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Department of Natural Resources  
Response to Budget Questions of  
House Appropriations Committee,  
State Departments Division  
1983-85 Biennial Budget

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1. "What is the status of your affirmative action plan"? Have the FY 1982-83 budget reductions had an adverse impact on the plan's implementation?"

The Department of Natural Resources has met its affirmative action goals except in the area of female supervisors and handicapped employees. The current goals and current protected class ratio are as follows:

	<u>Goal</u>	<u>Present</u>
1. Females		
a. Management	5.6%	5.8%
b. Supervisory	22.0%	5.8%
c. Other	29.0%	38.3%
2. Minorities		
a. Metro Area	4.0%	4.3%
b. Outstate	2.0%	1.8%
c. Over fifty percent (50.8%) of the Department minority employees are employed in professional or technical positions.		
3. Vietnam Era Veterans	9.0%	10.4%
4. Handicapped Employees	8.2%	3.7%

Budget cuts have caused some problems, but there has been no adverse impact on the program. While the department suffered significant budget reductions which resulted in personnel impacts, the majority of the department personnel reductions were made by effectively managing vacancies with a minimum number of layoffs.

2. "Please provide a list of your change level requests and indicate the Governor's recommendation on each. Include both dollars and complement. In addition, list any recommendation for increases or decreases to the same level not requested by the department."

See attached Exhibit A.

3. "To what extent are your change level requests a reinstatement of funds removed from your budget by FY 1982-83 cuts? To what extent do your change level requests represent a change from LCMR funding in FY 1982-83 to general fund in FY 1984-85?"

See attached Exhibit A.

4. Please list the general and special fund revenue generated by your department's activity through receipts, fees, etc. Indicate how much of that revenue is retained by the department to offset administrative and program costs. Where revenue is not retained by the department, indicate who/what receives the proceeds.

See attached Exhibit B.

5. Please provide fund statements for the following fund/accounts operated by the DNR:

Game and Fish Fund  
Forest Management Fund  
State Forest Account  
Consolidated Conservation Area Account  
Non-Game Wildlife Fund  
State Park Operation and Maintenance Account  
Snowmobile Trails and Enforcement Account

See attached Exhibits C and D.

6. What is the rationale for the Governor's recommendation for general reduction in certain programs? How was the amount determined?

The Governor's Office, prior to developing their budget recommendation, requested the department to submit a series of decision packages to aid the Governor in his budget decisions. One of the requested decision packages was for a general reduction in the DNR budget. The Governor selectively included portions of that decision package in his budget recommendation based upon an assessment of the impacts.

7. You have reduced the Game & Fish request by \$500.0 in 84 & \$250.0 in 85 "to provide an appropriate fund balance." How do you determine what is "appropriate?"

There is no specific dollar value attached to "appropriate fund balance". We have spent considerable time over the past several months attempting to constantly refine our estimates of anticipated fund receipts for the remainder of this fiscal year and over the next several years and to match proposed budget expenditure levels to insure continued solvency of the fund. It should be noted that the Game & Fish Fund statement (attached as Exhibit D) indicates a fiscal year 1985 ending fund balance of about \$4-1/4 million based upon the department's proposed expenditures for the coming biennium; however, that fund balance does not include salary supplement costs for the 1983-85 biennium as a result of bargaining unit contract settlements. While we don't know what these costs might be, the Department of Finance has advised us that the cost potentially could be as high as \$3.4 million. That would reduce the 1985 ending fund balance to about \$800,000. While that is getting a little close we still feel that balance will still allow the fund to remain solvent.

General - Question #7 (cont.)

It should be noted that there are a couple of items that have increased the draw on the Game & Fish Fund. One is an increase in the assessment of statewide indirect costs against the Game & Fish Fund. We have been advised by the Department of Finance that indirect costs will be increased \$60-80,000 for fiscal years 1983, 1984 & 1985. Secondly, we have some catch-up to do on unemployment and workers compensation costs. As you recall, the department has historically requested a deficiency appropriation for prior unemployment and worker's compensation costs. With the recent increase in interest penalty for unemployment compensation to 1-1/2% a month it is prudent management that we get on a current payment basis to eliminate a sizeable interest penalty cost. Accordingly we are proposing to pay 5 years of unemployment and workers compensation costs in 3 years (1983, 1984 & 1985) so that our payments will be current.

Based upon the foregoing it became obvious that the department would have to immediately proceed to reduce expenditures for fiscal year 1983 and the coming biennium to assure continued solvency of the fund. Accordingly the department has reduced planned expenditures against the Game & Fish Fund for fiscal year 1983 by \$250,000. Additionally the department has amended it's budget for the coming biennium by reducing it's request by \$500,000 in FY 1984 and \$250,000 in FY 1985.

Administrative Management Services Program - General (6-5314)

There are a number of questions which follow a common thread and should be appropriately responded to together. More specifically this includes the questions indicated under each of the following headings:

Administrative Management Services Program - General; Questions 1 & 2  
License Center; Questions 1 & 2  
Regional Administration Program; Question 1  
Field Services Support Program; Questions 1 & 2  
Planning & Research Program - General; Question 1

The fundamental issue raised is the appropriate funding source for the above programs and activities.

In the past, the funding source for these various programs has fluctuated significantly as indicated below:

Program	1975-77	77-79	79-81	81-83
Administrative Mgmt.				
General Fund	67%	67%	67%	65%
G & F Fund	33%	33%	33%	35%
Regional Administration				
General Fund	100%	100%	96%	80%
G & F Fund	0	0	4%	20%
Field Services				
General Fund	75%	75%	75%	70%
G & F Fund	25%	25%	25%	30%

This split in funding mix has been rather arbitrarily established each biennium for these programs and as you can see over the past 8 years has increasingly depended on the Game and Fish Fund.

To effectively respond to the multiplicity of funding source questions which you have asked would require an extensive cost distribution system to account for a multiplicity of individual projects within the various programs and activities. The department currently does not have such a system; we currently use the Statewide Accounting System to account for expenditures at the program and activity level but to go below that level will require significant computer system development within the department. The department has long had an interest and desire to develop a cost distribution system but has never had the funding or personnel to develop such a system. Development of a department cost distribution system is one of the key elements identified in our recently completed Management Information Systems Strategic Plan which is the foundation for the DNR request to LCMR for funding of improved management information systems in the department.

Questions were raised relative to the funding mix in the various activities in the above programs (i.e. Commissioner's office, license center, financial management, etc.). The department generally has not attempted to divide up the multiple funding sources down to the activity level because: 1) without an effective cost distribution system the distribution of funding would have to be arbitrary; and 2) the split funding of individual activities would require the department to significantly expand the number of accounts it manages and further compound our financial management problems (the department already has over 800 accounts within 170 appropriation accounts and the Department of Finance is attempting to get the DNR to reduce that number). Accordingly the department has been concerned with maintaining the appropriate fund source distribution at the program level in accordance with the legislative intent. When we establish annual spending plans for individual bureaus we frequently fund them from a single fund source (clean fund accounting) in order to keep our accounting system more manageable. For example, we are currently funding the Bureaus of Engineering and Lands entirely from Game and Fish Funds even though they provide service functions for both the General Fund and Game and Fish Fund activities; similarly the Bureaus of Personnel and Office Services and Records are entirely funded from the General Fund even though they provide services to activities in both funds. To change this practice at this time would require a significant expansion in our financial management staffing.

Questions have been raised regarding the funding of a portion of department "administrative" costs from special revenue funds. We think that it is an appropriate question but also look at it with considerable hesitancy because of a number of inherent problems. Several considerations are:

1. In some instances it would be illegal to extract administrative costs from special revenue funds. For example, one of the special revenue accounts shown in the Mineral Management Program expenditures is the 80% distribution of tax-forfeited mineral receipts paid to the affected counties. This expenditure (approximately \$1.3 million for each year of the coming biennium) is set by law and we cannot extract "administrative" costs from this expenditure. The remaining 20% of the tax-forfeited mineral receipts (approximately \$1.3 million each year of the coming biennium) are deposited in the General Fund and thus any "administrative" costs should come from the General Fund rather than the special revenue fund.
2. Extracting "administrative" costs from some of the special revenue accounts will increase the General Fund requirements within the program. For example, in the Parks Program, because of continuing General Fund reductions thru this biennium, the State Park Maintenance and Operation Account has been increasingly used to offset decreased General Fund support for park operations. Extracting "administrative" costs from this special revenue account will reduce the funds available from the account for the program and thus will require increased General Fund support for park operations.
3. Most of the special revenue accounts are already required by the Department of Finance to pay statewide overhead costs which are assessed annually.
4. From a practical standpoint, using special revenue accounts to fund "administrative" cost will require a significant increase in the number of accounts in DNR which will further compound our financial management problems.
5. Because of the limited nature and amount of a number of special revenue accounts, they do not demand the full range of administrative services that the General Fund and Game and Fish Fund activities require. For example, the State Park Maintenance and Operations Account, the Forest Management Fund, the Consolidated Conservation Area Fund, etc. do not require the services of the DNR License Center.

The significant issue, as it has been historically, is the appropriate mix of funding source from the General Fund and Game and Fish Fund in support of administrative functions in the department. This primarily affects the Administrative Management Services Program and the Field Services Program. While the Regional Administration Program has been split funded between the General Fund and Game and Fish Fund during the past two biennia, that situation is different than the two previous programs because of the heavy natural resources programmatic involvement in this program. Thus, Regional Administration has received Game and Fish Funding for the positions specifically involved in fish and wildlife management.

A possible rationale for funding of Administrative Management Services and Field Services between the General Fund and Game and Fish Fund would be the relationship between the two funds in the department biennial budget. For example, the relationship between the General Fund and the Game and Fish Fund in the DNR budget is 63.6% and 35.4% respectively. The funding mix for the Administrative Management Services budget request is 57.7% General Fund and 42.3% Game and Fish Fund; for the Field Services Program the funding mix is 70.3% General Fund and 29.7% Game and Fish Fund. The funding mix for the two combined programs is 63.7% General Fund and 36.3% Game and Fish Fund. Using the above rationale it would appear that the funding mix for the combined programs is about appropriate as indicated in the department budget.

#### Administrative Management Services Program - General (6-5314)

3. "How will the Governor's recommendation of a \$273.4 general reduction affect this program?"

The elements of this general reduction are as follows:

1. Commissioner's Office: \$25,000/year, elimination of contingency for unforeseen costs and/or unfunded liabilities.
2. Financial Management: \$13,000/year; elimination of all part-time labor funding.
3. Personnel and Training: \$12,500/year; will require closing of the DNR Training Center at the William Mitchell Law School.
4. License Center: \$40,000/year; nearly a 15% reduction in printing funding for the printing of licenses and related materials.
5. Information and Education: \$71,000; a substantial reduction in natural resources publications and supplies and expense.
6. Office Services: \$21,200; a reduction in forms handling and distribution and DNR photocopying funds.

#### Land Administration (6-5324)

1. "The narrative states the appropriation for payment of ditch and special assessments is inadequate. Why did you not include a request for full funding? What is the impact of under funding this activity?"

This item has historically been an unfunded liability in the department. We have tried to extract funds from the department budget where ever possible in the past to try to pay the majority of the assessments. The Land Administration budget request includes funds for assessments in the amount of just over \$50,000 each year for the '83-85 biennium. Our assessment billings have averaged approximately \$125,000 per year in recent years. We are currently holding about \$201,000 of assessment billings which we do not have funding for; however, we are disputing several of these assessments.

2. The narrative states "Greater emphasis should be given to the leasing program to improve lease management, and revenues will increase as more leases are established." Can you provide this emphasis within the Governor's recommendation?

The land suitability project funded by the LCMR will assist the acceleration of the leasing program and provide the department with a better foundation for it's leasing program. The land base managed by the department does offer greater leasing opportunities. However, under current legal constraints and staff limitations we will not be able to fully maximize these opportunities. Additionally staff for the northern three regions would help; however, current budget pressures do not allow this expansion.

3. "Is the cost of lease administration built into the lease rates?"

Lease rates are established by using market evidence from comparable leases in the private sector. Minimum transaction fees have been established to cover administrative costs for the very small, low revenue leases. For example, we have initiated a transfer fee to cover the department's cost of transferring existing leases, licenses, and agreements at the lessee's request.

4. "How is the length of a lease determined? How do you set and review the lease rate?"

Leases may be issued for no longer than 10 years in accordance with Minnesota Statutes, Section 92.50. Leases of shorter duration may be issued if desired by the lessee or by DNR management staff.

Lease rates for agricultural leases are established each year based upon market evidence of comparable private agricultural leases to insure that our rates are comparable to private land. Other leases that are based upon land value have the rate established based on an appraisal of the land at the time the lease is issued. All leases of this nature are reappraised every five years, under current policy, and the lease rate is appropriately adjusted.

5. "The DNR has been criticized for holding too many acres of state's land area. What progress has been made in this area?"

The land suitability project, financed thru LCMR funds, has been initiated to evaluate the entire land base managed by the department. One result of this will be an identification of state lands for disposal. In the interim the department has conducted several land sales but because of present market conditions the lands are not selling well. For example, the most recent department land sale was in October, 1982; we offered over 2,650 acres for sale in 13 counties and we were successful in selling only 582 acres.

#### Information and Education (6-5331)

1. "In the past, part of your appropriation has been earmarked for adult hunter education. What amount is requested/recommended for FY 1984 and FY 1985?"

The department's budget request for adult hunter education is \$44,600 and \$46,200 in fiscal years 1984 and 1985 respectively.

#### Information and Data Systems (6-5333)

1. "Please summarize the results of the Revenue Accounting Task Force referenced in the narrative. Did the Task Force make any specific recommendations?"

The Revenue Accounting Task Force, composed of key personnel in DNR involved in revenue generating activities and Department of Finance representation, has succeeded in identifying the magnitude and complexity of the many revenue generating processes being maintained by the department and has made a number of recommendations. The most significant one being a complete revamping of the existing antiquated manual system for revenue accounting in DNR with the development of a modern computerized system. Because of the complexity of the technical aspect required by our various accounting processes, the services of a professional system analyst were obtained from the Information Systems Bureau (ISB) to complete the initial computerization study. Based on the findings of this combined effort, a segmented approach was recommended to resolve: a) the short term revenue accounting problems (Segment I) and b) a long term comprehensive fiscal systems integrating all aspects of the departmental fiscal processes (Segment II). Based on this segmented approach, a contract was negotiated with ISB to pursue Segment I to its completion keeping in mind the followup segment which will commence immediately upon implementation of this initial segment. As of this writing, the Phase I study has been completed and approved, and funding obtained to program and implement Segment I. It is the department's goal to have Segment I of this system operational by July 1, 1983.

2. "What progress is being made on developing a cost accounting system for DNR?"

The development of a cost accounting procedure has been scheduled for the 1983-85 biennium pending approval of the required funding. As an interim process in conjunction with the development of the revenue system, some required coding standards are being developed to facilitate development of all related fiscal projects currently being researched. A pilot project is currently being developed for the Division of Parks and Recreation in the area of a labor distribution system. The development of a statewide labor distribution capability currently being researched by the Finance Department is also being monitored as a potential solution to our needs in this area.

3. Please briefly describe the "DNR Information Systems Strategic Plan" prepared for the LCMR. What portions of the plan could be implemented with the \$600.0 LCMR dollars? without?

The "DNR Information Systems Strategic Plan" as developed by an internal task force composed of key personnel involved in data/word processing systems and other modern office management technologies and was directed by Ron Visness on a mobility assignment from the Department of Energy, Planning, and Development. The primary purpose of the plan was to: assess the current status of information system applications and hardware and software capabilities in the department; recommend an effective management structure for management information systems in the department; evaluate potential needs for modern office technology applications; and develop a strategic plan to guide implementation of DNR management information systems including a cost estimate for budgeting purposes. Attached as Exhibit E is an Executive Summary of the plan.

You will note that implementation of the integrated plan contemplates using a variety of funding sources included in the department budget request. The LCMR Information Systems budget request is generally intended to be used for the following purposes: applications development - \$343,500 (the major element being for development of a department-wide cost accounting system); information systems planning - \$75,000; data communications - \$80,000; and hardware - \$75,000.

#### Regional Administration Program (6-5340)

2. "What is the funding and FTE distribution for the administrative staff only (excluding the program supervisors)?"

Staff included in the regional administration budget encompasses four functional staff groups. These are:

Regional Administration  
Professional/Technical Services  
Program Management  
Clerical Support

The regional administration and coordination function includes 6 regional administrator positions (one for each region). The professional/technical assistance function covers 22 positions. Generally, this includes a business manager, field services coordinator, engineer, and lands specialist in each region (currently Region 5 does not have a regional engineer or lands specialist). Program management staff encompasses regional supervisor positions for each of the six major field disciplines (enforcement, fish, wildlife, parks, waters, and forestry), as well as regional naturalist positions in three regions. There are 39 program management positions statewide. The clerical support function includes 40 positions.

A summary chart of the functional breakdown of positions within the regional administration budget and their associated costs (estimated FY '84 salary and fringe benefits costs) is provided below.

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Regional Administration Staff Functions: Positions & Salary Costs

	Positions		Salary Costs*	
	Number	% of Total	Dollars	% of Total
Reg. Admin. & Coord.	6	5.6	248,320	7.8
Prof/Tech. Asst.	22	20.6	745,337	23.4
Program Mgmt.	39	36.4	1,446,597	45.5
Clerical Support	40	37.4	741,908	23.3
Totals	107	100.0	3,182,162	100.0

\* Includes personnel fringe costs

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3. "The metropolitan regional office was directed to be closed by Laws 1982, Chapter 641. The office is open at present, though funding for FY 1984-85 does not appear in the budget. Why hasn't the office been closed? If the Legislature elected to reinstate the office for FY 1984-85, what funding and complement would need to be added to this program?"

The legislation adopted in 1982 required the Department of Natural Resources to do two things: 1) to reduce its general fund budget by \$450,000; and 2) to close the metropolitan region office. The budget has been reduced as required. The department is prepared to close the metropolitan office by the end of the current fiscal year; the office, however, has not yet been closed. There are several reasons for this.

First, immediately following the 1982 Legislative Session, the department established an internal task force to examine alternative regional structures (including the elimination of the metropolitan region office) and budgetary costs or savings, as well as one-time implementation costs associated with each alternative. It quickly became apparent that funds could not be saved in the short run by an immediate closing of the metropolitan region office. The department realized it was in a difficult position; it had two, seemingly, diametrically opposing directives: save money and close the metropolitan region office.

Second, the task force's preliminary evaluation of alternative regional structures indicated that there would be significant adverse impacts to the department's natural resource management programs. From a programmatic perspective, reducing the number of regional offices was not demonstrated to be cost effective. The department believed that, prior to taking any action which would adversely impact natural resource management programs, the legislature should be provided an opportunity to review the action, its costs, and associated resource management impacts. A report detailing alternative regional organizational structures has been submitted to the legislature for their review and evaluation.

Six Region Funding: In accordance with your request, the department has determined the funding required to operate a six region organization under the Regional Administration budget for the 1983-85 biennium. This analysis is based upon the premise that funding would be provided for the currently authorized positions as indicated on the preceeding page and maintaining the supplies and expenses at current levels. The funding required would be \$3,616,500 and \$3,633,900 for fiscal years 1984 and 1985 respectively.

4. "Please summarize the findings of 'Report to the Minnesota Legislature on the Minnesota DNR Regional Organization'."

A five page summary is attached as Exhibit F (pp. 55-59 of the report). The summary includes:

Description of alternative proposals - p. 56  
Summary of budgetary and personnel changes - p. 56  
Evaluation of alternative proposals - pp. 57-58  
DNR conclusion - pp. 58-59

The Management Analysis Division of the Department of Administration reviewed the report and made five important points:

1. Based upon the assumptions inherent in the study, the DNR analysis is accurate.
2. The costs associated with implementing alternative regional organizational structures are high.

The department agrees; major changes in the existing regional organizational structure would entail high one-time implementation costs. It should be noted, however, that 60 to 76 percent of the costs of implementing the alternatives reviewed in the report are due to personnel costs (severance, unemployment compensation, and relocation costs) which would be incurred as a result of conditions imposed by department employees' bargaining unit contracts. In these contracts, the state has agreed to layoff and seniority conditions which result in high severance costs and numerous relocation expenses (related to a employee's right to move into a vacant position or to "bump" a less senior employee under specified conditions) when positions are eliminated, relocated, or reallocated to a different classification.

3. "... It is impossible to reorganize one level of an organization without fully examining programmatic, structural, and fiscal effects on other parts of the organization."

The department has three basic functional levels: central office, regional administration, and field staff. The legislature mandated that the department reorganize only the middle portion of its organizational structure. The department recognized that there would be problems in reorganizing solely a single organizational level. It additionally recognized, however, that: 1) to do otherwise would entail a massive study which could not be done in a timely manner with existing resources; 2) that a full-scale analysis of the department's organizational structure had been completed less than ten years ago by Governor Wendell Anderson's Loaned Executive Action Program (LEAP); and 3) that the legislative directive was to reorganize and save money, and that any major effort to reorganize the department's overall structure would involve additional short-term costs. Therefore, the department's regional organization task force examined only major adverse impacts to other organizational levels while developing and evaluating alternative regional organizational structures as directed.

