | | | | | | | | | 502,000 | 563,000 | | | | 1,065,000 |
| Fire Management Analysis | | | | | | | | | 162,400 | 170,000 | 195,000 | | | 527,400 |
| Forest Planning/Info. System | | | | | | | | | | 710,000 | 689,000 | 375,000 | | 1,774,000 |
| Forest Inventory | | | | | | | | | | 734,000 | 450,000 | | | 1,184,000 |
| Forest Soils Specialization | | | | | | | | | | 132,000 | | | | 132,000 |
| Biotechnology Applications | | | | | | | | | | | | 250,000 | 168,000 | 418,000 |
| Product Dev. Assessment | | | | | | | | | | | | 150,000 | | 150,000 |
| Future Timber Supply Scheduling | | | | | | | | | | | | | 146,000 | 146,000 |
| Regeneration Growth Inventory | | | | | | | | | | | | | 50,000 | 50,000 |
| Undrained Peatlands for Short Rotation Forestry | | | | | | | | | | | | | 116,000 | 116,000 |
| TOTAL | 1,200,000 | 915,000 | 475,000 | 550,000 | 575,000 | 514,000 | 425,000 | 0 | 664,400 | 2,309,000 | 1,334,000 | 775,000 | 480,000 | 10,216,400 |

| GENERAL PROGRAMS | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|--|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| LCMR Administration | 150,000 | 100,000 | 125,000 | 100,000 | 150,000 | 150,000 | 299,750 | 360,000 | 449,800 | 414,000 | 462,500 | 595,100 | 500,000 | 3,856,150 |
| Admin/Cig. Tax Collections (Dept. of Tax) | 55,000 | 51,000 | 59,069 | | | | | | | | | | | 0 |
| Federal Reim. Acct/Contingency | 50,000 | | 250,000 | 725,000 | | 1,000,000 | 1,000,000 | 1,000,000 | 2,000,000 | 350,000 | 1,132,800 | 920,000 | 1,000,000 | 165,069 |
| Purchase of Equipment | | 100,000 | | | | | | | | | | | | 9,427,800 |
| Iron Range Municipalities Planning Study | | 16,100 | | | | | | | | | | | | 100,000 |
| Public Land Evaluation | | | 50,000 | | | | | | | | | | | 0 |
| Bemidji State Envir. Ctr. | | | | | 14,278 | | | | | 476,000 | 400,000 | | | 16,100 |
| Science Museum | | | | | 7,496 | | | | | | | | | 926,000 |
| Environmental Library, Mpls. | | | | | | 100,000 | | | | | | | | 14,278 |
| MN Envir. Education Council | | | | | | 100,000 | | | | | | | | 7,496 |
| MN Bicentennial Committee | | | | | | 200,000 | | | | | | | | 100,000 |
| Environmental Review Program | | | | | | 37,500 | | | | | | | | 200,000 |
| DNR Long Range Plan | | | | | | | | 331,000 | 347,600 | 276,000 | | | | 37,500 |
| Land Record System | | | | | | | | 80,000 | | 249,000 | 50,000 | | | 954,600 |
| Nat Res Data Systems DNR | | | | | | | | | | 303,000 | 600,000 | | | 379,000 |
| Volunteer Mgt. Intensification | | | | | | | | | | | 195,000 | | | 903,000 |
| Accelerated Land Exchange/Land Mgt. | | | | | | | | | | | | 175,000 | | 370,000 |
| Compost/co-compost Research | | | | | | | | | | | | | 435,000 | 0 |
| Municipal Solid Waste Incinerator Evaluation | | | | | | | | | | | | | 100,000 | 685,000 |
| Biological Control of Pests | | | | | | | | | | | | 250,000 | | 275,000 |
| Ash as Lime or Fertilizer | | | | | | | | | | | | | 490,000 | 0 |
| Conservation Corps | | | | | | | | | | | | | 70,000 | 250,000 |
| Non-Energy Peat Development | | | | | | | | | | | | | 300,000 | 490,000 |
| Sludge Ash Pilot Project | | | | | | | | | | | | | 100,000 | 70,000 |
| | | | | | | | | | | | | | 200,000 | 300,000 |
| | | | | | | | | | | | | | 100,000 | 100,000 |
| | | | | | | | | | | | | | 200,000 | 200,000 |
| TOTAL | 255,000 | 267,100 | 484,069 | 825,000 | 171,774 | 1,527,500 | 1,299,750 | 1,771,000 | 2,797,400 | 2,068,000 | 2,840,300 | 2,475,100 | 3,085,000 | 19,926,993 |