4. Changes in the department's regional organizational structure are not advisable without further study.
5. An indepth analysis that includes possible reorganization of the Central Office and the sub-regional structure is advisable.

As noted above, a major study of the department's organizational structure (with hundreds of field staff interviews) was conducted in 1972 under LEAP. Radical changes in the department's organizational structure were recommended. The department began to formally reorganize along the guidelines prescribed by LEAP in 1973; and in 1974 published a DNR Organizational Manual which emphasized the regional administration concept as recommended by LEAP. In a short period of time the department went through radical organizational changes, a total physical reorganization, as well as the institution of new accounting and budgeting systems. Since that time the department has continued, and will continue, to refine its organizational structure and to improve the cost-effectiveness of administrative systems and procedures. Efforts to decentralize decision-making to the field continue, policies have been developed to better coordinate resource management programs and to improve the effectiveness of resource management activities, payroll decentralization and improved bill paying procedures have been adopted, new revenue management procedures are being developed, management and data information systems are being integrated, and organizational analysis have been undertaken in select divisions. Additionally, the Division of Forestry (with the single largest field staff) is examining the realignment of its administrative units, as directed by the Forest Resource Management Act of 1982 (Laws of Minnesota 1982, Ch. 511, Sec. 8, Subd. 2).

In summary, the department has: had a recent and major analysis of its organizational structure; undertaken a massive structural and physical reorganization; developed and implemented more efficient and effective administrative and resource management procedures (and continue to do so); initiated internal organizational analyses at the discipline level; and is currently conducting a study of the single largest field staffs sub-regional organizational structure. It is unclear what the goal or benefits of a new departmental organizational analyses would be.

5. "How would the Governor's recommendation for a general reduction of \$363.5 be implemented?"

Implementation of the Governor's recommendation would entail the closing of the metropolitan region office. Ten positions would be eliminated, the regional engineer and regional lands specialist positions would be transferred to southeast region (currently the metro and southeast regions share these positions), and five positions (a regional fisheries supervisor, a regional hydrologist, and three clerk typist 2 positions) would be transferred to the disciplines so that essential urban fisheries and water management needs would continue to effectively be addressed.

The Governor's budget recommendation represents funding at a level less than that necessary for funding all regional administration staff positions for five regions. Full personnel funding for five regions would necessitate an additional \$168,900 just for operational costs without consideration of the high closure costs indicated in our report or the other program costs required to maintain essential management programs in the divisions. If it is ultimately the legislatures decision to reduce the DNR regional structure to less than the present six regions it is imperative to the effective functioning of the department that adequate funding be provided.

It is our understanding that the legislature's intent in seeking a reduction in the Regional Administration budget is to reduce administrative costs but not to reduce natural resources management efforts or services. As indicated in the report, we believe that we have optimized the efficiency and effectiveness of the regional structure with the present six regions. The fundamental problem associated with reducing the regional administration budget is that the reduction does impact natural resources capabilities because the first line management and supervision staff (Division program managers; i.e. Regional Park Supervisors, Regional Fish Supervisors, Regional Hydrologists, etc.) for all field operations is contained in the regional administration budget. As the department has repeatedly maintained, the division program managers in each of the regions are imperative for effective and efficient implementation of natural resources programs in the field.

The department is prepared to discuss possible options for legislative consideration.

Field Services Support Program (6-5342)

3. "The narrative (6-5343) states the DNR plans to consolidate some facilities and dispose of some surplus buildings. Please elaborate."

The Department has an objective of reducing buildings by 20 during the biennium. Currently we have identified seven buildings for disposal. It is expected that continued DNR emphasis on disposal of unnecessary buildings will result in additional structures being identified. The Division of Forestry study of realignment plans as relates Forest Resource Management Act, Laws of 1982, is expected to contribute to the building reduction objective.

It should be noted that building disposal has been a continuing objective of the department for a number of years. For example, since September 1977, we have been successful in disposing of 194 buildings totaling in excess of 170,000 square feet.

4. "You have reduced the Game & Fish request by \$200.0/year. What will be affected by this change?"

This is a typo error. The reduction is \$20,000. The impact will be on the Department equipment appropriation.

Waters-Water Bank (6-5346)

1. "The narrative indicates the inventory, designation and publication responsibilities in the Water Bank program will be completed in FY 1985. Does this mean a request for these activities will not appear in the FY 1986-87 budget?"

Historically, the Water Bank Activity has included both the protected waters inventory and the administration of state funds to compensate landowners for the preservation of wetlands. While the inventory is scheduled for completion in the forthcoming biennium, there will be continuing need to administer the landowner compensation aspects of the overall program. Therefore, it is anticipated that funding at a reduced level would be requested for the following biennium.

2. "Please discuss the separate legislation for water bank/wetland preservation referenced in the narrative."

The water bank/wetland preservation legislation referenced in the narrative is the Department's request for acquisition of interests in land (Resource 2000). In the current biennium, \$200,000 each year was appropriated from the Game and Fish Fund for water bank agreements and \$4,500,000 of state bonding funds were appropriated through the Resource 2000 program for the combined wildlife and water bank land acquisition programs, of which \$2,500,000 is designated for water bank. The Department's Resource 2000 request is \$1,750,000 for water bank land acquisition purposes for the 1983-85 biennium.

3. "Could Non-Game Wildlife check off money be utilized for any portion of this program?"

The Non-Game Wildlife check off money, voluntarily donated by Minnesota taxpayers, is paid into a fund established specifically for the management of non-game wildlife. These funds are then appropriated to the Department for use by the Non-Game Section of the Section of Wildlife. The Department feels that any diversion of these funds from non-game wildlife management will result in a drastic reduction of contributions and would not serve the purposes of either the Non-Game or Water Bank Programs.

#### Minerals--General Operations and Management (6-5369)

1. "What portion of funding and complement in this budget activity is attributable to leasing activity? Are these costs built into the lease rates?"

Of the entire general fund budget request of \$3,879.8 for the biennium, approximately two thirds, or \$2,600.0 is attributable to the management of the 10 million acres of mineral rights administered by the Division. The other one-third is for mineral related activities such as environmental review, regulatory duties related to the Exploratory Boring Act, addressing mineral related inquiries of the public and governmental agencies, input into other Department of Natural Resources management activities, staff support (such as heavy metals studies, IRIS, Economics, etc.) for other Division activities such as Mineland Reclamation, Peat Management and Inventory.

Of the \$2,600.0 figure for mineral rights management, direct costs of issuing and administering issued leases are significantly less (approximately \$1,400.0) but realistically the mineral leasing function cannot be carried out separately from the overall management of mineral rights. These direct costs vary according to involvement of state leases in taconite production and the size and number of copper-nickel lease sales, etc. It is expected that due to the current problems being experienced by the taconite industry and resulting rescheduling of operating plans, and the current interest in copper-nickel leasing and exploration that these costs may run higher during the biennium.

For a typical 50-year mineral lease there are three periods of higher lease administration costs: the first is related to the lease negotiation (or lease sale) and issuance; the second is the period when the property is brought into production; the third is when mining is being completed and the lease is terminated. In between these periods the costs are generally low. Once production is established, costs are partially offset by the requirement under the state lease that certain inspection costs must be reimbursed by the operator (Weighmaster Revolving Fund).

Of the activity complement of 48, fourteen are directly involved (at least a portion of their time) with Iron Ore and Taconite lease activity. As many as 30 are involved with the development of a copper-nickel lease sale, with the number reduced to 15 once the leases are issued.

Leasing costs are indirectly built into the lease rates. Leases provide for both rentals and royalties and these rates are primarily determined on the basis of the value of the mineral property. Royalties which are based on the value and amount of mineral production are for the major source of income under the state leases. Rentals, and special advance royalties in the form of rentals, are generally a charge for "tying up" the property by the operator and such, administration costs are one of many factors considered in establishing them. These costs, however, are considered over the life of the lease rather than on a year by year basis (see comments above on high and low cost lease periods).

2. "The Permanent School Trust Fund will be receiving almost \$3 million in rent and royalty income from DNR's activity in FY 1984-85. What funding and complement is required to generate this income? Does DNR receive any reimbursement for their cost?"

Because of the level of taconite production from school trust fund lands (approximately 50%) and the amount of its lands involved in the copper-nickel lease sales, it is estimated that approximately \$1,100.0 (of the \$2,600.0 million mentioned in Question 1 for overall mineral rights administration) is related school trust fund minerals. Of this approximately \$600.0 are direct costs of leasing activity. A portion of the time of the same number of complement mentioned in Question No. 1 is involved (14 for iron ore and taconite, and up to 30 for copper-nickel lease sale development).

100% of mineral income from Trust Fund properties goes to the Permanent Fund. An earlier attempt to recover administration costs for DNR was ruled unconstitutional. A constitutional amendment would be required to get reimbursement.

3. "Proceeds from tax forfeited land are distributed 80% to local taxing districts and 20% to the general fund. What is DNR's cost to administer the mineral resource on this land? Does the 20% deposited in the general fund cover the state's cost?"

It varies widely depending on the level of taconite development on tax forfeited lands at a particular time, the areas involved in copper-nickel leasing, and litigation regarding severed mineral rights and tax forfeiture. It generally varies from 10 to 20 percent of total mineral proceeds from tax forfeited mineral rights. The cost for the forthcoming biennium is estimated at \$600.0.

Yes, both overall and over the life of a tax forfeited mineral lease. The 20% to be deposited for the forthcoming biennium is estimated at \$660.0.

4. "The narrative (6-5368) states that funds for re-fencing unleased state owned mines is not included in the request. How much money was/is used for this purpose in FY 1982-83? Is DNR submitting departmental legislation to extend the fencing compliance date? Has the remaining fencing been prioritized?"

\$24.0 was expended for this purpose; however, the annual expenditure varies significantly based on amount of theft of fencing, snow damage, etc. This is for labor and materials for repair only and does not meet the new standards for fencing. The fence repair costs have been as much as \$45.0 in a single year.

The DNR has submitted legislation to extend the fencing compliance date to November 1984. (It has been previously extended three times).

The St. Louis County Mine Inspector has filed a notice with the Department regarding fencing compliance. The Division inspects all of the fencing each spring to prioritize repairs, and inspects the fencing in populated areas more frequently. Fencing in heavily populated or use areas is generally given priority.

5. "The Governor has recommended unrequested increases of \$500.0 for copper/nickel test drilling. What was the amount requested for drilling? Can DNR increase their effort to meet the Governor's recommendation within the next two years or would a slower incremental increase be more reasonable? Please provide a detailed budget for this expenditure of the \$500.0"

1. \$197.3 was requested by the department.
2. This initiative has the potential to provide significant economic stimulus to Minnesota. By conducting minimal test drilling in areas of potential mineralization, we can gather additional information about geologic structure in the specific areas which could be of significant interest to companies conducting mineral exploration in Minnesota. This potentially could result in significant additional mineral leasing of state mineral lands with attendant increases in mineral rental receipts and also an increased expenditure by the companies in Minnesota.

The Department can readily increase its effort to meet the Governor's recommendation within the biennium. Due to budget cuts in recent years, there is a backlog of test drilling to be done. A Minnesota Department of Transportation drill has been equipped with wireline equipment (with LCMR funds) to facilitate bedrock drilling for this program. The Division has already done geochemical surveys in much of the area and some ground geophysics and this work is being coordinated with the recent M.G.S. Aeromagnetic surveys in the area. The only ingredient missing has been funding.

3. COPPER NICKEL TEST DRILLING (Governor's Recommendations)

	<u>FY 1984</u>	<u>FY 1985</u>
0 Personal Services		
01 Reg. Classified Positions (2 field positions)	50.0	53.5
1 Expense/Contract Service		
10 Rents & Leases	.2	.5
12 Repairs Services	.2	.2
14 Printing and Binding		1.0
16 Prof/Tech Services-Contracts	194.0	189.2
18 Purchaed Services	.2	.2
2 Expense/Contract Services		
21 Travel/Subsistance In-State	4.5	4.5
26 Freight and Express	.1	.1
3 All Supplies/Materials/Parts		
30 All Supplies/Materials/Parts	.8	.8
TOTAL	<u>250.0</u>	<u>250.0</u>

4. ACTIVITY DESCRIPTION

F.Y. 84

- |                                                                                                                                                                                                                             |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| a. 3,000 foot deep "structural" hole in southern Duluth Complex                                                                                                                                                             | \$ 60.0 |
| b. Two traverses of up to 20 holes/traverse cutting across the Duluth Complex. Average 100 feet overburden and 100 feet bedrock. Geologic control drilling to increase knowledge of economic geology of the Duluth Complex. | 190.0   |

F.Y. 85

- |                                                                                                                                                                                                                                                                         |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| c. Geologic control drilling in east central Minnesota in area for potential for stratabound and/or strataform sulfides to increase economic geologic knowledge of area. Two traverses of up to 100 holes per traverse with an average of 100 feet of bedrock per hole. | \$100.0 |
| d. Identification of certain magnetic anomalies from the MGS aeromagnetic survey.                                                                                                                                                                                       | 130.0   |
| A) Lost Lake anomaly - 4,000' hole<br>B) West end of Animikie Basin - 2,000'hole<br>C) Mag. and gravity high in Virginia formation west of the Duluth Complex - 1,000' hole                                                                                             |         |

- e. Basal till sampling in greenstone or gabbro to use 20.0  
for geochemical exploration instead of bedrock drilling.

6. "The Governor has recommended unrequested increases of \$2 million for direct reduction research. Please provide a detailed budget for the expenditure of these funds. Are these envisioned or department expenditures or pass through monies?"

"Has research done to date supplied enough evidence of the feasibility of this process to justify this commitment of funds?"

6a. (a.) Direct Reduction Research (Governor's Recommendation)

	<u>FY 1984</u>	<u>FY 1985</u>
0 Personal Services		
02 Reg. Unclassified Positions (one position)	43.8	45.6
03 Part Time/Seasonal/Labor Service	10.0	10.0
1 Expense/Contract Services		
11 Advertising	1.0	1.0
14 Printing and Binding	1.5	2.0
16 Prof/Tech Services-Contracts	685.4	1,185.6
2 Expense/Contract Services		
20 Communications	.8	.8
21 Travel/Subsistence In-State	3.0	3.0
22 Travel/Subsistence Out-State	3.0	1.0
3 All Supplies/Materials/Parts		
30 All Supplies/Materials/Parts	1.5	1.0
TOTAL	<u>750.0</u>	<u>1,250.0</u>

Activity Description: Research and design proposals for a direct reduction facility on the Iron Range will be provided by this activity. Requests for proposals (R.F.P.) procedure will be used for obtaining and selecting direct reduction proposals in conjunction with existing taconite facilities (retrofitting of current taconite concentrate-pellet operations). A close working relationship by the DNR with the Bureau of Mines, Iron Range Resources and Rehabilitation Board, Minerals Resource Research Center and the Minnesota taconite operation will be involved in carrying out this activity.

Explanation of Request: Most of the requested funding, (\$1,871.0) will be used for contracts selected under the R.F.P. process. The balance, less than 7% is for complement (one person and labor service ) and administrative support in R.F.P. development and contract monitoring.

2. (b.) Of the \$2,000.0 recommended for this activity \$129.0 would be expended within DNR and \$1,817.0 will be expended by DNR through outside contracts.

2. (c.) Direct reduction is the oldest known process for making iron. There are now many modern variations of the process, each designed to address a particular situation. In 1980, approximately 7 million tons of direct reduced iron was produced by the free world countries. Existing direct reduction plant capacity now stands at approximately 16 million tons per year.

Technically it can be done. Certain conditions or situations are necessary, however, to make it economically viable. If a new, separate, plant is envisioned; if, quoted prices for fuel or ore feed the process are used; If the envisioned product is merely a competitor for steel scrap; the answer is No. If, however, existing equipment in existing taconite plants can be modified, added onto, etc.; if prices for lignite, taconite concentrate, etc. can be negotiated (who pays "sticker " prices for a new car?); and if the product competes with hot metal, merchant pig, and steel products; then the answer could be Yes.

The problem (or opportunity) must be approached from many fronts. A marketing study is being started and a transportation study is under consideration by IRRRB. A process for direct reduction has been developed by the Bureau of Mines' Twin Cities Laboratory and partially tested. This process is based on converting existing grate kilns currently being used at many of the taconite plants on the Iron Range, and using low low cost western coal or lignite as a fuel. All or most of the pilot plant equipment is available and the various parts of the envisioned flow sheet have been run at the pilot plant level. The whole flow sheet now needs to be run as a unit over extended periods of time, however, to provide the data needed for engineering of commercial taconite plant alterations. This is but one of a number of proposals that would be considered through the R.F.P. process under this activity.

The need for long term research for new direct reduction technology also exists but it must be recognized that such research could take many years. It is also necessary, therefore, to address the problem from a more immediate standpoint such as proposed in the Governor's recommendation.

7. "The Governor has recommended \$8 million to establish a "Natural Resources Research Facility." Please provide a detailed budget for the expenditure of this money. Expand on the goals & mission of this new institution. Is this money to be spent on a capital building project or for operational costs? It is reasonable to expect that a new facility can be created and staffed immediately? What are the long terms operations & capital budget plans for this facility? What would be relationship of this facility be to the U of M?"

Funding for a "Natural Resources Research Facility" as recommended by the Governor has been shifted to the University of Minnesota's budget.

The proposed facility would provide capacity for mineral research and other of Minnesota's natural resources such as water, biomass, peat, etc. As the manager of these resource the Department requests that a mechanism be provided for its input into such research in an advisory and review capacity.

#### Minerals-Peat Management (6-5373)

1. "What portion of funding and complement in this budget activity is attributable to leasing activity? Are the costs built into the lease rates?"

As stated in the budget narrative, the peat management program is currently in a state of transition from site selection and leasing procedure development to site selection and leasing implementation. Of the \$584.1 requested for management of the more than 3 million acres of state owned peatlands, approximately \$380.0 is attributable to leasing activity (including site selection). This compares with approximately \$220.0 for the present biennium.

The leasing costs are indirectly built into the lease but it is over the life of the lease rather than on a year by year basis. Leases provide for both rentals and royalties and these rates are primarily determined on the basis of the value of the property. Royalties, which are based on the type and amount of peat products, are the major source of income under the state lease. Rentals and performance are generally the charge for "typing up" the property by an operator, and as such, administration costs are one of many factors considered in establishing them. For a typical 25 year peat lease, there are three periods of higher lease administration costs: the first is related to the lease site selection, lease negotiation (or lease sale) and issuance; the second is the period when the property is brought into production; the third is when peat mining is being compelled and the lease terminated. In between these periods, the costs are generally very low. Development of the state's peat resources is still at a very preliminary stage. Until there is a moderate lease base and some production, the economic return-cost recovery balance will not be achieved.

2. "The Governor recommended an unrequested increase of \$4.5 million. Please provide a detailed budget for the expenditure of these funds. How was this amount chosen? Would DNR expend these funds or would they be pass-through monies? What is meant by "carefully develop peat bogs"? Can DNR document an existing market for harvested peat that justifies this expenditure?"

4	Equipment		
40	All Equipment	2.0	2.0
	TOTAL:	<u>250.0</u>	<u>250.0</u>

Sub-Activity One Description: These two elements of the Governor's request will enable detailed survey work to proceed in establishing sites for bog preparation (see Sub-Activity 3) and provide supporting environmental monitoring for bog preparation and the peat mining pilot (Sub-Activity 2). This sub-activity will also establish the basis for rules development for peatland reclamation. Legislation has been introduced requiring reclamation of all mined peatlands.

Explanation of Request: In all, 6 positions are required to staff the two work elements in Sub-activity one. Two positions each will be allocated to the detailed survey project, the environmental monitoring program, and the reclamation rules effort. Monies in object code 03 will support part-time and seasonal workers for the detailed peat surveys, most of the work for which must occur in warm seasons. Monies recommended in object code 16 will support initial reclamation work, some environmental monitoring sub-tasks and the costs of rule adoption, including a hearing examiner.

Sub-Activity Two: Peat Mining Pilot for Fuel Testing

	<u>FY 1984</u>	<u>FY 1985</u>
1	Expense/Contract Services	
11	Advertising	1.4
14	Printing and Binding	.5
16	Prof/Tech Services-Contracts	270.0
2	Expense/Contract Services	
20	Communications	.5
21	Travel/Subsistance In-State	2.0
3	All Supplies/Materials/Parts	
30	All Supplies/Materials/Parts	1.0
	TOTAL:	<u>275.4</u>

Sub-Activity Two Description: This activity would produce up to 10,000 tons/yr. of peat fuel for testing in interested utilities, industries, and institutional and commercial facilities. No present alternative supply exists and it is imperative to begin wide-spread testing of peat fuels and to establish their technical and economic feasibility under different conditions.

Explanation of Request: The preponderance of funding in this sub-activity will be used to contract for up to 10,000 tons per year of fuel peat production. The monies not passed through for contract or services in connection with the mining activity will be used for administrative support and activity monitoring.

Sub-Activity Three: Site Preparation for Peat Mining

	<u>FY 1984</u>	<u>FY 1985</u>
0 Personal Services		
03 Part time/Seasonal/Labor Service	10.0	15.0
1 Expense/Contract Service		
14 Printing and Binding	1.0	1.5
16 Prof/Tech Services-Contracts	1,261.5	1,754.0
2 Expense/Contract Services		
20 Communications	.5	.5
21 Travel/Subsistence In-State	5.0	7.0
3 All Supplies/Materials/Parts		
30 All Supplies/Materials/Parts	2.0	2.0
TOTAL:	<u>1,280.0</u>	<u>1,780.0</u>

Sub-Activity Three Description: Up to 3,000 acres of state-owned peatland sites will be prepared for private sector operations. The bulk of requested funding will be passed through the agency via contracts for site preparation services. It is expected that a significant jobs impact is associated with this activity. It is proposed that such site preparation costs be recovered as an add on charge per ton of peat production (over and above royalties) when the bog is subsequently leased.

Explanation of Request: Less than 2% of the total for Sub-Activity Three would be used for administrative tasks, the balance would go directly to site preparation activities.

Sub-Activity Four: Consumer Incentives

	<u>FY 1984</u>	<u>FY 1985</u>
1 Expense/Contract Services		
11 Advertising	1.0	1.0
14 Printing and Binding	1.0	1.0
16 Prof/Tech Service-Contracts	190.6	190.6
2 Expense/Contract Service		
20 Communications	.5	.5
21 Travel/Subsistence In-State	1.0	1.0
3 All Supplies/Materials/Parts		
30 All Supplies/Materials/Parts	.5	.5
TOTAL:	<u>194.6</u>	<u>194.6</u>

Activity Description: This activity would stimulate market development through various consumer incentives which could include interest by-down programs, low interest loans, and small grants with which to encourage boiler conversions for peat use, peat fuel handling facilities, and other necessary retrofits. Many of the potential peat consumers and much of the peat resource are outside of the tax relief area where such incentives could be provided by IRRRB.

Explanation of Request: All but two percent of requested funding, retained for administrative costs, would be spent in support of the incentives program.

The dollar figure in the funding proposal is based upon an assessment of current peat bog preparation costs (the largest budget item in the proposal), the acreage of prepared bogs required to encourage significant development, and the magnitude of necessary support programs.

Current bog preparation costs are in the range \$800 to 1400/acre, depending upon the topography, hydrology and surface vegetation of the bog as well as the methods of bog preparation chosen. The latter could be labor or machinery intensive.

It is assumed that several prepared bogs in excess of 500 acres each would be a significant initiation of a peat mining industry in the state. Private lessees of these prepared state lands could begin operations with a 500 acre or larger mining area and expand operations into the balance of the bog as market conditions warranted. The incentives this provides a private developer are savings in time (mining can begin immediately upon obtaining a lease) and a better cash flow by a "spreading out" of up-front costs.

The programs that support the peat bog preparation proposal are: 1) the DNR detailed peat survey and environmental monitoring/reclamation; 2) the pilot peat mining and fuel testing project, which will provide fuel peat for state wide feasibility testing; and 3) a consumer incentives program to encourage consumer shifts to peat fuels through low cost retrofitting. Each of these support programs are funded at modest but, it is felt, appropriate levels, considering the magnitude of the central bog preparation proposal.

Of the \$4,500.0 recommended for this activity, approximately \$500.0 would be expended within DNR and \$4,000.0 would be expended by DNR through outside contracts.

The phrase "carefully developed peat bogs" means that peat bog preparation would be carried out after careful site selection work and under rigorous standards of environmental monitoring and reclamation planning. These standards are ensured by the content of the support programs for peat bog preparation described in the explanation of the budget request.

The Inter Agency Peat Task Force is currently conducting a study of potential peat markets. This study will be completed by June 1983. Preliminary data already developed under this study show 11 large scale coal users in the primary peat resource area which appear to be possible markets for peat fuels. The fuel volume per year of these coal users is over 1 1/3 million ton per year at costs varying from \$32.69 to \$70.00 per ton. Of this, approximately one half million tons is used at an average cost of \$2.60 per million Btu. It is felt that peat can be competitive at costs of about \$2.25 per million Btu. Expansion of the study to schools and public buildings where high cost fuels are also being used will certainly identify additional potential markets.

There is also an established market for horticultural peat (horticultural and energy peat can often be mined from the same bog) throughout the county. Approximately 1/3 of the peat used in the United States is imported, primarily from Canada. During the last five years the average of peat inputs was 369,000 tons per year.

Forestry-General Operations and Management (6-5379)

1. "You expect to receive \$143.0 in forest campground receipts in FY 1984-85. What will be the cost of maintaining the campgrounds for the same period?"

Forest Campground Maintenance

	<u>FY 1984</u>	<u>FY 1985</u>
Dedicated Receipts	\$ 70,000	\$ 73,000
General Fund	70,300	74,900
Full Time Employees Salaries (est.)	150,000	157,500
Total	<u>\$290,300</u>	<u>\$305,400</u>

The Division of Forestry expects to spend \$143,000 in dedicated receipts over the next biennium, plus \$145,200 requested from the general fund for campground maintenance. These funds will be used to hire seasonal labor, buy supplies and materials, and pay for Greenview contracts (approximately \$90,000 per year). In addition, the Division of Forestry will spend an estimated \$307,500 in regional complement employees time and salaries to administer and maintain the Division's campground program.

Funds requested will only cover minor repairs, supplies, and maintenance necessary to provide a minimum amount of service for the health and safety of the user.

In addition to the funds listed above, we have requested \$800,000 from LCMR and \$380,000 in the capital improvement budget to fund major rehabilitations at eight campgrounds and eight day use sub-areas. The purpose of this request is to upgrade or rehabilitate the facilities to protect the resource, along with the health and safety of the user. The capital improvements budget also includes a request for development of dispersed recreation sites on two new areas managed by the Division which are in highly used tourism areas.

2. "IRRRB's funding for the County Assistance Program is being deleted for the FY 1984-85 Biennium. Please summarize the history on this change. What was the state's and IRRRB's cost in FY 1982-83? What was the return to the state and IRRRB in FY 1982-83? What will the state's cost be in FY 1984-85? What will be the state's return in FY 1984-85?"

Prior to 1978 the County Assistance Program (CAP) was operated and funded by the IRRRB. In that year CAP was transferred to DNR by Department of Administration Reorganization Order #87 with the understanding that funding responsibility would thereafter shift to the general fund. Because of growing pressure on the general fund, the shift from IRRRB to general fund support was never completed. During the 1979-81 biennium IRRRB continued to fund CAP entirely. During the 1981-83 biennium IRRRB support was reduced to two-thirds with the remainder of the funding coming from the General Fund.

The cost of the program for the 1981-83 biennium is \$358,063 from IRRRB and \$179,032 from the general fund. The counties reimburse 50% of the CAP Foresters' salaries, which because of the funding mix in the current biennium goes entirely to the IRRRB. This amounted to \$214,500 for F.Y. 1982 and 1983. Our budget request for the 1983-85 biennium totals \$611,700 for the CAP program. Of this amount we expect the counties to reimburse \$250,000 as their 50% share of CAP Forester salaries. As the budget request includes a change level request of \$407,800 and the counties are estimated to reimburse \$250,000 the net additional cost to the general fund will be \$157,800.

3. "What is the cost of managing the lands in consolidated conservation areas? What are the receipts from these lands?"

The receipts from the Con Con lands for 1982 amounted to \$729,968.

The Department of Natural Resources does not have a cost accounting system which specifically identifies all expenditures on Consolidated Conservation Area Lands.

An attempt was made to estimate the management, development and protection costs as a percentage of all forest land administered by the Division of Forestry. On a straight acreage basis the Con Con lands represent approximately 29% of state ownership.

However an analysis of the 1,556,695 acres of Con Con lands utilizing Phase II forest inventory data indicates that as much as two thirds of the total acreage is classified as non-forest or non-stocked commercial classification. Also these lands are characterized by high water tables which limits their productivity.

Assuming the 1/3 of the Con Con lands would be suitable for management activities and that they are lower than average in productivity the following costs are estimated for the Con Con lands in fiscal year 1982.

Forest Management	\$256,855
Forest Development	\$253,750
Forest Protection	<u>\$197,497</u>
Total Cost	\$708,102

#### Forestry-Fire Fighting (6-5385)

"You are requesting a change level of \$576.0 in FY 1984, \$626.5 in FY 1985 to fund most anticipated fire suppression cost as well as pre-suppression costs. In the past, suppression costs have been transferred from the LAC Contingent Account and the Executive Council."

1. "What has been the smallest annual amount transferred from these fund?"

There have been years when transfers from the LAC Contingent Account and/or the Executive Council have not been necessary.

Transfers over the past several years follow:

<u>FISCAL YEAR</u>	<u>LAC &amp; EXECUTIVE COUNCIL TRANSFERS</u>
1976	\$ 750,000
1977	\$11,274,719
1978	\$ 500,000
1979	\$ 435,000
1980	\$ 2,982,935
1981	\$ 1,610,000
1982	\$ 455,000

2. "If FY 1984-85 were "average" years, would DNR still require contingent account stransfers to cover actual costs even if the increases were granted? To what extent?"

Fire expenditures are subject to weather conditions. It is not possible to define an "average" fire year in terms of severity of expense. The change level request is based on the low average expenditures over the past several years. The request is conservative and reflects minimal funding to maintain a continuity of operations. The objective of the Department is to be able to provide prompt payment, without undue delays, to private and public vendors for fire fighting costs incurred. Meeting schedules of the Executive Council or the LAC do not allow for continuity of payment. It is expected that requests for contingent account transfers may be necessary. The change level would provide for this during most years. With this difficulty in defining an "average" fire year, one basis of projecting need for contingency account transfers is to use average fire fund expenditures over the past five years. Total expenses averaged \$1,500,000. The F.Y. 1984-85 request totals \$1,983,200. If \$3,000,000 were expended over the biennium, approximately \$1,000,000 or \$500,000 per fiscal year could be required in Contingency Fund transfers.

3. "Has the present method required the state to pay additional charges or higher rates? If so, please give examples."

Documenting actual additional costs or higher rates is difficult without digging back thru numerous billings. A copy of a bill from the U.S. Forest Service for air tankers is an example on hand. This indicates a late payment rate of 14.20%. There are unsatisfied private vendors with verbal comments that they will have to reflect payment delays in increased costs. In addition, there have been instances where vendors have been reluctant to conduct business with the State for payment delays. There is an increase in the State's administrative costs in satisfying unhappy vendors.



Forestry-Forest Management Intensification (6-5389)

1. "Please explain the receipts that will be deposited in the Forest Management Fund. For what can this fund be expended? Indicate the amounts DNR has budgeted from the fund for each of these purposes in FY 1984-85."

1. Forest Management Fund - receipts, allowed expenditures, and amounts budgeted for FY 1984 and 1985.

a. The receipts to be deposited in the Forest Management Fund after July 1, 1983 are:

- 1) Money transferred from the state forest fund. 1/2 of the receipts in this fund are apportioned to the appropriate counties the remaining 1/2 is transferred to the forest management fund.
- 2) Money transferred from the state forest suspense account which are the receipts up to the total costs incurred by the state during the fiscal year on state forest trust fund lands less the \$500,000 transferred to the state forest development account.
- 3) Receipts from the sale of tree planting stock from the State's Forest Tree Nurseries.
- 4) Interest occurring from investment of the fund.

b. The Forest Management Fund is limited to the following:

- 1) Reforestation
- 2) Forest road improvements
- 3) Equipment and training needed for the prevention and suppression of forest fires.
- 4) Forest pest prevention and treatment.

c. The proposed budget for FY 1984-85 from this fund is:

- |                           |             |
|---------------------------|-------------|
| 1) Reforestation          | \$2,450,000 |
| 2) Forest Roads           | \$ 300,000  |
| 3) Fire Equipment & Trng. | \$ 0        |
| 4) Forest Pest Prevention | \$ 0        |

As the Forest Management Fund is limited in its available funding our priorities in the proposed budget include only Reforestation and Forest Roads. The present reforestation budget is not adequate to cover the necessary annual needs plus the backlog of sites requiring reforestation activities. The F.Y. 1981-1983 budget request included \$4.4 million for these activities but this was reduced to less than \$1.6 million for the current biennium after final Legislative budget approval and subsequent budget reductions. This request, even included with the F.Y. '83 base, would not equal the request made in 1981 and its positive impact must be adjusted for the inflation of the past two years.

The Forest Road Plan identifies \$3,765,642 as the funding necessary for reconstruction and maintenance of Forest Roads is the F.Y., 1984-85 biennium. At the present time it appears that only limited funding for roads will be available thru the BWCA program. This added to the Forest Management fund budget for roads would total \$1,000,000 for the biennium or 26.5% of the need.

2. "Why isn't DNR proposing that any of the nursery operations be funded by the Forest Management Fund?"

At the time the biennial budget request was developed only a preliminary estimate of the self-sufficiency of the nurseries was available. The Nursery and Tree Improvement Plan required under Section 13 of the Forest Resources Management Act of 1982 including the economic analysis of making them self-supporting, was not available until February 1, 1983. We were also concerned that because the Forest Management would start with a zero balance on July 1, 1983 as seedling sales do not start until September 1st each year, due to the time required to establish an accurate annual inventory, a serious cash flow problem would develop.

Another unanswered question was to what extent would prices have to be raised and what impact would this have on sales volume? Sales to private landowners could be estimated based on current prices but public lands had previously received planting stock free under M.S. 89.37. These unknowns directed us to take a cautious approach and we, therefore, did not request funding for the nurseries out of the forest management fund in the 1983-1985 biennium. This approach would allow the nursery receipts to build up and eliminate cash flow problem in future years. A better estimate of sales could also be made for the next biennium based on two years of experience.

The "Minnesota Nursery and Tree Improvement Program" report was completed on February 1, 1983 and submitted to the legislature. We would urge a careful review of Chapter IV "Benefits and Costs" in the report. Basically the report concluded that the forest nursery operations can become self-supporting but urged caution in conversion to the self-support policy. The following are excerpts from the report regarding this issue:

"Two considerations, other than economic efficiency may enter into the decision regarding whether or not to implement a self-support pricing policy. these other considerations are (1) equity, or income redistribution issues, and; (2) the change in the balance of payments between state government accounts which result from implementing a self-support policy.

"Under current policy, the taxpayers of Minnesota are providing a subsidy to private purchasers of state nursery stock. This subsidy is increased whenever the private purchaser also elects to plant those seedlings under a government sponsored cost sharing program. In essence, the result of the current pricing policy with respect to private purchasers has been to redistribute income from taxpayers in general to specific, tree planting individuals who may or may not need the income thus received. Under the proposed self-support policy, the income redistribution associated with subsidized nursery stock would not occur. A self-support policy would improve equity because those who benefit from the trees will be those who are paying for the trees. At the same time, Minnesota's public policy of encouraging private reforestation would not be unduly hampered. Seedlings would still be made available, but at their true cost, and those who wished could then receive reforestation aid through cost sharing programs.

"The balance of payments between state government accounts would not be affected as significantly as one might expect when changing to a self-supporting pricing policy. As shown in Table 4.1, the State of Minnesota is the single biggest user of nursery products. Under the current pricing policy the state is spending approximately one and one-half million dollars in state funds per year on the nurseries. These expenditures are made mainly from the General Fund, with some expenditures from the State Forest Development Fund and other sources. Under a self-support policy, these expenditures would be reduced to about \$979,000, which is the estimated value of the nursery products and services that the State would be "purchasing" from the nurseries.

"The estimated savings of \$520,000 per year, or \$1,040,000 per biennium would accrue, basically to the State General Fund, beginning in FY 1985 under the plan envisioned here. This savings would be accomplished through a reduction in the General Fund appropriations of the Department of Natural Resources, Division of Forestry. However, to cover the costs of nursery operations and capital improvement purchases, it will be necessary to increase the Division's appropriations from the Forest Management Fund. This increased appropriation would be funded by the additional nursery receipts that would be deposited to that fund. The net effect of these actions may be an increase in the Division of Forestry's overall budget, but the increase will come from dedicated funds generated by the sale of the nursery stock itself. On balance, cash flow within state government will probably be enhanced under the self-support policy, as General Fund obligations for the forest nurseries would be reduced, thus freeing funds for other public purposes.

"Based on the results of the economic analysis it appears likely that changing to a full-self-support, but non-profit pricing policy would be in the state's best interest. However, making that policy change in FY 1984 may entail a high degree of risk and uncertainty. The economic analysis and its conclusions are valid only so long as the ceterus parabus assumption upon which the analysis was based is not violated. Therefore, it was necessary to evaluate the consequences of other changes in state law and policy and their relationship to a change in nursery stock pricing policy.

"In fiscal year 1984 many public and non-profit agencies will be obligated to pay for seedlings which they formerly received free of charge. This change in nursery practices, mandate by law, will most likely have a significant, adverse effect on nursery stock shipments in FY 1984, if not for several years thereafter. The magnitude and longevity of this effect are totally unknown, and can not be readily quantified at this time. Logic suggests that there may be a fairly large (2 - 4 million seedling) reduction in nursery orders occasioned by this change in policy. The change in demand and, hence, receipts introduces enough uncertainty into the current analysis to warrant suspending the implementation of what otherwise would be an economically efficient and equitable self-support policy.

"Economics would dictate that timeliness and caution be used in implementing a self-support pricing policy at the state nurseries. Structural change in demand for state nursery stock will occur over the next several years as a result of recent changes in law. Until these changes in demand stabilize, and a new demand function can be estimated for state nursery stock, it will be difficult to regulate production and costs at the nurseries. Unbalanced demand and production could easily lead to nursery stock surpluses, under-pricing of stock being sold, and the loss of the self-supporting capability. It may be in the long-term interests of the state to implement the total self-support policy in two stages.

"From an economic perspective, there would be a net gain in FY 1984 through the implementation of a tree improvement surcharge. This action would place the tree improvement program on a self-supporting basis by FY 1985, and would provide some financial relief for the State General Fund. At the same time, financial risks associated with unknown changes in demand could be minimized by delaying full implementation of the nursery self-support policy until FY 1986, when demand and production schedules should have stabilized. The cost of delaying this part of the overall policy will be approximately \$520,000 in continued General Fund obligations during the 1983 to 1985 biennium. This cost would offset a potential deficit of up to \$600,000 in the Forest Management Fund during the same time period. On balance, the suggested delay would be cost effective, and could help assure the ultimate implementation of a successful self-support policy which would generate an estimated \$8,000,000 in General Fund savings by the turn of the century."

For these reasons we believe that it would be prudent to defer converting the forest nursery operations funding to the Forest Management Fund until fiscal year 1986.

3. "What are DNR's costs in managing the State Forest Trust Fund lands? Will DNR receive this amount from the receipts of the State Forest Trust Fund lands?"

The certification report of costs for the State Forest Expense Account Report for FY 1982 listed the following:

Forest Management	\$1,353,146
Forest Protection	<u>1,176,242</u>
Total Cost	\$2,529,388
FY 1982 Receipts	\$2,231,631

Based on this report the costs exceeded receipts by \$297,757 however much of the costs were for forest development activities such as site preparation, tree planting, plantation release, etc. which are all investments which will increase future returns.

Our recent review of the procedure used in determining the forest protection cost may require some refinement. This will be analyzed further and a determination made before the fiscal year costs are calculated for FY 1983.

4. "What is the status of the forest resources management plan required by Laws 1982 Chapter 511?"

The Minnesota Forest Resources Plan (MFRP) will be a seven volume plan which addresses major forestry issues in Minnesota. The first four volumes of the plan have been completed. These are: Volume 1 - Concept; Volume 2 - Issues; Volume 3 - Assessment; and Volume 4 - Goals and Strategies. Volume 5 - Objectives and Recommendations and Volume 6, DNR Forestry Program and budget are in draft form. All seven volumes of the plan will be completed by the June 30, 1983 deadline.

During the MFRP process, major input has been provided by DNR divisions, other state agencies, the U.S. Forest Service, the College of Forestry and county land administrators.

A State Forest Road Plan with an inventory and project priority list has also been completed in conjunction with the MFRP.

The next step in the planning process is forest resource unit plans and these will be accomplished using a DNR interdisciplinary team with input from other agencies and the public. Copies of the MFRP are available upon request.

5. "What is the status of the BWCA forest management assistance grant for FY 1984-85?"

The President's budget for federal fiscal year 1984 does not contain any funding for the BWCAW forest management assistance grant. Contact has been made with the Minnesota Congressional delegation and to date letters of support have been received from Senator Boschwitz and Representatives Sabo and Sikorski.

The Minnesota Forest Industries and the National Association of State Foresters have also stated their support for reinstatement of this item in the federal budget.

Fish - General Operations and Management (6-5399)

1. "You have reduced the Game and Fish request by \$100.0 each year. What activities/projects will be affected by this change?"

The impact on spending in the remainder of FY '83 will be on repair or construction projects that do not yet have funds obligated under contract or requisition. The only other place where that amount of money could come from at this time of year is from seasonal labor funds needed for spawning stations and fish production ponds throughout the spring season. Rather than curtail fish production activities, we will postpone the following projects until FY '84:

Walk-in freezer for fish food at French River Hatchery.....	\$ 3,600
Replace ultraviolet filter for water treatment at French River Hatchery .....	15,000
Replace road culvers at Spire Valley Hatchery.....	12,000
Construct fish load-out facilities at Lanesboro Hatchery.....	40,000
Retenone purchases for lake rehabilitation.....	<u>29,400</u>

\$100,000

In FY' 84 and FY ' 85 the \$100,000 reduction will be taken from seasonal labor funding for lake surveys and creel census. This will have the least short term impact on the fish management program, but may result in the loss of some Federal Aid reimbursement, as would reeduction in alternate activities.