| HISTORY | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|---------------------------------------|--------|---------|---------|---------|-----------|-----------|-----------|---------|---------|--------|---------|---------|---------|-----------|
| Historic Sites Program | 80,000 | 235,704 | 266,052 | 287,803 | 280,000 | 345,000 | 695,000 | | | | | | | 2,189,559 |
| Paleontological Archaeologic Programs | | 93,500 | 88,000 | 88,000 | 45,600 | 45,600 | | | | | | | | 360,700 |
| Fort Snelling Restoration | | 200,000 | 265,000 | 322,000 | 682,500 | 1,071,500 | 1,325,000 | 250,000 | | | | | | 4,116,000 |
| Grand Mounds Interpretive Ctr. | | | | | | 150,000 | | | | | | | | 150,000 |
| Interpretive Center Plan | | | | | | | 100,000 | | | | | | | 100,000 |
| Forest History Interpretive Ctr. | | | | | | | 200,000 | | | | | | | 200,000 |
| Statewide Archaeologic Survey | | | | | | | | 250,000 | 150,000 | 59,200 | | | | 459,200 |
| Iron Range Interpretive Program | | | | 75,000 | | | | | | | | | | 75,000 |
| Iron Range Interpretive Ctr. | | | | | | 500,000 | | | | | | | | 500,000 |
| Conservation of Historic Collections | | | | | | | | | | | 100,000 | 85,000 | | 185,000 |
| Historic Preservation Planning | | | | | | | | | | | | 45,000 | | 45,000 |
| Environmental Oral History | | | | | | | | | | | | 50,000 | 45,000 | 95,000 |
| Historic Site Craft Program | | | | | | | | | | | | 80,000 | | 80,000 |
| Historic Data Base | | | | | | | | | | | | | 100,000 | 100,000 |
| Geographic Resource Marking | | | | | | | | | | | | | 45,000 | 45,000 |
| Heritage Trails | | | | | | | | | | | | | 45,000 | 45,000 |
| Indian History Grants in Aid | | | | | | | | | | | | | 70,000 | 70,000 |
| Farm Economy Record | | | | | | | | | | | | | 45,000 | 45,000 |
| TOTAL | 80,000 | 529,204 | 619,052 | 772,803 | 1,008,100 | 2,112,100 | 2,320,000 | 500,000 | 150,000 | 59,200 | 100,000 | 260,000 | 350,000 | 8,860,459 |

| NATURAL RESOURCE INFORMATION | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|------------------------------|---------|-----------|-----------|---------|---------|-----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Topographic Mapping | 100,000 | 940,000 | 1,000,000 | 910,000 | 750,000 | 1,060,000 | | 628,000 | | | | | | 5,388,000 |
| Soils Survey/mapping | | 50,000 | 60,000 | 40,000 | 48,000 | 100,000 | | 1,037,000 | 1,545,400 | 1,863,000 | 1,850,000 | 1,900,000 | 1,400,000 | 8,593,400 |
| State Land Use Planning | | 275,000 | | | | 380,000 | | 5,000 | 150,000 | 130,000 | | | | 940,000 |
| Aerial Photo Plan/maps | | | | | | | 160,000 | | 150,000 | | | | | 310,000 |
| Generalized Forest Maps | | | | | | | 8,000 | | | | | | | 8,000 |
| Remote Sensing | | | | | | 25,000 | | 10,000 | 70,000 | | | | | 105,000 |
| Land Mgt. Info. System | | | | | | | | 110,000 | 350,000 | 210,000 | 150,000 | | | 820,000 |
| Automated Ref. System | | | | | | | | | 80,000 | 136,000 | | | | 216,000 |
| TOTAL | 100,000 | 1,265,000 | 1,060,000 | 950,000 | 798,000 | 1,565,000 | 268,000 | 1,790,000 | 2,345,400 | 2,339,000 | 2,000,000 | 1,900,000 | 1,400,000 | \$17,780,400 |