2. "Items #4 and #5 under "Budget Issues" both imply dissatisfaction with the State's participation in federally supported programs. Is participation elective? Why or Why not?"

Participation in Federally supported programs is elective. These programs are reimbursable programs requiring state to spend money first. Many of our important programs such as fish stocking are presently not covered by the federal program. Stocking is one of our important tools requiring a large portion of the budget. We will not reduce this program simply to obtain reimbursable funds.

3. "Please list the research studies being conducted. The narrative states there are "problem-oriented" projects. How are they selected?"

Problems oriented research projects were delineated through a series of written and oral communications with all fisheries personnel within DNR. This included the fisheries area supervisors, regional fisheries supervisors, fisheries research biologists, Ecological Services and Fisheries Central Office staff. In addition, comments from University Professors, other states and the public were collected from formal and informal conversations. The final list of research projects was prepared from the above ideas by the Research Supervisor in consultation with his staff and the Chief and Assistant Chief of Fisheries. At present, a priority list of 44 research projects has been prepared. Additions to this list are an ongoing process.

At the present time, 21 problem oriented research projects are in various phases of field work and/or completion. In addition, new projects are to be initiated in the spring and summer of 1983. A listing of the ongoing and continuing projects follows:

- Study 112: Shoreline seining for 0-age largemouth bass as a method of predicting subsequent year-class abundance at recruitment to the anglers catch
- Study 115: Sportfishery of Lake Winnibigoshish and connected waters
- Study 116: Evaluation of continuous walleye and sauger fishing on the Mississippi River
- Study 118: Feeding interactions of northern pike and walleye and their influence on the prey resource
- Study 121: Evaluation of flathead catfish as a predator in Minnesota lakes
- Study 123: Identify principal muskellunge spawning area(s) in Leech Lake by use of radiotelemetry
- Study 124: Evaluation of lake of the Woods walleye fishery
- Study 125: The response of bluegill and associated fishes to manipulation of yellow perch and walleye abundance
- Study 201: Evaluation of smelt as forage fish in inland lake trout lakes
- Study 203: Development of effective lake trout stocking procedure
- Study 210: Field evaluation of three strains for hatchery reared trout
- Study 213: Evaluation of spring-chinook salmon (Oncorhynchus tshawytscha) as a sport fish in Minnesota waters of Lake Superior
- Study 214: Reduction of predation on stocked fingerling rainbow trout in lakes through use of alternate prey
- Study 216: Factors affecting brown trout reproductive success in southeastern Minnesota trout streams
- Study 218: Evaluation of Valley Creek rainbow trout in other southeastern Minnesota trout streams

Study 219: Evaluation of trout stream habitat management in southeastern Minnesota

Study 220: Evaluation of various lake trout strains in inland lakes

Study 305: Evaluation of lake aerations technique for winterkill prevention

Final report on Fuller's Bait Shop fishing contest

AFS 6: Final report North Shore anadromous creek census

AFS 6: Final report St. Louis River creek census and tagging study

A listing of problem oriented research projects to be initiated in spring and summer of 1983 is as follows:

Evaluation of walleye stocking through the use of pharmaceuticals

Muskellunge strain evaluation

Husky Muskie Club voluntary angler reporting

Increasing femaleness in walleye to increase the growth rates of harvested walleye

Northern pike population dynamics and interactions with other species

Smolt evaluation of anadromous fish in North Shore streams

Use of regulations on experimental walleye lakes

Evaluation of optimum stocking rates for flathead catfish

Evaluation and assessment of netting standards

Edge effect on bluegill populations through mechanical vegetation removal

Evaluation of special regulations on trout streams

4. "How does the department decide which projects to undertake with Game and Fish funds? What input is solicited or obtained prior to commitment of funds"?

Projects are undertaken with Game and Fish funds to benefit the Fish and Wildlife populations and respective user groups in the state. These projects are based on the best biological information available which provides a sound basis for program development enhancing the renewable resources of fish and wildlife. Input is obtained from program managers and user groups before implementation.

Wildlife - General Operation and Management (6-53109)

1. "The narrative states 'needed censuses and surveys' are conducted annually. What type of data are generated? How is 'need' determined?"

Attached is a list of wildlife censuses and surveys that are carried out annually. In general, censuses are actual counts that are made such as in the aerial moose count, aerial deer count, and counting active beaver colonies. Surveys are indices to determine trends that are done on a sampling basis. Examples are the roadside drumming counts and waterfowl breeding pair counts. This work enables us to monitor wildlife populations and habitat on an annual basis and provides long-term trends. Need is determined by the amount of information necessary for establishing various seasons. Those species that are impacted the most by hunting and trapping such as big game and waterfowl are the highest priority because annual regulations, to some extent, determine the size of the population the next year. (See attached Exhibit G).

2. "You are requesting nearly 100% increase in funds for the wildlife habitat improvement grant program. Why has the funding for this program fluctuated so widely (high of \$93.6 in 1981 to low of \$16.1 in 1982)? Which practices are cost shared and which are not?"

The fluctuation in the wildlife habitat improvement grant program was caused by a Department of Administration decision to place grant and aid monies for food plots and nesting cover in the 3 group under food for animals. The estimated expenditure for 1982 was actually \$95,000.

Practices that are cost-shared include establishment of nesting cover, winter cover, food plots and wetland development.

3. "You propose to reduce Game and Fish funding in this activity by \$100.0/year from the amounts shown. What activities/projects will be affected?"

The reduction of \$100,000 per year in the Section of Wildlife budget will cause a general cutback in operations and management. 25 percent of the cutback for this year came from a savings in the cost of printing hunting licenses. The remainder came from the 3 group and salaries.

4. "Does this budget activity provide any administrative or research support for the Non-game Wildlife, the Natural Heritage or the Scientific and Natural Areas Programs?"

Yes. This budget activity provides for the administration of the Non-game, Natural Heritage and Scientific and Natural Areas Programs. The general supervision by the section head, assistant section head and accounting officer are included as well as considerable clerical assistance. All of the office space and supplies are provided to the Non-game Program from general operations and management. Research support is also provided to the Non-game Program in the form of project design, overview and some logistic support.

#### Wildlife - Special Management Programs (6-53111)

1. "Please indicate the funding, source of funds, and positions associated with each of the programs in this budget activity."

(See attached Exhibit H).

2. Please briefly describe the Ginseng Harvest Program, including license costs and restrictions. What is the economic impact of this program?"

Ginseng is a native woodland herb found in southeastern Minnesota and much of northeastern United States. Its root is highly valued in the orient for its purported medicinal properties. The increasing rarity of this species has led to high prices for its roots (\$150.00/lb), and has increased the harvest pressure to the point where it may be threatened with extinction. For this reason, the export of wild ginseng is under the jurisdiction of the U.S. Fish and Wildlife Service as provided for by the Conference on the International Trade in Endangered Species. The Natural Heritage Program is responsible for implementing the terms of the treaty as they apply to individual states where ginseng is harvested.

A license is not required to harvest ginseng in Minnesota, but a license is required to purchase ginseng for the purpose of interstate commerce (\$5.00 annually and available only to Minnesota residents). Dealers must record the name and address of each harvester from whom they buy ginseng as well as the weight of the ginseng. This information must be submitted to the Heritage Program by January 15 of each year. Approximately 1200 harvesters and 20 dealers participate each year. Each shipment that leaves Minnesota is inspected by a Conservation Officer who issues a certificate that must be presented to the Port Authority at the port of exit. Approximately 3,000 lbs. is shipped from Minnesota each year with an estimated value of \$500,000. Most of the harvesters are rural or small town residents who use the revenue from ginseng to supplement their income. Licensed dealers often deal seasonally in furs, hides and other products in addition to ginseng.

Each year the Heritage Program must submit a report to the U.S. Fish and Wildlife Service summarizing the harvest results and results from an ongoing research program. On the basis of this report, the Service will decide whether to grant export approval for the following year. Approval is granted only if evidence indicates that continued export will not threaten the survival of wild ginseng within the state.

3. "When will the long-range plans be completed for the Non-game Wildlife Program? How is this plan being developed?"

The long-range plan will be completed in March 1984. This plan is being developed according to the attached draft -- "Volume 1 - The Planning Concept" (see attached Exhibit I).

Wildlife - Wildlife Acquisition/Canadian Waterfowl (6-5117)

1. "You propose to reduce Game and Fish funding by \$250.0 in FY 1984. What activities/projects will be affected?"

The reduction of \$250,000 in wildlife land acquisition in FY 84 will postpone the purchase of about 400 acres of land by at least two years.

Wildlife - In-Lieu-of-Tax Payments (6-53123)

1. "The in-lieu-of-tax payments appear to be designed to compensate the local unit of government for taxes it would otherwise have collected if the State had not acquired the land. What was the status of these lands before acquisition by the State? Were they generating property tax revenues at the time?"

The status of acquired lands before acquisition was as follows:

<u>Previous Ownership</u>	<u>Method of Acquisition</u>	<u>Acres</u>
Trust Fund	Condemnation	99,464
Consolidated Conservation	Commissioner's Order	23,353
U.S. Government	Transfer, Land Exchange	23,960
State (DOT, Welfare)	Transfer	782
Tax-Forfeited	Purchase, Transfer	106,151
Private	Purchase, Gift	266,220

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Total	519,930
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51.2% Private

48.8% Nonprivate

2. "That narrative briefly describes some alternative rates of payment. What would be the cost of using any of these alternatives?"

An alternative rate of payment would be to reimburse counties at the same rate as other natural resources lands, which is \$3.00 per acre. This would reduce the payment on each acre of land by \$1.00 to \$3.00 in the west central and southwestern part of the state. This would assess wildlife lands at the same rate as all other natural resource lands. At this time the game and fish fund is supporting wildlife lands at a higher rate than those lands that are supported from the general fund.



#### Ecological Services Program (6-53126)

1. "How was the distribution of cost between funds determined for this program?"

Historically, the Ecological Services Section, although part of the Division of Fish and Wildlife, has been partially funded by the general fund. Beginning in the 1975-77 biennium the appropriations from Game and Fish Fund and General Fund has been equal. In addition a portion of the budget has been supported by annual grants from Northern States Power Company for monitoring the impact of power plants and grants from the Environmental Protection Agency for monitoring the impact of aquatic herbicide use on lakes. The rationale for distribution of cost between General Fund and Game and Fish Fund is the percentage of time and resources spent on activities that have direct benefit to the general public rather than specifically to fish and wildlife programs. Examples of such activities include laboratory work for other DNR divisions, coordination and administration of the statewide aquatic nuisance control program, assisting the Department of Agriculture in enforcement of pesticide use laws, assisting the Pollution Control Agency in pollution investigations, and providing technical assistance and advice to other DNR divisions on a variety of activities including chemistry, limnology and bacteriology.

The legislature determined in 1976 that the appropriations from General Fund and Game and Fish Fund should be equal based on the activities carried out. A detailed analysis has not been conducted in recent years to determine if this split is still valid. The request for the 84-85 biennium including change level will shift Ecological Services funding to a lesser portion of General Fund. The change request for restoration of cuts received against the General Fund in F.Y. 83 is out of the Game and Fish Fund. If the budget request is granted the new ratio will be forty percent General Fund and 60 percent Game and Fish Fund.

#### Parks - General Operations & Management (6-53131)

1. "Please describe the effect of the Governor's recommendation for a \$100.0/year general reduction. Which parks would be affected?"

It would appear at this time that with anticipated dedicated account balances (income over projection) from current 1982-83 fees carried into and through the 1984-85 biennium plus increasing camping by \$1.00 and vehicle permits to \$15.00, there would be adequate money to keep all parks open at 1982-83 levels. This action would constitute an additional conversion of \$200,000 from general fund to dedicated account for maintenance and operation.

If there are no further cuts or strikes, if weather during both seasons is normal to good, if visitor use remains consistent, etc., biennial balances would be in the neighborhood of \$1,750,000 with the Governor's recommendations. This amount would cover the recommended \$1,000,000 conversion plus the \$200,000 reduction leaving a balance of approximately \$550,000. This balance would be necessary to carry forward into the 1986-87 biennium to keep maintenance at a reasonable level and to cover salary supplements, inflation, etc., for dedicated fund expenditures.

NOTE: If this balance is to be utilized in covering the \$200,000 reduction to keep the small parks operating, an additional appropriation from the dedicated account, over and above current budget requests and recommendations, must be made.

2. "Please outline the fee increases needed to meet the Governor's Recommendation. If the funding shift were implemented, what would be the user support of total cost of parks?"

Based on current projections and assuming that present level of use continues, a \$15.00 annual vehicle permit plus a \$1.00 camping permit increase would replace the \$1,000,000 general fund reduction recommended by the Governor.

It should be pointed out, however, that in the past (1982-83 biennium) \$1,200,000 dedicated funds have been used to pay seasonal salaries. With the \$1,000,000 conversion, approximately \$2,200,000 will have to be spent for this purpose.

This brings up the question - would the dedicated account have to pick up funding obligations for salary supplement (increases), paid insurance during layoff, and unemployment and workers compensation for employees paid from this account, or would these items be paid from the General fund? In the past, unemployment and workers compensation have been paid from general fund dollars, insurance and salary supplements were absorbed by the dedicated account.

The \$15.00 vehicle permit fee would provide for these obligations. It would not, however, leave any projected account balance (buffer) to compensate for visitation drops because of buyer resistance to increased fees, bad weather, strikes, etc. Neither would this allow for any balances that could be brought forward into the 1986-87 biennium to keep the maintenance function at a reasonable level as was done during the 1984-85 biennium, which is \$320,000 below 1982 appropriation level.

If appropriation language could be drafted allowing for payment of these items from general fund, it is projected that the \$15.00 vehicle permit and the \$1.00 increase in camping would generate an approximate \$757,700 biennial balance as buffer for unforeseen attendance drops and funding that could again be brought forward the following biennium for maintenance purposes.

It should be further pointed out that if the general fund picked up the salary supplements, insurance, and unemployment and workers compensation, a \$12.00 vehicle permit plus the \$1.00 camping fee increase would replace the \$1,000,000 general fund reduction.

With this reduced permit increase and with the general fund picking up the related salary obligations, it would appear that approximately \$293,700 would remain as a biennial revenue balance for buffer and/or future maintenance funding in 1986-87.

With \$2,200,000 spent for salaries from the dedicated account during the 1984-85 biennium, the following budget obligation will be incurred:

Unemployment and Workers Compensation	\$ 451,000
Insurance during layoff	30,000
Salary Supplement	<u>150,300</u>
TOTAL	\$ 631,300

Although one could estimate that the \$15.00 motor vehicle fee and the \$1.00 camping fee increase would cover the \$1,000,000 general fund conversion plus all other employee obligations, it may be overly optimistic to pursue this course of action. Buyer resistance and ability to pay may far exceed our estimates. This would not only reduce our projected revenues but may also indirectly impact the State's tourism industry by over pricing our facilities in comparison to our neighboring states.

State park vehicle permits were increased 100% (\$5.00 to \$10.00) in 1982, the proposed \$15.00 fee would constitute an additional 50% increase at this time. If the dedicated account is to cover unemployment and workers compensation, insurance, and salary supplements each biennium, we can surely look forward to similar increases in all future biennial budget proposals. This continuing procedure could jeopardize Minnesota's park system and its continued use by our citizens.

If such funding shifts were implemented at the \$12.00 fee, the user would support 34% of the general operation and management of state parks. If the \$15.00 were charged for annual permits, the percent would be 36%.

Another issue that should be considered is the Legislation to charge skiers an additional fee for skiing in state parks. This also has a bearing when determining state park entrance fees.

3. "If the parks information system is not funded by the LCMR or the General Fund, what is the effect on the parks operation?"

The Parks' Information System has two parts:

- A. The public deserve to receive more and better information about its State Parks. No employee responding to public inquiries is capable of memorizing the vast amount of data needed, keeping the data current, or finding the data in the short time allowed. The problem is compounded by other employees "taking over" for breaks, etc. The Division is requesting a system that will give it this capability so that the public feels satisfied that its questions have been fully answered and now is anxious to visit those parks.
- B. Much of the Division's data, such as attendance, is recorded manually. Many hours are spent extracting information for management purposes and legislation. Because getting information takes so long, much needed data remains unknown. The Division is requesting a computer, and two technicians for two years to write programs and instruct the staff. With this system, the Division can analyze its attendance, resources, revenue, expenditures and can interface with data in other computers, giving the Division the capability of making better management decisions.

4. "Do any seasonal workers receive unemployment compensation for a portion of the year? What is the cost? Is it possible to either shorten the work period or convert full-time/seasonal to part-time/year round personnel to avoid the obligation of unemployment costs?"

Yes, 1982 fiscal year, the Division of Prks and Recreation paid \$557,655.31 for 325 employees. During calendar year 1981, there were 770 seasonal and part-time employees - 42% were paid unemployment.

An employee less than full time could be eligible for unemployment if they worked at another job or other jobs and the total weeks and earnings qualified them for unemployment. We would be billed for that portion of the unemployment that was paid for the time they worked for the Division of Parks and Recreation.

We do have some positions established as part-time unlimited - 90%--two Regional Naturalists, five Park Naturalists, three Clerk Typists, one Buildings and Grounds Worker and one Clerk Two.

The reason we do not know more of these positions is a part-time unlimited employee must work the same schedule week after week -- in the peak seasons we need the employee the maximum hours possible; at other times we could not justify having the employee on the payroll. Personnel rules and union contracts do not permit adjusting the schedule of a part-time unlimited employee to fit our needs economically.

#### Parks - Employment of Needy/Elderly (6-53133)

1. "How many people are employed through Green View? What is their compensation?"

Green View presently has 63 employees. They are scattered evenly throughout the park system. These employees are paid \$4.00/hour; the administrative cost is \$.78/hour, thus the cost to the State is \$4.78/hour which includes hiring and payrolling.

2. If additional dollars were provided for Green View employment, could they supply additional workers? Could DNR supply additional tasks?

If additional dollars were provided, Green View, Inc. assures us there are available employees. Some 38 parks have requested 48 additional Green View employees to provide 32,680 hours of work. Each park identified work that needs to be done.

3. How does DNR determine whether or not the maintenance work "would not be done otherwise"?

Each park is allocated a specific amount of funds to hire seasonal help. With the reduction in the Division's spending plans, Park Managers are short of labor to adequately maintain and operate their parks. Those tasks (i.e. repairing leaking faucets, windows, small equipment, and providing certain services) not accomplished by the full time and seasonal employees, are relegated to the Green View employees.

Parks - State Park Development (6-53134)

1. "How much was spent from bond proceeds for development in FY 1982-83? How much for professional services?"

This biennium (1982-83), the Division of Parks and Recreation's Development Program had two major program sources -- the Legislative Commission on Minnesota Resources (LCMR) and State Bonding. The \$2,858,000 appropriated by LCMR and unrefunded marine gas taxes have had high priority and will be completely spent on health and safety projects by the end of this fiscal year.

To date, only \$1,345,800 of the approved \$2,434,800 State Bonding dollars have been allocated to State Parks to be spent on projects. This \$1,345,800 allocation was not approved until late January of 1982; however, projects are now being completed and it is anticipated that most projects will be under contract by the end of this fiscal year. To date, \$275,646 of this \$1,345,800 have been spent or encumbered including an approximate 15% for professional services.

It is important to note that several of these Bonding projects are eligible for Great River Road match funding and are required to go through an extensive eligibility and qualification process.

Enforcement (6-53141)

1. "Overtime costs represent about 13% of the total personnel costs each year. Has the department determined that payment of overtime is most cost effective than additional full or part-time/seasonal officers?"

In the work agreement between the State of Minnesota and the Conservation Officers' Association for the period of July 1, 1981 through June 30, 1983, the employer agreed to pay overtime up to a maximum of 200 hours at the end of each thirteen consecutive full payroll period.

This represents \$783,300 per year for overtime.

The cost of maintaining an average officer in the field per year is \$52,545. This cost includes salary, vehicle, communications, meals expense, boats and motors, protective equipment and uniform.

The Division recognizes the advantage of extra officers in the field on high activity situations such as opening season days. The \$783,300 overtime would represent less than 15 officers. Though the employer pays for 400 hours of overtime per year, most officers exceed this substantially. These extra hours were agreed to by the association and depended upon by management as part of the agreement package.

Due to licensing requirements and necessary extensive training, part-time/seasonal officers are not practical.

The Division considers it most cost effective to pay overtime than hire additional full or part-time officers.

In summary, the Department feels that it is not feasible to schedule Conservation Officers because there are not enough officers to cover the assigned territories. To compensate, officers work to cover the assigned territories. To compensate, officers work as duties dictate and are on 24-hour call. If the Department were to hire additional officers, it would still be necessary to pay overtime because of the extremely high work load and irregular hours necessary to protect our resources.

2. "Each officer covers his/her own territory from his/her own physical base. How does DNR provide coverage of these areas when one or more officers are gone due to vacation, illness, position vacancies? Has any consideration been given to expanding areas covered, but having more than one officer cover the same area.? Would this allow any consolidation of office space and equipment?"