LCMR Program Summary by Issue Area

| | 1963 | 1965 | 1967 | 1969 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | TOTAL |
|-----------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| Nat Res Info | 100,000 | 1,265,000 | 1,060,000 | 950,000 | 798,000 | 1,565,000 | 268,000 | 1,790,000 | 2,345,400 | 2,339,000 | 2,000,000 | 1,900,000 | 1,400,000 | 17,780,400 |
| Soil & Water | 370,000 | 250,000 | 382,900 | 334,600 | 359,666 | 431,840 | 436,000 | 2,765,063 | 3,137,000 | 1,540,900 | 1,408,200 | 4,200,000 | 4,642,000 | 20,258,169 |
| Recreation | 3,988,609 | 3,688,895 | 4,194,960 | 11,560,650 | 13,857,200 | 13,895,500 | 14,997,400 | 11,722,842 | 16,959,000 | 8,546,400 | 9,084,000 | 3,041,600 | 1,391,000 | 116,928,056 |
| Forestry | 1,200,000 | 915,000 | 475,000 | 550,000 | 575,000 | 514,000 | 425,000 | 0 | 664,400 | 2,309,000 | 1,334,000 | 775,000 | 480,000 | 10,216,400 |
| Fish & Wildlife | 850,000 | 725,000 | 1,000,000 | 1,075,000 | 1,075,000 | 490,000 | 667,500 | 223,300 | 209,300 | 322,000 | 126,000 | 390,000 | 3,309,000 | 10,462,100 |
| History | 80,000 | 529,204 | 619,052 | 772,803 | 1,008,100 | 2,112,100 | 2,320,000 | 500,000 | 150,000 | 59,200 | 100,000 | 260,000 | 350,000 | 8,860,459 |
| Energy | 0 | 0 | 0 | 0 | 50,000 | 140,000 | 0 | 800,000 | 859,800 | 1,067,000 | 589,000 | 450,000 | 184,000 | 4,139,800 |
| Minerals | 255,000 | 150,000 | 140,000 | 160,000 | 232,000 | 100,000 | 920,000 | 2,867,000 | 1,130,900 | 1,606,000 | 1,491,000 | 2,490,000 | 1,400,000 | 12,941,900 |
| General | 200,000 | 267,100 | 484,069 | 825,000 | 171,774 | 1,587,500 | 1,299,750 | 1,771,000 | 2,797,400 | 2,068,000 | 2,840,300 | 2,475,100 | 3,085,000 | 19,871,993 |
| TOTAL | 7,043,609 | 7,790,199 | 8,355,981 | 16,228,053 | 18,126,740 | 20,835,940 | 21,333,650 | 22,439,205 | 28,253,200 | 19,857,500 | 18,972,500 | 15,981,700 | 16,241,000 | 221,459,277 |

FEDERAL AND LOCAL FUNDING INVOLVING LCMR PROGRAMS

RECREATION

| | |
|---------------------------------------|---------------|
| Land and Water Conservation Fund | \$ 52,263,000 |
| Housing and Urban Development | 14,000,000 |
| Urban Park and Recreation | 1,100,000 |
| Great River Road | 3,150,000 |
| Upper Great Lakes Regional Commission | 500,000 |
| Economic Development Administration | 3,050,000 |
| Soil Conservation Service | 500,000 |
| U. S. Army Corps of Engineers | 2,000,000 |
| Local | 37,800,000 |

WATER

| | |
|--|-----------|
| Environmental Protection Agency - Lake Improvement | 5,200,000 |
| Water Resources Council - Water Planning | 1,200,000 |
| Local | 1,300,000 |

NATURAL RESOURCES INFORMATION

| | |
|--|-----------|
| Soil Conservation Service - Soils Survey | 9,200,000 |
| Local | 3,150,000 |

ENERGY

| | |
|--|-----------|
| Department of Energy - Peat/Alternative Energy | 1,700,000 |
| National Science Foundation - Peat | 150,000 |

MINERALS

| | |
|---|---------|
| U. S. Geologic Survey | 150,000 |
| Department of Energy | 175,000 |
| National Academy of Science - Seismic Profile | 500,000 |

HISTORY

| | |
|---------------------------------------|-----------|
| Department of the Interior | 1,250,000 |
| National Endowment for the Humanities | 75,000 |

| | |
|-------|---------------|
| TOTAL | \$138,413,000 |
|-------|---------------|

These figures are approximations and are presented to provide an understanding of how LCMR appropriations have been used to leverage federal dollars for the benefit of Mn.

| | |
|---|--------------------|
| Total LCMR appropriations 1963-1983 | \$189,236,000 |
| Total federal and local funding involving LCMR programs | <u>138,413,000</u> |
| GRAND TOTAL | \$327,649,000 |