Each Conservation Officer is assigned an area to insure that the entire state gets equal and proper protection and attention. During a vacation, illness or position vacancy, the Area Supervisor splits the patrol area among the adjoining officers.

Conservation officers office in their private homes. Consolidation of several area's patrolled by more than one officer would not result in a monetary saving in office space or equipment.

3. "What is the cost of the snowmobile training classes, certification of snowmobile students and snowmobiler arrests? Why aren't these costs being considered for payment from the snowmobile trails and enforcement account in FY 1984-85?"

Minnesota Statutes 84.86, Subd. 1(6), provides for the snowmobile safety education and training courses and that the commissioner shall collect a fee that shall be deposited in the General Fund and the amount thereof is appropriated annually to the commissioner of natural resources for the administration of such programs. The Division, as allowed, has raised the registration fee from \$2 to \$4 per person. It is anticipated that this will amount to an increase of \$22,000 per year for training purposes. The actual cost to the Division of Enforcement for training each student is \$12.74. It is anticipated that the Division of Enforcement will receive \$75,000 per year from the Snowmobile Trails and Enforcement account to offset the cost of the snowmobile training classes. The Enforcement monies necessary for certification for snowmobile students and snowmobile arrests will be considered for payment out of the Snowmobile Trails and Enforcement account when the anticipated returns are realized.

4. "The narrative references an enforcement school at a cost of \$24.0. Please elaborate."

The Minnesota Board of Peace Officer Standards and Training operates pursuant to Minn. Statutes 626.85 through 626.855 and is authorized to Promulgate Rules and Standards relating to selection, training and licensing of Peace Officers. 4 MCAR was adopted and took effect March 1, 1982. Each officer is required to take 48 hours of approved continuing education courses in 36 months for license renewal. To comply, the Division of Enforcement holds an Annual School for our officers. This 3-day school is held during a low activity time and half of the officers attend one week and the other half the next week. All reservation

officers and Fish and Wildlife personnel with enforcement powers are invited to participate. They also share the cost on a prorated basis. A portion of the school is conducted by Division personnel with exceptional expertise in his/her subject and a portion of the school is conducted by professional instructors. The \$24,000 cost covers all professional instructors, their transportation and expenses, meals and lodging for the officers. It is anticipated the Division will spend \$9,000 for lodging, \$10,000 for meals and \$5,000 for instructors.

5. "The Governor has recommended that boat registration fees be increased from \$12 to \$18 for a 3-year license. MS 361.03 provides that any revenues raised from this source is to be expended for water-craft program administration, enforcement, inspection and acquisition and development public access. The Governor has apparently not recommended any increase in expenditures in this area commensurate with the fee increase. Can the requirements of MS 361.03, subd. 5 met by the budget recommended by the Governor?"

It is our understanding that the Governor has reassessed the recommendation to increase watercraft registration fees and is no longer recommending this increase. Therefore, the above question becomes moot at this time.

#### Planning & Research Program - General (6-53146)

- Question 2. "If the Governor's recommendation were implemented without additional LCMR support, what activities would be halted, abandoned, or slowed?"

Natural Resource Data Systems, Policy Development and Management Analysis are activities which would be virtually eliminated without additional LCMR support.

These activities are carried out by an exceptionally talented staff who have been responsible for conceptualizing and/or serving as technical staff to introduce to the department much needed new technologies, streamlined management procedures, organizational analysis through the use of task forces, and research capabilities.

The principal losses would be the products of these two units - which bring about improvements in the effectiveness and efficiency of the department's activities - and the loss of the human resource which have and would continue to bring about this progress. Also of importance would be the loss of the word processing systems and computer telecommunications capability in the Space Center which serves the operations of the Division of Parks and Recreation, the Division of Waters, the Trails and Waterways Unit, the Bureau of Engineering, as well as the Office of Planning.



## I. POLICY DEVELOPMENT AND MANAGEMENT ANALYSIS

The Policy Development and Management Analysis Unit has improved both the department's inter- and intra-discipline relations and coordination. It has also streamlined a number of administrative service activities. The unit is a specialized group totally oriented toward improving departmental efficiency and effectiveness. Because of its record of success, it has earned the trust and respect of other units in the Department and the LCMR. The LCMR initially funded it in recognition of its need and recommended conversion in recognition of its accomplishments.

The individuals within the unit are unique specialists with education and expertise in natural resource and recreation management as well as business management. The principal products of their work are documented policies, procedures and organizational redesigns.

The inability to fund this unit would mean the loss of the department's single unit devoted to documenting department direction, a unit objectively geared toward departmental coordination, efficiency and effectiveness.

### A. EXAMPLES OF PAST ACCOMPLISHMENTS

#### NATURAL RESOURCE PROGRAM POLICIES AND PROCEDURES

1. The unit created the DNR Manual. This manual represents the first time that all of the department's written instructions have been brought together in one document available to all department personnel.
2. The unit provided the direction to interdisciplinary task groups which developed policies and procedures for all units of the state's outdoor recreation system --

Natural State Parks  
Recreational State Parks  
State Forest Recreation Areas  
State Trails  
Unit Trails  
Wildlife Management Areas  
Scientific and Natural Areas  
Wilderness Areas  
Water Access Sites  
River Management

as well as policies for --

Grant-In-Aid Trails  
Pesticide Use On Department Administered Lands  
Areas Of Solitude  
Water Surface Use Management  
Wildlife/Forestry Coordination

These policies not only guide the actions of personnel within single disciplines but also reach across discipline lines and allow for improved departmental coordination. This coordination provides for improved resource management as well as efficiencies from the documentation of departmental policy.

#### ADMINISTRATIVE POLICIES AND PROCEDURES

1. The unit provided staff to do an analysis and revision of the department's revenue management procedures. The revision which is currently being implemented has already saved two person years and will result in a computerized system.
2. The unit developed the operational procedures (to include a desk manual) for the decentralization of personnel and payroll activities to the regional offices. The decentralization has improved the timeliness of all personnel and payroll activities.
3. The unit provided direction to an inter-disciplinary task group which developed and documented efficient procedures for all department land exchanges, land title transfers and internal transfers of administrative control.

#### ORGANIZATION REDESIGN

The unit is just completing a comprehensive organizational analysis of the department's Division of Waters. It is apparent that the results of this study will call for a significant redesign of the division technical support units. This redesign is intended to provide a more effective management structure. It is expected that this unit will play a major role in further analysis within the other department disciplines.

This unit also did the regional organization study in coordination with an internal DNR Task Force which was mandated by the Legislature.

#### B. EXAMPLES OF PRODUCTS AND ACTIVITIES PROJECTED FOR 1983-85 BIENNIUM (will not be accomplished without continued funding)

1. Organizational Analysis Section of Fisheries. (will include goal and objective setting, development of revised procedures, new efficiencies and improved effectiveness)
2. Comprehensive Lake Management Policy and Procedures. A strategic direction for the management of the state's lakes is needed. This activity would coordinate the state's shorelands, water access, fisheries, water surface use, and wildlife activities in a comprehensive strategic approach to lake resources.  
Currently there are approximately 30 disciplines, agencies or levels of government involved in about 20 different lake management activities.

There is a need to:

- evaluate the biological and cultural carrying capacity for lakes (shoreland and waters)
  - define goals for classes of lakes
  - establish interdisciplinary use and management standards for lakes
  - identify role of various "lake managers"
  - establish individual management standards and procedures for each lake program or activity
  - develop a method for priority setting among programs
  - examine methods for distributing use
  - determine information and education needs within the department and for the public; and to establish strategies for addressing these needs.
3. Coordination of the Department's Enforcement Activities - improving the working relations of the department's enforcement activities with the other line disciplines dealing with issues such as: the delegation of law enforcement authority to other line personnel, inter-disciplinary communication and coordination, and enforcement training standards and programs.
  4. General Administration Procedures (unit assistance)
    - Cost Accounting System Development
    - Personnel Procedures
    - Consolidation of Equipment/DNR Buildings (assistance)
    - Minimization of Worker's and Unemployment Compensation Costs
  5. Off Road Vehicles: The use of ORV's on department administered land. (Strategic policies are needed on how to deal with this growing interest and demand.)
  6. Detailed Pesticide Use Procedures. Policy has already been documented concerning department use of pesticides on state lands. There exists a need to develop detailed procedures for its use and monitoring.
  7. Monitoring, review and updating of existing policies, procedures, and the DNR Manual.
  8. Other activities related to new issues which may arise during the upcoming biennium.



## II. NATURAL RESOURCES DATA SYSTEMS

### A. CURRENT ACTIVITIES

#### ASSISTANCE TO VARIOUS UNITS OF THE DEPARTMENT

Currently the Natural Resource Data System Unit provides highly technical research and data collection and management assistance to all of the department's disciplines. This includes:

1. Waters
  - Support for water permits system
  - Support for the lakeshore update
2. Trails & Waterways
  - Support for public access, trails, boating & canoeing routes
  - Maintain design of field facility inventories
  - Maintain brochure mailing system
3. Parks
  - Gas tax study
  - Park user information system - design and maintenance
  - Sample of campground users
4. Enforcement
  - Development of methods to determine effectiveness of road checks
5. Forestry
  - Recreation supply and demand analysis
  - Lakeshore lease analysis
  - Maintaining forest roads inventory
  - Recreation committee coordination
  - Supply land suitability results
  - Coordinate forest recreation promotion - literature mailing etc.
  - Survey of forest trail users
6. Fish & Wildlife
  - Assist in printing wildlife management area maps
  - Continued mapping of general habitat areas
7. Commissioner's Office
  - Canadian resort study
  - Word processing study
  - BWCA issue
  - Capital budget

8. Office of Planning (other units)

- Statewide river management plan
- Individual park management plans
- Simulation of policy alternatives
- Collection of basic information for PERT

ASSISTANCE TO OTHER UNITS OF GOVERNMENT

1. Land Management Information Center (LMIC)

The unit supplies watershed, stream trace, SCORP inventory, and land suitability study information to LMIC.

2. Information for Regional Commissions 1 and 6W.

3. Assistance to Cook, Ottertail, and Rice counties in maintaining computer terminals.

B. EXAMPLES OF PRODUCTS AND ACTIVITIES PROJECTED FOR 1983-85 BIENNIUM  
(will not be accomplished without continued funding)

1. Update of the 1978 SCORP and coordination of public involvement

2. Development of a continuous phone user survey program that at small cost can keep the general survey part of SCORP up-to-date

3. Recreational Use Information - Continue support for keeping attendance up-to-date on trails, rivers, and public access sites

4. Continue sampling of State Park camper data, so better priorities can be set

5. Continue coordination of word processing for Planning, Waters, Engineering and Parks

6. Continued coordination and keeping up-to-date the public facility inventory part of the SCORP. Concentration on Trails & Waterways, (Public Access, Canoe and Boating Rivers, Trails) and State Park and State Forest Recreation Area

7. Coordination of and assistance to tourism in the update of the private facility inventory

8. Assist divisions and Tourism in developing an automated system to handle brochure distribution

9. Assist the department in computer mapping, graphic support, and computer assisted printing

10. Conduct a major study on off-road vehicles demand, preferences, and policy needs (3 wheelers, motor bikes, four-wheel drive)

11. Continued coordination with Policy development by providing data on resources and use

12. Land suitability project: develop information and alternate scenarios to develop land allocation alternatives
13. Continued support for computer activities in the Division of Waters
14. Continued support of Forest Planning efforts especially in the area of computer mapping and in projects like the forest road study
15. Special studies for the Commissioner's Office on resource use
16. Assist Parks in their development of a park information system.
17. Work with other agencies of state government to unify their resource data collection with DNR programs and assist in coordination with LMIC
18. Development and implementation of a survey to monitor expenditures by users of state recreation facilities
19. Contingent upon replacement of current license center data entry equipment, development of questions that enhance the usefulness of licensing data
20. Development of a quarterly state natural resource consumption forecasting program

C. OTHER IMPACTS OF LOSS OF THE DATA SYSTEMS UNIT'S ASSISTANCE

1. Other Divisions

The Natural Resource Data Systems Unit provides service to divisions in the areas of system design and implementation, data analysis and special studies. It is these services that will be lost if additional funding is not provided. Built upon work developed under LCMR funding, the unit designs and administers ongoing research systems studying the use of trails, rivers and parks. The program in the change level is scheduled to generate qualitative data designed to enhance the manager's understanding of the user's needs and experience and better understand the economic impact of users of DNR facilities. Without this program this data will not be available.

2. Tourism

As the state moves to improve its position in the tourism market, the unit has assisted the divisions' efforts to better serve the tourism market. Current plans schedule expanded use of the DEPD Tourism Division's information distribution system. Currently the Tourism Division and Trails and Waterways Unit share a mailing system. In the upcoming biennium more divisions will share and the DNR's system will be tailored for department telephone enquiries. Additionally, the unit's agenda includes

refinement of analyses of existing information on the state's recreation/tourism market. This will yield market segmentation information that will lead to more effective and efficient delivery of information about the state's recreation resources. Without funding these advancements will not take place.

3. LMIC and Other Agencies

While under LCMR funding, one of the major missions of the unit has been to encourage use of the Land Management Information Center and its MLMIS data base. This work is typified by the enhanced water use data available at LCMR. The unit's schedule includes continued education and promotion of the use of MLMIS for decision making and policy formulation. In addition plans call for intense scrutiny of the data bases developing in DNR to guarantee that data with geographic value have MLMIS codes attached. As a corollary responsibility, the Natural Resource Data unit will work with other agencies to integrate their data collection with DNR data needs. These types of education and coordination require intensive involvement of skilled personnel. Without these positions the investment from the education and coordination will not occur.

4. State Comprehensive Outdoor Recreation Plan (SCORP)

The update and maintenance of SCORP which maintains Minnesota's eligibility for Land and Water Conservation Funds (LAWCON) would be eliminated except for the general fund engineering aide who maintains the public recreation inventory; Minnesota would not remain eligible for future federal LAWCON funds. Also planned is the development of a continuous phone survey program that at small cost would keep the SCORP survey up-to-date. Eliminated also would be the department's ability to coordinate and integrate this inventory effort with that of the Division of Tourism as is proposed through LCMR as a joint project for FY 83-85.

Planning - Policy Development & Management Analysis (6-53155)

Question 1. "What is the status of the land classification study?"

The Land Resource and Management Plan Project, or the Land Suitability Study as it is more commonly known, is the most recent effort to assess the land resource base owned by the State of Minnesota and administered by the Department of Natural Resources. Similar land classification programs were conducted during the 1930s, the 1950s, the early 1970s and now this study. All of these classification programs have had one basic feature in common. They have all tried to identify the current and potential uses of publicly owned lands, and they have all built upon and added to the earlier efforts.

The land suitability study is approaching the problem of what should be done with state owned lands from a different perspective than previous studies. This is possible because of the wealth of information about our land and resources that are available from computerized data bases.

In the land classification study of the 1970s field personnel were asked to assess each parcel of DNR administered land and to classify it according to its "highest and best use." A secondary use was also assigned.

The land suitability study is looking at various natural resource, social and economic factors such as good agricultural land or good recreational sites and then a search of the computerized data bases is conducted to identify lands that have these characteristics.

The result of this process is the identification of areas of the state that are suitable for different uses. Seven different land uses are being examined:

1. Agricultural Crop Production
2. Timber Production
3. Mineral Potential
4. Outdoor Recreation
5. Wildlife Habitat
6. Energy Development
7. Urban Development

Task forces have been set up within the Department to address most of these land uses. Each Task Force is slightly different depending on the land use being examined. The Wildlife Habitat task force for example is composed of area wildlife managers and central office staff. The Recreation Task Force is composed mostly of central office staff from four divisions and bureaus with recreation interests. Agricultural Crop Production does not have a task force because this use was addressed by the State Planning Agency in 1979 and this information will be adapted for use in the land suitability study.

In some cases, depending on the particular natural resource, social and economic factors involved, it is possible to identify the suitability of a specific parcel for any of the above land uses. In most cases, however, a larger area is identified and what is really described is the "neighborhood" that a given parcel of land is a part of. These neighborhoods will suggest different ways of allocating and managing state owned lands.

For instance, in the forested lakes area of central Minnesota the state does not own large amounts of land. The shoreland in this area is becoming intensively developed and there are many private owners of forest land. This may suggest that the Department should place more emphasis on fire suppression, public access development, the provision of recreational opportunities and more assistance to private owners of forest land.

Just east of this area in northern Aitkin County the state has extensive holdings of forestland and there are fewer lakes and very low densities of people. This may suggest that the lands in this area be more intensively managed for timber production or wildlife habitat and that less emphasis might be placed on the provision of recreational facilities and private forest management assistance.

Another significant difference between this and other land classification studies is that we are identifying the suitability of the land for all of the land uses itemized earlier. This avoids some of the problems inherent in designating a "highest and best use" and recognizes the fact that some lands can be utilized for more than one purpose at the same time.

During the next biennium it is proposed that the results of the suitability determinations be used to help allocate lands to different potential uses and administering authorities within the Department. A considerable effort will also be made to explain these allocations to other government units and the public and to seek their input on the future management of these lands.

#### Planning-Data Systems (6-53157)

Question 1. "Please briefly describe the State Comprehensive Outdoor Recreation Plan (SCORP). Why was it undertaken? What are its major conclusions? How has the department changed its programs based on SCORP findings?"

The State Comprehensive Outdoor Recreation Plan directs and guides public expenditures on recreation development in Minnesota. It guides federal, state and local agencies as they prepare budgets for recreation facility development. It ensures that these expenditures go to needed types of facilities and that agencies and levels of government do not duplicate one another's efforts. To do this, SCORP relies on an extensive data set on the location of and use of facilities. These data are continuously updated through surveys, indices and secondary research. As new data and questions come to the fore, new analyses provide update direction and guidance.

SCORP is an outgrowth of the Minnesota Outdoor Recreation Resources Commission of the middle 60s and the Federal Land and Water Conservation Fund Act of 1964. Both these identified a need for effective public recreation investment and recommended a single statewide plan to achieve good investments. SCORP performs that investment guidance function.

The concluding chapter of 1979 SCORP addressed 12 major issue areas. The salient issue areas deal with shoreland and water resources, hunting and fishing, trail development and management, land ownership and information. The shoreland/water resources conclusions called for enhancing river management to tap underused recreation resources and relieve pressure from overused ones; improved management of public shoreland with an intent toward making more of it available to the general public and accelerated development of public access to lakes and streams. Hunting and fishing conclusions called for targeted, intensified management of wetlands, uplands and fisheries and stresses low cost cooperative management methods. Trail conclusions called for investments targeted at locations near population and major tourism concentrations and segregation of conflicting users and trail development tied closely to heavy use of existing trails. Land ownership recommendations concentrated on evaluation of the

public value of public lands and accelerated land exchange to consolidate high quality recreation land. Lastly, the information issue area concluded that the public services provided through existing public recreation facilities was falling far short of the potential. The major cause of this inefficiency was a lack of public knowledge about what facilities were available where. SCORP recommended a major effort to tell the public what was available.

Overall, SCORP brought forth the fact that the recreation provision system is a complex federal, state and local effort. Strong coordination will increase its efficiency.

Recent analyses of data lead to the conclusion that wildland and family group oriented recreation will be important in the last half of the 80s and early 90s. In addition, recreation will be characterized by greater devotion to machine oriented activities. This conclusion is based on accelerated family formation and the passage of the post war baby boom into their highest earning years.

The department has intensified its river management and undertaken a close look at shoreland resources. In addition, it operates an accelerated public access program. The department closely coupled its trail management and development strategies to existing trail use. In addition, it views each proposal's contribution to tourism areas or nearby populations as paramount in importance to qualifying for funding. The department is performing a major land evaluation, a product of which is the identification of superlative outdoor recreation lands. Major new information programs include computerized brochure mailing lists, county public access maps, computerized fish stocking data and a major tourism information system proposal. The department is also improving its state park information delivery system and its methods for giving the public locations and information on public hunting areas. In addition the department has given emphasis to forest recreation, including rejuvenation of dilapidated campgrounds to provide low cost camping to meet the future increase in demand for wildlands camping.

#### Youth Program (6-53167)

1. "How is the "return of \$1.14 for every \$1.00 spent" determined?"

For every project that is completed, a work project analysis form is filled out. The camp director or crew leader who fills out the form will contact the host agency to determine what that project would cost the agency to complete if the conservation corps enrollees had not been available. If the value of the project cannot be determined in this manner, a local contractor will be asked what he would charge to accomplish the work project. The total value of work projects accomplished is then compared to the amount of dollars received to operate the program to come up with the figure in question.

2. "The narrative states "The office of Youth Programs has the capacity to operate a larger program." Please elaborate."

In the past, federal funds were available to operate our programs. With the loss of those dollars, our program was decreased significantly. Because we continued to operate a conservation crops program, we were allowed to keep the vehicles, tools and equipment that were purchased with federal funds. Besides these resources we have the network, work project locations and guidelines still in place to rapidly expand the size of our program with a minimum of start-up costs. As the proposal to expand our year round young adult program indicates, with an additional \$1,200,000 we could employ over 270 18-26 year old young adults for 6 months. With \$800,000 additional we could put 175 unemployed young adults to work.

3. "If the 5 hours of environmental education training were eliminated, how would the costs and work product of the MCC be affected?"

In our summer work program for high school students we plan to offer 5 hours of Environmental Awareness (EA) training, this is down from 10 hours of EA offered in previous years. It should be noted that the enrollees are not paid for the hours devoted to environmental awareness training. If the 5 hours of EA training were eliminated, approximately \$3,500 in staff salaries would be saved while over \$14,000 in additional costs would be incurred to pay for enrollee salaries for the extra 5 hours worked per week. If no additional funds were provided, approximately 14 enrollees positions would have to be eliminated to cover the costs. No additional work product would be forthcoming because the work accomplished by the additional 5 hours worked by the enrollees would be offset by the 14 enrollee positions eliminated. The EA program has proven to be successful according to the enrollees (80% of these surveyed felt the EA component was worthwhile and valuable). Also, a 7 hour work day with 1 hour of EA training is about the maximum for 15 and 16 year old boys and girls, for many of whom are experiencing their first job.

#### Trails and Waterways Management Program - General (6-53169)

1. "Please briefly describe the Statewide Trail Plan."

The statewide DNR Trail Plan will serve as the blueprint for the future administration of state trails, grants-in-aid trails and unit trails in state parks and forests.

This plan will set forth what appears to be the most efficient cost-effective method of providing for the trail-oriented recreation needs of Minnesotans while recognizing and being guided by the needs and concerns of other affected parties. It is presently in draft form for review within the DNR.

2. "Do you expect the trends of increased skiing, bicycling and horseback riding and stabilized snowmobiling to continue? How do you make this determination?"

In the future, the DNR expects trends of increased biking, ski-touring and hiking to continue. The DNR does not believe similar trends exist for snowmobiling and horseback riding: future use for these two uses is not expected to rise.

To explore the question of trail supply and demand, several sources of information were used:

1. public response to questions posed at a statewide series of meetings and displays in the spring of 1981;
2. 1978 SCORP data and projections;
3. documented use of four existing state trails;
4. multi-seasonal use of existing DNR trails;
5. snowmobile registration trends;
6. bicycle sales and surveys; and,
7. additional observations and recommendations by the public and by DNR field staff.

(See attached Exhibit J)

3. "Laws 1980, Chapter 580, required a study of gasoline use in motorboats and snowmobiles. Please briefly summarize the results of the study. Was the Department of Transportation involved in the data gathering and methodology of the study?"

(See attached Exhibit K)

MN/DOT was not involved in the preparation of the first drafts of the gas tax study (within the DNR, the Boat and Water Safety Coordinator and staffs of the Office of Planning and the Trails Planning Section collaborated on the original drafts). On November 8, 1982, a preliminary draft was provided to MN/DOT for comment and review.

Gene Ofstead, Director of Government Relations and his staff devoted several days to this project. MN/DOT volunteered several observations which resulted in substantial changes to the reports methodology and conclusions.

In addition, MN/DOT was invited to prepare alternative estimates to be included in the report, but they declined.

#### Trails - General Operation and Management (6-53171)

1. "If, as is stated in the narrative, the budget activity provides administration, planning, etc. of all trails, why isn't some of the cost borne by the snowmobile account?"

The Snowmobile Account bears a share of the administration cost of snowmobiling. Since it is a dedicated account only those activities related to snowmobiling are included. \$640,000.00 is identified as overall administration. Of this amount \$125,000.00 is rental, grants supplies, communication and printing. \$300,000.00 is identified to support the snowmobile licensing activities. \$150,000.00 is identified for enforcement and the safety training program. This level of support is based upon the history of expenditures by the Division of Enforcement. \$65,000.00 will be for monitoring of all snowmobile trails and the grants program.

There are no funds allocated to the service related activities of other Units of the Department because of minimal involvement.

Trails Planning is funded from General Revenue. The planning process includes both non-motorized and motorized activities, thus it is appropriate not to split fund. However, the monitoring of snowmobile trails is being proposed from the dedicated account.

2. "What is the "new source of funding" for the ski touring grants-in-aid programs? Is it reflected in this budget activity?"

1. To comply with the Laws of 1982, Chapter 580, the Department has submitted a report to the Legislature concerning the collection of fees from user's of state and GIA trails including cross-county skiers. If such fees are collected, the preferred method of collecting these fees would be through the issuance of a license (the user rather than the equipment would be taxed).

2. No - it is not reflected in this budget activity because the method of generating revenue for this program has not been approved by the Legislature.

3. "Why hasn't the department requested funding for a manager for the Root River Trail as required by law?"

Because the same budget level plus cuts have made it impractical to request this position. Also, because of limited development funds and the expectation of no Resource 2000 this coming biennium, it is now expected that little or no development will take place until at least the 86-87 biennium.

4. "What will be the effect of the general reduction recommended by the Governor?"

Maintenance funds for 500 miles of non-motorized trails with less than moderate use would be eliminated, limited maintenance on 750 miles of moderately used trails and adequate maintenance of 1,250 miles of heavily used trails.

#### Trails - River Recreation (6-53175)

1. "What will be the effect of the general reduction recommended by the Governor?"

1. The 100% development level will not be reached (approximately 14 developments planned for this biennium).

2. Maintenance will be reduced to once per season per river.

3. Canoe route map distribution will be reduced.

4. Facilities and hazards, such as rapids and dams, will not be adequately signed.

## Trails - Water Access (6-53178)

1. "Why are you reducing Game & Fish/unrefunded marine gas tax support for this activity?"

The Governor's recommendation is not reducing the support of this activity. The reduction is based on the estimated unrefunded portion of the marine gas tax available for the next biennium.

Currently the Water Access Program is funded by receiving 1/3 of the unrefunded gas tax as provided by law. These funds provide for the maintenance and operation of the water access program. Due to a recent change in income tax procedures of not requiring receipts be submitted by a tax payer claiming a credit for gas tax used for marine purposes, the funds available have significantly dropped. Before the change in tax requirements, gas tax refunds were averaging \$108,000.00 per year.

A summary of the gas tax for marine use and refunds follows:

Year	3/4 of 1% of Gas Tax Revenue	Amount Refunded	Balance	1/3 Available to Water Access & Lake Improvement
1976	\$1,385,470	\$136,010	\$1,248,460	\$416,153
1977	1,440,484	106,398	1,334,086	444,695
1978	1,479,032	128,136	1,350,896	450,299
1979	1,463,227	115,981	1,347,246	449,032
1980	1,500,534	55,712	1,444,822	481,607

Average - \$108,447

82	1,798,332	1,096,560	699,771	233,263	<i>where 61</i>
1981	\$1,699,134	\$778,198	\$ 920,936	\$310,312	<i>pk Gov - pk Gov Act A &amp; W Safety - 6F Water Access - 6 &amp; F</i>

84 = 2.2% - elim refund gas tax inc, 2.2%  
Because of the large increase in "refunds" (7 times), it appears taxpayers are taking advantage of the credit now that no receipts are required. *Grants = fed by receipts*

85 2.2%  
Based on this change it is estimated that an average of \$295,000.00 will be available per fiscal year, over the next biennium, to the Water Access Program.

2. "Does the \$500.00/year under LCMR same level represent continuation of a previously LCMR funded program?"

Yes - the Water Access Program has received LCMR funding, to accelerate acquisition and development, since 1979.

## Trails - Minnesota Trails Assistance (6-53180)

1. "How much funding is proposed for each of the purposes listed under "Activity Objectives?"

1. Grants to local units of governments - \$2,561,200.00

2. Acquisition, development and maintenance of state recreational snowmobile trails - \$635,000.00
  3. Snowmobile safety programs - \$70,000.00
  4. Administration/Enforcement - (License Bureau, \$300,000; Enforcement, \$80,000; Monitoring, \$65,000; Administration, \$125,000)
2. "How much revenue is expected during FY 84-85 due to the current percentage of unrefunded gas tax attributable to snowmobile use? If the findings of the gasoline use study were adopted, what would the revenue from this source be?"
1. The current percentage is .75 of 1%. We anticipate revenues totaling \$3,120,000.00.
  2. The study identifies a range of .81 of 1% to 1.44%. The range in dollar amounts would be from \$3,369,000.00 to \$5,990,440.00.

1548E

DEPARTMENT OF NATURAL RESOURCES  
1983-85 BIENNIAL BUDGET  
SUMMARY OF DEPARTMENT REQUEST/GOVERNOR'S RECOMMENDATION BY PROGRAM

Department Request					Governor's Recommendation				
Program	F.Y. 1984		F.Y. 1985			F.Y. 1984		F.Y. 1985	
	Amount	# Pos.	Amount	# Pos.		Amount	# Pos.	Amount	# Pos.
<u>ADMINISTRATIVE MANAGEMENT SERVICES</u>									
SAME Level	\$ 5,840.5	133.0	\$ 5,961.5	133.0	General Reduction Inflation	\$ 5,840.5 (135.8) (34.5)	133.0	\$ 5,961.5 (137.6) (74.9)	133.0
CHANGE Level									
Unemployment Compensation	11.2		11.2			11.2		11.2	
Workers' Compensation	17.6		17.6			17.6		17.6	
Legislative Auditor	16.4		17.6			16.4		17.6	
Survey Section	93.0	3.0	103.0	3.0		93.0	3.0	103.0	3.0
Information System - LCMR	300.0	5.0	300.0	5.0		No Rec.		No Rec.	
Volunteer Management - LCMR	97.5	2.0	97.5	2.0		No Rec.		No Rec.	
Subtotal	6,376.2	143.0	6,508.4	143.0		5,808.4	136.0	5,898.4	136.0
<u>REGIONAL ADMINISTRATION</u>									
SAME Level	3,257.2	101.0	3,279.7	101.0	Close Metro Inflation	3,257.2 (181.4) (6.0)	101.0 (10.0)	3,279.7 (182.1) (11.8)	101.0 (10.0)
Subtotal	3,257.2	101.0	3,279.7	101.0			3,069.8	91.0	3,085.8

## Department Request

## Program

## FIELD SERVICES SUPPORT

SAME Level

CHANGE Level

Building Repair

Subtotal

## WATER RESOURCES MANAGEMENT

SAME Level

CHANGE Level

Restoration of Dec. '82  
Reduction~~Wild/Scenic Rivers~~~~Wild/Scenic Rivers - LCMR~~

Water Bank

~~Water Information System~~~~Water Data Network - LCMR~~

Accel. Groundwater - LCMR

Subtotal

F.Y. 1984		F.Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 4,893.5	45.0	\$ 5,136.6	45.0
460.0		460.0	
5,353.5	45.0	5,596.6	45.0
3,514.0	75.0	3,556.0	75.0
56.0		56.0	
62.5	2.0	62.5	2.0
(58.0)	(2.0)	(58.0)	(2.0)
(200.0)		(200.0)	
106.7	2.0	113.1	2.0
(33.0)	(1.0)	(33.0)	(1.0)
179.0	3.0	121.0	3.0
3,627.2	79.0	3,617.6	79.0

General Reduction  
Inflation

Inflation

## Governor's Recommendation

F.Y. 1984		F.Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 4,893.5 (20.0) (71.0)	45.0	\$ 5,136.6 (20.0) (153.6)	45.0
460.0		460.0	
5,262.5	45.0	5,423.0	45.0
3,514.0 (11.8)	75.0	3,556.0 (27.1)	75.0
56.0		56.0	
-0-	-0-	-0-	-0-
(58.0)	(2.0)	(58.0)	(2.0)
(200.0)		(200.0)	
-0-		-0-	
(33.0)	(1.0)	(33.0)	(1.0)
No Rec.		No Rec.	
3,267.2	72.0	3,293.9	72.0

## Program

## MINERAL RESOURCES MANAGEMENT

SAME Level

CHANGE Level

Partial Restoration of  
Jan. '82 Reduction  
Restoration of Dec. '82 Reduction  
Accel. Minerals Eval. - LCMR  
Mineland Reclamation - Restora-  
tion of Dec. '82 Reduction  
Peat Management - Restoration  
of Dec. '82 Reduction

Subtotal

## FOREST MANAGEMENT

SAME Level

CHANGE Level

Partial Restoration of  
Dec. '82 Reduction  
Unfunded Positions  
Insect & Disease  
Tree Improvement

Gov. Initiatives  
Copper-Nickel  
Direct Reduction  
N.R. Res. Facility  
Peat Research  
Inflation

Inflation  
BWCA Deflation

## Department Request

## Program

## FOREST MANAGEMENT (Contd.)

## CHANGE Level

County Assistance Program (CAP)

Conversion - 10 Fund

Accel. Private Forest Mgmt.

Forest Planning

Soil Specialists

CAP Conversion - 20 Fund

Fire Fighting

Forest Mgmt. Intensification

Accel. Private For. Mgmt. - LCMR

Forest Resource Planning - LCMR

Information Management - LCMR

Accel. Phase II Inventory - LCMR

Forest Soil Specialization - LCMR

Wildfire Planning - LCMR

Campground Rehabilitation - LCMR

## Subtotal

## FISH MANAGEMENT

## SAME Level

## CHANGE Level

Urban Fishing

Walleye Lakes

Unemployment Compensation

Workers' Compensation

Trout Stream Management

## Subtotal

F.Y. 1984		F.Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 200.4	10.0	\$ 207.4	10.0
450.0	10.0	450.0	10.0
230.0	4.0	246.0	4.0
82.5	3.0	84.5	3.0
(190.6)	(10.0)	(190.6)	(10.0)
576.0		626.5	
1,000.0		1,750.0	
(281.5)	(10.0)	(281.5)	(10.0)
(179.1)	(5.0)	(179.1)	(5.0)
168.6	1.0	168.6	1.0
(142.0)		(142.0)	
(66.0)	(3.0)	(66.0)	(3.0)
97.5	3.0	97.5	3.0
400.0	3.0	400.0	3.0
20,941.7	431.0	21,993.2	431.0
8,063.0	205.0	8,063.7	205.0
10.0		10.0	
185.0	3.0	155.0	3.0
102.3		102.3	
69.3		69.3	
152.0	1.0	183.0	1.0
8,581.6	209.0	8,583.3	209.0

General Reduction  
Inflation

## Governor's Recommendation

F.Y. 1984		F.Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 200.4	10.0	\$ 207.4	10.0
450.0	10.0	450.0	10.0
230.0	4.0	246.0	4.0
82.5	3.0	84.5	3.0
(190.6)	(10.0)	(190.6)	(10.0)
576.0		626.5	
1,000.0		1,750.0	
(281.5)	(10.0)	(281.5)	(10.0)
(355.0)	(5.0)	(355.0)	(5.0)
No Rec.	(3.0)	No Rec.	(3.0)
(367.0)	(10.0)	(367.0)	(10.0)
(66.0)	(3.0)	(66.0)	(3.0)
No Rec.		No Rec.	
No Rec.		No Rec.	
19,816.1	411.0	20,800.3	411.0
8,063.0	205.0	8,063.7	205.0
(100.0)		(100.0)	
(29.2)		(61.6)	
10.0		10.0	
185.0	3.0	155.0	3.0
102.3		102.3	
69.3		69.3	
152.0	1.0	183.0	1.0
8,452.4	209.0	8,421.7	209.0

## Department Request

Program	F.Y. 1984		F.Y. 1985	
	Amount	# Pos.	Amount	# Pos.
<u>WILDLIFE MANAGEMENT</u>				
SAME Level	\$ 8,567.8	111.0	\$ 8,760.9	111.0
CHANGE Level				
Shortwave Radio Dispatch	3.0		3.0	
Environmental Review	32.3		33.3	
Private Lands	25.0		25.0	
Furbearer	9.7		9.7	
Unemployment Compensation	132.0		132.0	
Workers' Compensation	7.9		7.9	
Computerized Licensing	215.0		215.0	
Deer Habitat	508.0		508.0	
Heritage Conversion	59.9	2.0	59.9	2.0
<del>Heritage Conversion - LOMB</del>	(47.0)	(1.0)	(47.0)	(1.0)
Nongame Checkoff	-0-	1.0	-0-	1.0
Wildlife Acquisition	2,000.0		750.0	
Payment in Lieu	(185.0)		(165.0)	
Subtotal	11,328.6	113.0	10,292.7	113.0
<u>ECOLOGICAL SERVICES</u>				
SAME Level	807.1	18.0	813.3	18.0
CHANGE Level				
Seasonal Positions	90.0		90.0	
Unemployment Compensation	3.4		3.4	
Subtotal	900.5	18.0	906.7	18.0

## Governor's Recommendation

	F.Y. 1984		F.Y. 1985	
	Amount	# Pos.	Amount	# Pos.
	\$ 8,567.8	111.0	\$ 8,760.9	111.0
General Reduction	(100.0)		(100.0)	
Inflation	(50.5)		(106.9)	
Deflation Adjustment	11.6		24.6	
	3.0		3.0	
	32.3		33.3	
	25.0		25.0	
	9.7		9.7	
	132.0		132.0	
	7.9		7.9	
	215.0		215.0	
	508.0		508.0	
	-0-		-0-	
	(87.5)	(2.0)	(87.5)	(2.0)
	-0-	1.0	-0-	1.0
	1,750.0		750.0	
	(185.0)		(165.0)	
	10,839.3	110.0	10,010.0	110.0
	807.1	18.0	813.3	18.0
	(1.7)		(3.4)	
	90.0		90.0	
	3.4		3.4	
	898.8	18.0	903.3	18.0

General Reduction  
Inflation  
Deflation Adjustment

Inflation

Department Request

Governor's Recommendation

Program

PARKS AND RECREATION MANAGEMENT

SAME Level

CHANGE Level

Restoration of Dec. '82 Reduction  
~~Management Information LCMR~~  
 Tettegouche Park  
 Park Maintenance  
 Park Development - LCMR  
 Professional Services - LCMR

Subtotal

ENFORCEMENT

SAME Level

CHANGE Level

Shortwave Radio Dispatch  
 Snowmobile Training  
 Firearm Safety  
 Beaver Control  
 Beaver Control - Explosives  
 Unemployment Compensation  
 Workers' Compensation

Subtotal

F. Y. 1984		F. Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 10,938.9	165.0	\$ 11,095.5	165.0
100.0		100.0	
103.5	2.0	46.5	2.0
51.6		80.0	
200.0		200.0	
1,386.8		1,386.8	
(198.8)	(6.0)	(198.8)	(6.0)
12,582.0	161.0	12,710.0	161.0
8,095.9	174.0	8,186.3	174.0
42.0		62.0	
22.0		22.0	
44.0		44.0	
50.0		50.0	
20.0		20.0	
5.7		5.7	
55.2		55.2	
8,334.8	174.0	8,445.2	174.0

General Reduction  
 Inflation  
 Maint. & Oper. -  
 20 Fund

\* No Recommendation

General Reduction  
 Inflation

F. Y. 1984		F. Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 10,938.9	165.0	\$ 11,095.5	165.0
(100.0)		(100.0)	
(43.4)		(92.9)	
28.3		53.6	
100.0		100.0	
No Rec.		No Rec.	
51.6		80.0	
200.0		200.0	
* (219.2)		* (219.2)	
* (484.8)	* (14.0)	* (484.8)	* (14.0)
10,471.4	151.0	10,632.2	151.0
8,095.9	174.0	8,186.3	174.0
(30.0)		(30.0)	
(26.3)		(58.1)	
42.0		62.0	
22.0		22.0	
44.0		44.0	
50.0		50.0	
20.0		20.0	
5.7		5.7	
55.2		55.2	
8,278.5	174.0	8,357.1	174.0

## Department Request

## Program

## PLANNING AND RESEARCH

SAME Level

CHANGE Level

~~Policy Conversions~~~~Policy Conversions - LCMR~~~~N.R. Data System Conversions~~~~N.R. Data System - LCMR~~

Park Planning - LCMR

Land Resource Mgmt. - LCMR

River Planning - LCMR

~~Mississippi Headwaters~~~~Board - LCMR~~

Subtotal

## YOUTH PROGRAMS

SAME Level

CHANGE Level

Subtotal

F. Y. 1984		F. Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 1,284.4	39.0	\$ 1,288.5	39.0
175.9	4.0	184.8	4.0
(138.0)	(4.0)	(138.0)	(4.0)
234.0	6.0	249.0	6.0
(151.5)	(4.0)	(151.5)	(4.0)
(126.9)	(4.0)	(153.1)	(4.0)
(38.0)	1.0	(38.0)	1.0
-0-	(1.0)	-0-	(1.0)
104.5		104.5	
1,344.4	37.0	1,346.2	37.0
469.4	1.0	475.0	1.0
-0-	3.0	-0-	3.0
469.4	4.0	475.0	4.0

Inflation

Inflation

## Governor's Recommendation

F. Y. 1984		F. Y. 1985	
Amount	# Pos.	Amount	# Pos.
\$ 1,284.4 (1.0)	39.0	\$ 1,288.5 (2.3)	39.0
-0-		-0-	
(138.0)	(4.0)	(138.0)	(4.0)
-0-		-0-	
(151.5)	(4.0)	(151.5)	(4.0)
(250.0)	(10.0)	(250.0)	(10.0)
(238.0)	(4.0)	(238.0)	(4.0)
(100.0)	(5.0)	(100.0)	(5.0)
104.5		104.5	
510.4	12.0	513.2	12.0
469.4 (1.3)	1.0	475.0 (3.2)	1.0
-0-	3.0	-0-	3.0
468.1	4.0	471.8	4.0

## Department Request

Program	F. Y. 1984		F. Y. 1985	
	Amount	# Pos.	Amount	# Pos.
<u>TRAILS AND WATERWAYS</u>				
SAME Level	\$ 3,026.2	20.0	\$ 3,077.5	20.0
CHANGE Level				
Public Access	(204.2)		(222.2)	
Water Access - LCMR	290.0	4.0	290.0	4.0
Restoration of Dec. '82 Reduction	236.0		236.0	
License Center	50.0		200.0	
Enforcement	40.0		40.0	
Administration & Grants	401.5		391.0	
Inspection & Monitoring	20.0		45.0	
Trail Maintenance	57.7		64.8	
Subtotal	3,917.2	24.0	4,122.1	24.0
<u>MN ENVIRONMENTAL EDUCATION BOARD</u>				
SAME Level	141.7	4.0	142.6	4.0
CHANGE Level	88.2	1.0	90.2	1.0
Subtotal	229.9	5.0	232.8	5.0
TOTAL	\$ 91,433.3	1,624.0	\$ 92,355.1	1,614.0

General Reduction  
Inflation

\* No Recommendation

Inflation

## Governor's Recommendation

	F. Y. 1984		F. Y. 1985	
	Amount	# Pos.	Amount	# Pos.
	\$ 3,026.2	20.0	\$ 3,077.5	20.0
	(82.1)		(85.2)	
	(8.9)		(19.8)	
	(204.2)		(222.2)	
	* (500.0)	* (1.0)	* (500.0)	* (1.0)
	236.0		236.0	
	50.0		200.0	
	40.0		40.0	
	401.5		391.0	
	20.0		45.0	
	57.7		64.8	
	3,036.2	19.0	3,227.1	19.0
	141.7	4.0	142.6	4.0
	(1.2)		(2.5)	
	88.2	1.0	90.2	1.0
	228.7	5.0	230.3	5.0
	\$ 92,024.9	1,536.0	\$ 92,890.3	1,525.0

DEPARTMENT OF NATURAL RESOURCES  
SCHEDULE OF SPECIAL REVENUE FUND RECEIPTS

2/18/83

Exhibit B -1

<u>Special Revenue Fund</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
<u>Forestry</u>		
Campgrounds	\$ 70.0	\$ 73.0
Forest Management Fund (New)	690.0	717.9
Consolidated Conservation (1)	651.1	677.8
State Forest Account (2)	584.6	629.6
	<u>1,995.7</u>	<u>2,098.3</u>
<u>Minerals</u>		
Weighmasters	185.6	185.6
Minerals Tax Forfeit (3)	1,624.6	1,699.1
	<u>1,810.2</u>	<u>1,884.7</u>
<u>Land Bureau</u>		
Consolidated Conservation (1)	241.4	253.4
State Forest Account (2)	180.6	189.6
	<u>422.0</u>	<u>443.0</u>
<u>Parks</u>		
Maintenance - Current	2,628.4	2,696.9
Maintenance - Proposed	500.0	500.0
Working Capital (Sale of Merchandise) (4)	650.0	650.0
	<u>3,778.4</u>	<u>3,846.9</u>
<u>Trails</u>		
Snowmobile Registrations	<u>1,400.0</u>	<u>1,400.0</u>
 TOTAL	 <u>\$ 9,406.3</u>	 <u>\$ 9,672.9</u>

- (1) Consolidated Conservation: 50% of revenues distributed to counties, remaining 50% available for appropriation to Forestry General Operations and Management.
- (2) State Forest Account : 50% of revenues distributed to counties, remaining 50% transferred to new Forest Management Fund.
- (3) Minerals Tax Forfeit : 20% to General Fund, 80% to respective counties to be apportioned among taxing districts as follows: county, three-ninths; town or city, two-ninths; school district, four-ninths.
- (4) Parks Working Capital : Each year all balances in excess of \$100,000 transferred to General Fund.

DEPARTMENT OF NATURAL RESOURCES  
SCHEDULE OF GENERAL FUND RECEIPTS - DEDICATED AND NON-DEDICATED

B-2

<u>General Fund</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
<u>Land Bureau</u>		
Leases, Etc.	\$ 92.0	\$ 92.0
<u>Waters</u>		
Permits	96.0	96.0
<u>Forestry</u>		
Timber	3.0	3.0
BWCA Reimbursements	3,000.0	3,000.0
	3,003.0	3,003.0
<u>Parks</u>		
Timber	50.0	50.0
Sales Tax	25.0	25.0
	75.0	75.0
<u>Enforcement</u>		
Watercraft Registrations - Current (2)	1,988.1	2,719.4
Watercraft Registrations - Proposed	750.0	750.0
Snowmobile Training	12.0	12.0
Watercraft Fines	20.0	20.0
	2,770.1	3,501.4
<u>Field Services</u>		
Sale of Land and Buildings	10.0	10.0
Rental Housing (1)	85.0	85.0
Sale of Usable Equipment (1)	90.0	90.0
	185.0	185.0
<u>Miscellaneous</u>	53.0	53.0
 TOTAL	 \$ 6,274.1	 \$ 7,005.4

- (1) Field Services is authorized to use rental receipts for upkeep of residences and excess equipment receipts for new equipment purchases. All other revenues listed here are non-dedicated and are credited to the General Fund.
- (2) \$1,000.0 per fiscal year is appropriated to the Enforcement Division for county boat and water safety allocations.

GAME AND FISH FUND  
(Dollars in Thousands)

	Actual F.Y. 1981	Actual F.Y. 1982	Estimated F.Y. 1983	Governor's Recommendation	
				F.Y. 1984	F.Y. 1985
<u>ACTUAL AND ESTIMATED RESOURCES</u>					
Balance Forward	\$ 5,691.6	\$ 6,284.4	\$ 5,069.5	\$ 5,370.6	\$ 4,512.1
Prior Year Adjustments	453.5	92.1	187.2	437.2	-0-
Adjusted Balance Forward	\$ 6,145.1	\$ 6,376.5	\$ 5,256.7	\$ 5,807.8	\$ 4,512.1
Receipts					
Federal Grants	4,295.1	4,230.8	4,000.0	4,000.0	4,000.0
Occupational Permits and Licenses	129.2	183.6	190.0	190.0	190.0
Non-Occupational Permits and Licenses	101.8	57.4	94.0	94.0	94.0
Hunting Licenses	5,530.8	5,867.3	8,247.3	9,297.9	9,642.3
Sportsman's Licenses	1,390.4	1,574.1	1,805.3	1,805.3	1,805.3
Fishing Licenses	7,896.7	8,099.8	10,080.0	10,176.0	10,224.0
Migratory Waterfowl Stamp	399.4	417.1	420.0	420.0	420.0
Trout Stamp	-0-	-0-	120.0	150.0	150.0
Use of Property - Rentals	106.8	143.5	120.0	120.0	120.0
Sale of Natural Resources	60.1	77.9	78.0	78.0	78.0
Fines, Forfeitures and Restitutions	305.8	372.2	350.0	350.0	350.0
Interest Income	-0-	1,262.2	900.0	850.0	800.0
Small Game Surcharge	794.1	737.1	1,464.0	1,508.0	1,552.0
Other	78.9	43.0	42.0	42.0	42.0
Total Receipts	\$ 21,089.1	\$ 23,066.0	\$ 27,910.6	\$ 29,081.2	\$ 29,467.6
Revenue Refunds	13.9	31.0	31.0	31.0	31.0
Net Receipts	\$ 21,075.2	\$ 23,035.0	\$ 27,879.6	\$ 29,050.2	\$ 29,436.6
Transfers from Other Funds					
General Fund	12.4	-0-	-0-	-0-	-0-
Special Revenue Fund	-0-	10.0	-0-	-0-	-0-
Highway User Tax Fund	333.1	275.7	300.0	300.0	300.0
Federal Fund	9.3	-0-	-0-	-0-	-0-
Computer Services Fund	10.6	-0-	-0-	-0-	-0-
Total Transfers	\$ 365.4	\$ 285.7	\$ 300.0	\$ 300.0	\$ 300.0
Total Resources Available	\$ 27,585.7	\$ 29,697.2	\$ 33,436.3	\$ 35,158.0	\$ 34,248.7

GAME AND FISH FUND  
(Dollars in Thousands)

	Actual F.Y. 1981	Actual F.Y. 1982	Estimated F.Y. 1983	Governor's Recommendation	
				F.Y. 1984	F.Y. 1985
<b>ACTUAL AND ESTIMATED USES (Contd.)</b>					
<b>Expenditures</b>					
Administrative Management Services	1,742.5	2,144.7	2,322.6	2,442.4	2,484.9
Regional Administration	692.3	679.1	751.4	773.4	783.5
Field Services Support	942.1	1,408.9	1,494.3	1,549.6	1,627.7
Water Bank Program	-0-	200.0	200.0	-0-	-0-
Fish Management	5,601.9	6,461.6	7,319.5	7,933.2	7,999.2
Wildlife Management	6,195.6	6,906.0	7,514.5	9,906.5	8,993.2
Ecological Services	444.4	370.7	432.6	535.5	535.2
Enforcement	3,902.9	5,128.4	5,662.7	5,968.5	6,028.9
Water Access	517.2	434.2	484.4	297.2	293.7
Unemployment Compensation - Deficiency Appropriation	345.8	-0-	665.5	-0-	-0-
Interest Penalty - Unemployment Compensation	-0-	-0-	130.0	-0-	-0-
Workers' Compensation - Deficiency Appropriation	-0-	-0-	348.3	-0-	-0-
Leech Lake Payments	566.0	443.9	629.0	664.4	676.0
Game and Fish Contingency	-0-	-0-	-0-	200.0	200.0
Retirement Contribution Reduction	-0-	-0-	(273.0)	-0-	-0-
Indirect Costs	-0-*	-0-*	280.0	290.0	300.0
<b>Total Expenditures</b>	<b>\$ 20,950.7</b>	<b>\$ 24,177.5</b>	<b>\$ 27,961.8</b>	<b>\$ 30,560.7</b>	<b>\$ 29,922.3</b>
<b>Transfers to Other Funds</b>					
General Fund - Indirect Cost	245.7	190.0	-0-	-0-	-0-
Special Revenue - Workers Compensation	104.9	-0-	-0-	-0-	-0-
Capitol Budget	-0-	195.0	-0-	-0-	-0-
Debt Service Fund	-0-	65.2	103.9	85.2	76.7
<b>Total Transfers</b>	<b>\$ 350.6</b>	<b>\$ 450.2</b>	<b>\$ 103.9</b>	<b>\$ 85.2</b>	<b>\$ 76.7</b>
<b>Total Uses</b>	<b>\$ 21,301.3</b>	<b>\$ 24,627.7</b>	<b>\$ 28,065.7</b>	<b>\$ 30,645.9</b>	<b>\$ 29,999.0</b>
<b>Balance Forward</b>	<b>\$ 6,284.4</b>	<b>\$ 5,069.5</b>	<b>\$ 5,370.6</b>	<b>\$ 4,512.1</b>	<b>\$ 4,249.7</b>

The 1983-85 biennium balance forward will be used to fund the compensation adjustments and any new legislation.

\* F.Y. 1981 and 1982 statewide indirect costs were processed as transfers to the general fund.

## DEPARTMENT OF NATURAL RESOURCES

## FUND STATEMENTS FOR SELECTED SPECIAL REVENUE FUNDS

	<u>F.Y. 1983</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
<u>Forest Management Fund - 31200:76-20</u>			
Balance Forward-In	\$ --	\$ --	\$ 1,115.2
Receipts	--	690.0	717.9
Transfers-In			
State Forest Fund	--	366.8	382.6
Trust Funds	--	1,058.4	1,132.4
Less: Expenditures	--	(1,000.0)	(1,750.0)
Balance Forward-Out	<u>\$ --</u>	<u>\$ 1,115.2</u>	<u>\$ 1,598.1</u>
 <u>State Forest Account - 38105:00-20</u>			
Receipts	\$ 733.6	\$ 765.2	\$ 819.2
Less: Transfers-Out (Forest Mgmt. Fund)	(366.8)	(382.6)	(409.6)
Less: Expenditures	(366.8)	(382.6)	(409.6)
Balance Forward-Out	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>
 <u>Consolidated Conservation Fund - 38100:00-20</u>			
Balance Forward-In	\$ 491.6	\$ 456.6	\$ 532.8
Receipts	929.9	892.5	931.2
Less: Expenditures			
General Operations & Management	(500.0)	(350.0)	(350.0)
Distributions to Counties	(464.9)	446.3 (466.3)	(465.6)
Balance Forward-Out	<u>\$ 456.6</u>	<u>\$ 532.8</u>	<u>\$ 648.4</u>
 <u>Nongame Wildlife - 31400:78-20</u>			
Balance Forward-In	\$ 584.9	\$ 559.9	\$ 574.6
Transfer-In (Dept. of Revenue)	586.6	650.0	700.0
Transfer-Out (Univ. of Minnesota)	(25.0)	(25.0)	(25.0)
Expenditures	(586.6)	(610.3)	(684.3)
Balance Forward-Out	<u>\$ 559.9</u>	<u>\$ 574.6</u>	<u>\$ 565.3</u>

State Park Operations & Mgmt. - 31500:80-20

	<u>F.Y. 1983</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
Balance Forward-In	\$ 160.9	\$ 462.6	\$ 486.8
Receipts			
Current Fees	2,702.2	2,710.2	2,718.2
New Fees	--	414.5 *	653.2 *
Expenditures			
Current Fees	(2,400.5)	(2,600.5)	(2,600.5)
New Level (Governor's recommendation)	--	(500.0)	(500.0)
Balance Forward-Out	<u>\$ 462.6</u>	<u>\$ 486.8</u>	<u>\$ 757.7</u>

Snowmobile - 31000:21-20

	<u>F.Y. 1983</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
Balance Forward-In	\$ --	\$ --	\$ 1,119.7
Receipts - Registrations	--	1,410.0	1,410.0
Transfer-In (Unrefunded Gas Tax)	--	1,560.0	1,560.0
Expenditures	--	(1,850.3)	(2,030.1)
Balance Forward-Out	<u>\$ --</u>	<u>\$ 1,119.7</u>	<u>\$ 2,059.6</u>

\* New Fees:

	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
Increase Camping \$1.00	\$ 165.1	\$ 175.1
Increase Entrance Fee \$5.00	249.4	478.1
	<u>\$ 414.5</u>	<u>\$ 653.2</u>

	<u>F.Y. 1983</u>	<u>F.Y. 1984</u>	<u>F.Y. 1985</u>
<u>State Forest Suspense - 38104:62-86</u> <u>38104:63-61</u>			
Balance Forward-In	\$ 2,190.7	\$ 1,683.7	\$ 1,766.2
Dedicated Receipts	1,726.7	1,809.2	1,943.6
Transfer to Forest Development	(500.0)	(500.0)	(500.0)
Transfer to Forest Management Fund	--	(1,058.4)	(1,132.4)
Transfer to Trust Fund Balance	(1,690.7)	(125.3)	(133.8)
Refunds	(43.0)	(43.0)	(43.0)
Balance Forward-Out	<u>\$ 1,683.7</u>	<u>\$ 1,766.2</u>	<u>\$ 1,900.6</u>

Permanent School Trust Fund - 38005:00-86

Receipts:			
Property Rentals	\$ 641.7	\$ 253.8	\$ 266.5
Copper-Nickel Royalties	79.2	81.2	73.7
Iron Ore Royalties	1,577.5	1,342.9	1,343.4
Sand, Gravel, Rock	39.1	41.0	43.0
Timber & Timber Products	875.4	916.9	987.5
Sale of Land & Buildings	50.0	52.5	55.1
Sale of Standing Timber	25.5	26.8	28.1
Total	<u>\$ 3,288.4</u>	<u>\$ 2,715.1</u>	<u>\$ 2,797.3</u>

*Law change -  
Recover costs  
to F.M.F. - offset GF  
Can't offset 1:1 =  
\$541.1 = firefighting  
admin.*

Note: All receipts revert to Permanent School Fund balance.

Permanent University Trust Fund - 38007:00-61

Receipts:			
Iron Ore Royalties	\$ 68.2	\$ 66.0	\$ 65.4
Timber & Timber Products	8.8	9.3	10.0
Total	<u>\$ 77.0</u>	<u>\$ 75.3</u>	<u>\$ 75.4</u>

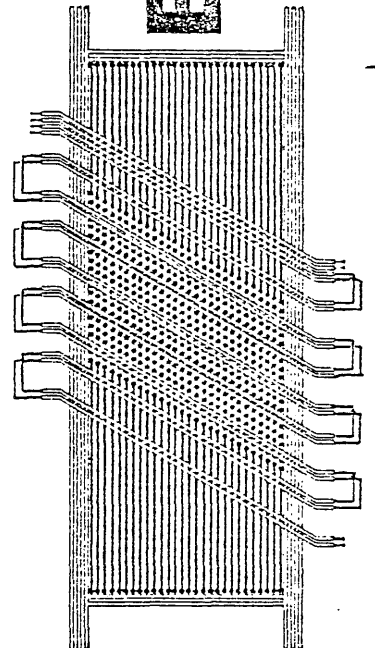
Note: All receipts are transferred to Permanent University Fund balance.



Department of Natural Resources  
Information Systems Strategic Plan

EXHIBIT 1

# Executive Summary





### Introduction

This report presents a development and management strategy for information systems for the Department of Natural Resources (DNR) for the 1984-85 biennium. It is a comprehensive look at:

- Applications to be developed
- Hardware requirements
- Data communication requirements
- Management of the development and operation of information systems

The plan is strategic in that it lists targets, but does not describe the methods which will be used. Each of the recommendations will be expanded into a systems development project or hardware acquisition.

The plan organizes all of the potential hardware, software, and organizational variables into a consistent pattern. Without a plan, it is difficult to evaluate requests, coordinate development and explain how the various pieces fit together. Many data processing applications are in operation or under development within DNR, but unevenness exists. Organizational units of the DNR which have substantial budgets have forged ahead, while other units are still working with older technology. One of the benefits of a strategic plan is that the "have nots" are given the opportunity to make their case for a bigger share of the funding.

### Methodology

The study team consisted of one full-time employee on loan from the Department of Energy, Planning and Development and a technical committee of DNR employees. The committee carried out special studies, provided data, and reviewed results. Its members were selected to represent all of the organizational units of the DNR. The committee was a particularly important communications link to the division directors. It functioned well and was a major reason the project flowed smoothly.

The techniques used in the study were a blend of two methodologies - IBM's Business System Planning (BSP) and Critical Success Factors (CSF) as defined by Rockart at the Massachusetts Institute of Technology. BSP uses a very detailed analysis of organizational processes and data to identify applications. Executive interviews are used to define the organization's "information architecture." The BSP process is quite detailed and time consuming. CSF on the other hand identifies application priorities only through interviews. Its goal is to identify the set of items which are absolutely critical to successful operation. It is considerably less detailed and highly subjective. It was felt that a blend of the two methodologies would yield the objectivity of BSP and the ease of CSF. The blend worked well as the results of the interviews correlated with data collected on organizational activities and existing data bases. Application priorities were then developed from the intersection of these three lists:

- DNR activities (Appendix 1)
- Existing DNR data bases (Appendix 2)
- Applications determined in initial interviews

Hardware acquisition recommendations were developed from a consideration of the following classes of data processing hardware:

- Large general purpose computers
- Professionally programmed mini-computers
- Office information systems
- Word processors
- Data entry systems

Large general purpose computers are the most familiar class. Machines of this type are in use at the Information Systems Bureau (ISB) and the University of Minnesota Computer Center (UCC). These machines typically have considerable capacity for data storage and high speed for fast execution of programs. Programming is usually done by professionals and access to these systems is available.

Professionally programmed mini-computers are intermediate in size and are programmed in languages which usually require professionals. They are roughly the same size and speed as larger machines from twelve to fifteen years ago. The state has a contract for the acquisition of Texas Instruments TI990s by agencies which can demonstrate the need for a mini-computer. The Division of Forestry has leased a TI990.

Office information systems is a relatively new class of mini-computers. They have been programmed by the vendors to perform a wide variety of office tasks, including data processing. The vendor programming is designed to be user-friendly, so that the machine can be used by semi-professional programmers. Nixdorf and Wang are currently the leaders in this class of mini-computer. The Fisheries Section has leased a Nixdorf 8845 Office Information System which will be used for word processing and the creation of a variety of fisheries oriented data bases, e.g., lake files and fish propagation. The machine will be programmed by Fisheries personnel.

Word processors are either mini- or micro-computers which have been programmed by the vendor for document creation. The DNR currently uses a variety of word processing equipment. A major element of this plan is a strategy for coordinating future acquisition of word processing systems.

Data entry systems are mini-computers which have been programmed to perform keyboard entry, file handling, and data editing tasks. They have taken over the tasks formerly performed by keypunches. Their major function is to do the work needed to get data ready for processing in a larger computer, however, modern data entry systems usually can do other work such as data base maintenance, inquiry, and light processing.

Past practice has been to purchase separate pieces of equipment for application processing, word processing, and data entry. This practice is changing as new versions of machines are introduced which are capable of performing a wider variety of tasks. Functions are, however, likely to remain distinct since a different piece of software will be purchased to perform each function. These changes will make migration toward a single vendor office easier in the future.

A key element of this plan is the evolution of the current hardware mix to a more coordinated environment in the future. A fundamental belief underlying the hardware strategy is that better access to computing resources will improve natural resource management and administrative operations.

Consideration of new systems and hardware configurations led naturally to an evaluation of how projects and operations are managed. The questions of what should be centralized was a major issue. The conclusions reached were based primarily on the DNR's current management practices. DNR Information System Management, Chapter 5 presents one way in which DNR can achieve centralized coordination while leaving flexibility to manage specific applications with appropriate unit managers.

#### Systems Summary

This chapter deals with applications development. The diversity within the DNR and the lack of overlap in day-to-day management activities made it necessary to establish a set of system categories to identify needed applications. The categorization made it possible to isolate department-wide needs from the needs of a single division. The categories are:

- Department-wide systems
  - Administrative
  - Strategic planning
- Divisional systems
  - Administrative management
  - Resource management
  - Research
- Word processing
- Data entry

The department-wide systems identified for development are:

- Administrative
  - Revenue accounting
  - Cost accounting
  - Land records
  - Forms inventory
  - Mailing lists
- Strategic planning
  - Lakes data base
  - Public lands data base
  - Land suitability

The divisional systems identified for development are:

- Enforcement
  - Violations tracking
  - Turn in Poachers (TIP) file
  - Hunter and snowmobile operator registration
- Engineering
  - Project control and other files
- Field Services
  - Equipment data base

## Fish and Wildlife

- Lake surveys
- Commercial fisheries
- Fish production and distribution
- Hunting license lotteries
- Game licensing

## Forestry

- Fire control
- Timber sales accounting
- Nursery management
- Timber inventory updates
- Timber stand improvement
- Private forest management

## Information and Education

- Boat operator registration

## Land Bureau

- Updating the "dead" file

## License Center

- Boat and snowmobile registration

## Parks and Recreation

- Park management and construction

## Office of Planning

- Land resources and management planning

## Waters

- Enhancement of the lakes data base
- Statewide water information system

Current information systems in the Division of Minerals are projected to continue to meet needs.

Hardware, Software, and Data Communications

The DNR currently uses a broad mix of computers. Major applications are run on large general purpose computers at:

## Information System Bureau (ISB)

- Statewide accounting
- Timber inventory
- Land records

## University of Minnesota Computer Center (UCC)

- Statewide Comprehensive Outdoor Recreation Plan (SCORP)
- Waters data bases

- Minerals data bases

## Land Management Information Center (LMIC)

- Lakes data base
- Public lands data base
- Peat inventory data

The DNR is developing applications on machines it has acquired, such as:

## TI990

- Forestry systems

## Nixdorf 8845

- Fisheries data bases

The DNR also uses a variety of word processors. They include:

Central Office

Centennial Office Building

Nixdorf 8845 - 3 terminals

IBM Display Writer - 3 terminals

Xerox 820 Microprocessor

Xerox 800 - 2 stations

Space Center

WANG 30 - 10 terminals

IBM Display Writer - 3 terminals

Regional Offices

Grand Rapids

IBM Office System 6

Brainerd

IBM Office System 6

Bemidji

IBM Office System 6

The DNR also owns or leases a variety of terminals. The Forestry area offices are equipped with teletype-type terminals. The Office of Planning has several CRT and printer-type terminals. Also, micro-processor and terminal equipment is installed in most regional offices.

The DNR can gain much by coordinating the use of its hardware. This can occur in several ways:

Improving access to processors currently in use

Coordinating word processing

Integrating divisions within regional offices

Increasing inter-computer movement of data

The primary need seems to be the creation of a network which allows easy linking of machines and applications. To this end, the plan advocates substantial funding for a study of data communications needs.

New equipment could potentially be located in the License Center for data entry and file inquiry on game licensing and boat and snowmobile registration.

It is unlikely that the DNR can or should try to move all of its applications to a single machine or a single vendor, but it may be possible to move office type applications such as, word processing, filing, and calendars into a single vendor environment. The plan presents a word processing strategy which could lead to single vendor environment in early 1984. The major elements of the strategy are:

Expansion of the word processing study to include cost/benefit data

Defining equipment specifications for all regional offices

Defining equipment specifications for the central office

Extending all current equipment leases to a common date early in 1984

By the fall of 1983, a decision on implementation of a single vendor environment for word processing and office automation at the central office and regional offices should be made. In the meantime, the equipment currently installed will be used to the fullest extent possible.

### Information Systems Management

Any review of information systems within the DNR leads naturally to an evaluation of how the department develops and maintains its computer based systems. The key to this issue is centralization versus decentralization. The DNR is a very diverse organization which practices decentralized management. It serves many, diverse clienteles whose needs are often in conflict.

The textbook answer to information systems management is to centralize under a manager who reports to the head of the organization. The limited research that is available seems to indicate that control of information systems in organizations parallels the type of managerial control of other activities in the organization. That is, organizations which are strongly decentralized also tend to decentralize control over applications, however, a centralized planning function generally seems to be necessary. This plan recommends that the DNR centralize planning, standards, and training and decentralize applications development.

Centralized planning will be accomplished through the establishment of a permanent information systems technical committee and the creation of an information systems planner position. The committee will be responsible for following activities:

- Review, modification, and recommendations for the information systems plan
- Approval of department-wide code structures
- Review and approval of all new equipment specifications
- Review and approval of hardware and software compatibility requirements
- Review and comment on all application development specifications
- Review and approval of the information systems training plan

Members of the technical committee will be selected to represent the following organizational units:

- Assistant Commissioner for Administration
- Assistant Commissioner for Planning
- Enforcement
- Fish and Wildlife
- Forestry
- Minerals
- Parks and Recreation
- Trails and Waterways
- Waters

An information systems planner position will be created within the Office of Planning. This planner will serve as staff to the technical committee and liaison to other departments to explain the information systems plan and ensure its compatibility with state policy.

Applications development will be decentralized to conform to current practices. Information systems development positions currently exist in:

- Bureau of Systems Management - 2 positions
- Fisheries Section - 2 positions

Forestry - 3 positions  
Minerals - 1 position  
Office of Planning - 5+ positions  
Waters - 2 positions

The staff of the Bureau of Systems Management will be increased by four positions and its responsibilities will be focused on administrative functions. It will also help smaller divisions and units on a "when and if needed" basis. This unit will be responsible for the development of the department-wide systems identified on page 3. It should also help the Divisions of Enforcement and Parks and Recreation with their information systems development. It will have responsibility for the recommended overhaul of the License Center and overall data entry. Another of its duties will be to assist administratively in hardware acquisition and to function as a liaison with ISB.

The systems development functions already in existence in some divisions will continue. Parks and Recreation and perhaps Trails and Waterways may create information systems positions in the next biennium. Even though applications development will be decentralized, directors will ensure that their employees comply with all compatibility, documentation, and indexing standards. Also, department-wide planning activities should limit the amount of divergence which might not otherwise be noticed.

The Office of Planning generates potential operational systems useful to other divisions as a natural outgrowth of its work. Care must be taken to ensure that the office begins tasks only when substantial departmental need exists. This can be handled through the information systems technical committee. Most systems should migrate from Office of Planning budgets to divisional budgets when development is complete. This migration should be initiated by the assistant commissioner for planning. The Office of Planning must have a budget adequate to maintain the planning systems which have department-wide impact such as the Statewide Comprehensive Outdoor Recreation Plan.

The impact of establishing a responsive, efficient Data Entry Section would be felt throughout the department. Overall data entry capabilities of DNR should be improved immediately. It is likely that there will be significant savings in the License Center with the introduction of key-to-disk technology which will provide faster and more accurate data entry, data base maintenance, editing, and inquiry capability. Systems Summary, Chapter 2 includes an outline of one concept for improving the operation of the License Center. It suggests that significant improvements can be made if data entry, game licensing, hunting license lotteries, and boat and snowmobile registration are developed in an integrated manner.

The establishment of key-to-disk technology could also help centralize many of the data base maintenance activities now performed by student workers, clerical employees, and professional staff. While data entry will be tied primarily to license applications, the Data Entry Section should remain part of the Bureau of Systems Management during the systems development period. Once the needs in ongoing licensing activities and data entry are known, a final decision on where to place the Data Entry Section can be made.

## Information Systems Budget - FY 84-85

## 1. Anticipated Application Development Costs

<u>Application</u>	<u>Rough Cost Estimate</u>	<u>Potential Funding Source FY 84-85</u>
Department-wide systems		
Revenue accounting	0	Completed in FY 83
Cost accounting	\$ 250,000	LCMR allocation-
		Information systems
Forms inventory	30,000	General Fund-
Mailing list		Administrative systems
Public lands data base		See Land Bureau
Enforcement		
Violations tracking system	50,000	LCMR allocation-
		Information systems
Automate TIP file		LCMR allocation-
		Information systems
Improve query capability in hunting and snowmobile registration		LCMR allocation-
		Information systems
Target range permits	0	License Center-
		Change request
Labor distribution	0	Completed in FY 83
Engineering		
Project control cards and other filing systems	20,000	LCMR allocation-
		Information systems
Field Services		
Equipment data base	8,500	LCMR allocation-
		Information systems
Fish and Wildlife		
Chemical and pathological analyses	0	Game and Fish Fund
Lake surveys	305,000	Game and Fish Fund
Commercial fisheries		
Fish production and distribution		
Hunting license lotteries	100,000	Game and Fish Fund
Game licensing		
Forestry		
Fire control	689,000	LCMR allocation
Timber sales accounting	186,000	Various Forestry sources
Nursery management		
Timber inventory updates		
Timber stand improvement		
Private forest management		
Information and Education		
Boat operator registration	0	Include with hunter and snowmobile operator registration
Land Bureau		
Land records system	15,000	LCMR allocation-
		Information systems
License Center		
Hunting license lotteries	250,000	Biennial budget-
Boat and snowmobile registration		Change request
Game licensing		

<u>Application</u>	<u>Rough Cost Estimate</u>	<u>Potential Funding Source FY 84-85</u>
Parks and Recreation		
Park management and construction	150,000	LCMR conversion- Change request
Office of Planning		
Natural resources data system	483,000	LCMR conversion- Change request
Land resources and management planning	100,000	LCMR allocation
Division of Waters		
Enhancement of lakes data base	219,800	LCMR conversion- Change request
Statewide water information system		
Total for Applications Development	<u>\$2,856,300</u>	

## 2. Applications Development Summary by Funding

General Fund	\$216,000
Biennial Budget Change Request	250,000
LCMR-Conversion to General Fund	852,800
LCMR-Information Systems	343,500
LCMR-Other DNR Programs	789,000
Game and Fish Fund	405,000
	<u>\$2,856,300</u>

## 3. Use of the LCMR-Information Systems Allocation

Applications Development		
Department-wide Cost Accounting	\$250,000	
Enforcement - Violations Tracking	50,000	
Engineering - Project Control	20,000	
Field Services - Equipment Data Base	8,500	
Land Bureau - "Dead" File	<u>15,000</u>	
		\$343,500
Information Systems Planning		75,000
Data Communications-Study and Hardware		80,000
Hardware Acquisition		
Word processing terminals		
Enforcement		
Personnel		
Commissioner's Office		
Engineering		
Minerals	30,000	
Micro-processors		
5 regional offices		
3 wildlife research	<u>45,000</u>	
		75,000
Contingency		26,500
Total LCMR Allocation		<u>\$600,000</u>

1. Computer Hardware Budget		<u>\$/year</u>
Current Equipment (also included in request for next biennium)		
Word processing equipment		\$164,495
Texas Instruments TI990 mini-computer		25,000
		<u>\$189,495</u>
Potential New Equipment		
LCMR-Information Systems Allocation		
Word processors		15,000
Micro-processors		22,500
Change Requests		
Waters-Statewide water data network		15,000
Parks-Information systems		15,000
Forestry-Regional offices information systems		10,000
		<u>\$77,500</u>
Total FY 84-85 Hardware Budget		<u><u>\$266,995</u></u>
5. Use of Hardware Budget-Word Processing and Data Processing		
Central Office		
Current word processing	\$139,495	
TI990	25,000	
LCMR-Information systems allocation	<u>15,000</u>	
		\$179,495
Regional Offices		
Current word processing	\$25,000	
LCMR-Information systems allocation for micro-processor	19,500	
Waters-Statewide water data network	15,000	
Forestry-Regional office information systems	<u>10,000</u>	
		\$69,500
Area Offices, Parks, and Research Stations		
Wildlife research-Madelia (1/8 of LCMR micro-processor allocation)	\$3,000	
Parks-Information systems	15,000	
Forestry and Fisheries-Micro-processor hardware for area offices and research stations will be acquired in FY 83	-0-	
		<u>\$18,000</u>
Balancing Total		<u><u>\$266,995</u></u>

In addition to amounts identified for hardware acquisition, other funds have been allocated to pay processing costs. Some of these monies, which show up on line 17 in the budget, might become available for other uses. Development of new systems, migration of systems to other computers, or a combination of processing tasks could make this money available. An estimate of the amounts for FY 84-85 is shown on page 12.

Land Bureau-AID 325274	\$5,000
Central Licensing-AID 325225	40,000
Information and Data Systems-AID 325134	14,000
Volunteer Management Intensification-AID 327155	10,000
Enforcement-DNR Laws-AID 325969	20,000
Field Services	900
Wildlife-Hunting License Lotteries	30,000
Biennial Amount	<u>\$119,900</u>

Several of the items listed above relate to either operation of the License Center or overall data entry. Therefore, it is suggested that this source of money be used to reequip those activities. For example, about \$80,000 per year could come from data entry, data entry for hunting license lotteries, and boat and snowmobile registration. This amount should be sufficient to acquire modern equipment. The exact allocation of funds will have to await the results of the study of these applications since they should be considered together.

#### Workplan for the Balance of Fiscal Year 1983

The plan concludes with a list of tasks which should be completed during the balance of FY 83. Completion of the work suggested will ensure a fast start in the new biennium while providing a potential test of the operation of the permanent information systems technical committee. The list includes:

- Processing the paperwork for all new positions
- Establishing the permanent information systems technical committee
- Completion of the word processing study
- Defining equipment specifications for regional offices
- Writing a strategy document outlining options for the License Center, overall data entry, and hunting license lottery cluster
- Establishing the structure of a department-wide labor distribution
- Assisting Enforcement in improving its data entry for labor distribution
- Acquiring hardware for Forestry area offices and Fisheries research stations
- Gaining support for a multi-department study of state data communications needs
- Implementation of revenue accounting
- Expanding usage of the Nixdorf 8845

Conclusion The plan contained in this document is the starting point for a continuing information systems planning activity. Its ideas have been reviewed and accepted by DNR management. It represents the DNR's information systems planning strategy at this time, however, data processing is undergoing another technological explosion, which can be expected to affect both hardware utilization and software development. Therefore, this plan must be considered a dynamic process which continues to incorporate new ideas as technology and funding allow. It is only the starting point.



## VIII. SUMMARY COMPARISON OF ALTERNATIVE PROPOSALS

### Legislative Mandates

The development of alternative proposals for the Department of Natural Resources' regional organization structure has been directed by two distinct groupings of legislative mandates: 1) Laws of Minnesota for 1982, Ch. 641, Art. 1, Sec. 2, Subd. 1[f], requiring the department to close the metropolitan headquarters and to prepare a plan for three regions, and 2) the legislative mandates which define and fund a multitude of natural resource programs which the department administers statewide on 5.3 million acres of state land, 12,000 lakes, and 94,000 miles of rivers and streams--and which serve the state's four million people.

Both groupings of legislative mandates directly effect the department's organizational structure. The first requires reductions in the department's regional administrative and program management staffs; effecting administrative efficiencies, public service, and the management of Minnesota's natural resources. The second requires that the department organize in the most efficient manner possible to effectively implement hundreds of natural resource management programs. This has been traditionally done through the program management staff of the department's decentralized regional organization.

### Parameters

To respond to all of these mandates the department established four parameters to guide the development and evaluation of alternative proposals for regional organizational structures. The four parameters are:

1. Resource Commonality - The DNR's regional organization structure should recognize and maintain the integrity of areas with similar resource management needs
2. Administration Function - Alternative regional organization proposals should attempt to minimize administrative costs. This may be done through reductions in external and internal coordination (integrated program management) and in support services to the disciplines, however, the minimum level of service necessary to maintain a coordinated regional organizational structure should be preserved
3. Program Management Function - Alternative proposals should be directed towards maintaining existing resource management and public service levels, as much as possible, and identifying areas where efficiency or cost-effectiveness can be improved
4. Organizational Integrity - Alternative proposals should maintain a minimum degree of organizational equality across all regions.

(For a more detailed discussion of the four parameters see Chapter III.)

### Alternative Proposals: Description

Four alternative proposals were developed. They are:

Three Regions. The existing NW and NE regions and portion of the central region were combined into two enlarged northern regions: NW and NE. The southern three regions (SW, SE and metro) and portions of the central region were combined into one super south region. The regional headquarters for the NW, NE and south regions, would be Bemidji, Grand Rapids and New Ulm, respectively. The department would close the Brainerd, Rochester and St. Paul regional headquarters; however, some program management staff would remain in each of the offices.

Administrative and supervisory staffs would be reduced from six, statewide, to three. The six program managing disciplines would each need to add an additional organization level--assistant, intermediate or area supervisors--to administer programs in the three enlarged regions.

Four Regions. The NW, NE and central regions would be maintained. The southern three regions (SW, SE and metro) would be combined into a new south region. Regional headquarters would be maintained at Bemidji, Grand Rapids, Brainerd and New Ulm. Regional headquarters would be closed in Rochester and St. Paul; limited program management staff would remain in these offices.

Regional administrators and regional supervisors for each discipline would be reduced from six to four. Most disciplines would require assistant or intermediate supervisors in the greatly enlarged south region.

Five Regions. The NW, NE, central and SW regional structures would be maintained. The SE and metro regions would be combined into an expanded SE region. Regional offices at Bemidji, Grand Rapids, Brainerd and New Ulm would remain open. A SE regional headquarters would continue to operate in either St. Paul or Rochester.

Regional administrators and regional supervisors for each discipline would be reduced from six to five. It would be essential for fisheries and waters to establish an assistant supervisor position in the SE region.

### Alternative Proposals: Fiscal and Personnel Summary

REGIONS	PERSONNEL CHANGES (#)				BUDGETARY CHANGES* (\$1000s)		
Proposed # Regions	Layoffs	Reloc.	Complement Change	Employees Effectd	Annual Change	Implem. Cost	Biennium Change
3	21.8	38	(8.5)	103	15.6	828.5	859.7
4	11.6	20	(7.1)	61	(46.9)	396.1	302.3
5 St. P.	12.2	13	(10.4)	38	(152.7)	281.6	(23.8)
5 Roch.	9.9	13	(10.9)	34	(158.3)	260.1	(56.5)

\* Budgetary changes are relative to FY '82 expenditures

### Alternative Proposals: Summary Evaluation

Specific impacts of the alternatives are discussed in the actual proposals (Chapters IV, V and VI). From a broad departmental perspective the impacts would be:

Three Regions. Administrative personnel, functions and costs would be drastically reduced. However, in order to administer resource management programs in regions ranging in size from 14 to 19 million acres, a new organizational level of assistant supervisors would need to be added for the resource managing disciplines.

There would be annual savings in personnel costs (\$81,700/year), however, these savings would be more than offset by increases in office and travel costs (\$20,200 and \$77,100, respectively). The net annual budgetary change would be an increase of \$15,600. There would be an additional one-time cost of \$828,500 to implement a three region organizational structure.

The fiscal facts alone--a biennium increase of \$859,700--demonstrate the lack of cost-effectiveness in a three region plan. An unwieldy three region structure would, additionally, create administrative problems: e.g., in the NE region, dealing with personnel matters and the supervision of 1,768 employees, providing an effective communication network among 64 separate office locations and having employees, the public and business contacts deal with travel distances of up to 250 miles to regional headquarters. Time spent by regional staff in dealing with administrative matters such as these would result in less time being available for the direction of resource programs--natural resources and the public would suffer.

Four Regions. In a four region proposal the major impacts are realized in the existing SW, SE and metro regions which would be combined into one super region. Administrative personnel, functions and costs would be reduced in the south region (\$88,700 in personnel alone). The savings, however, would be partially offset by increases in offices (new rentals) and travel costs (\$14,400 and \$27,400, respectively). The net annual savings would be \$46,900. During the first year a one-time implementation cost of \$396,100 would be incurred which would more than offset the annual savings.

The high implementation costs--\$279,900 in relocation, severance and unemployment costs; \$108,300 in office moves and remodelling and \$20,500 in system changes--would offset the proposed annual savings for many years. It would be 8.4 years before any actual savings would be realized; and then the savings would be just \$46,900 per year. From this perspective, the four region proposal is not cost effective and, therefore, untenable. However, if the proposal is to be considered for implementation, it must be realized that there would be reductions in public service and the quality of resource management efforts. These would be particularly apparent in the SE and metro regions--the fastest growing, most densely populated, and most accessible (to resource users) regions of the state. The fragile resources and population-related pressures of these regions require a high degree of internal and external coordination, monitoring of resource impacts and timely responses to resource issues by the department's regional staff. A smaller regional staff would have less time available for these essential activities.

Five Regions. Implementation of a five region proposal would result in reductions in regional staff (apx. 10.5 positions) and annual savings of approximately \$150,000. The one-time implementation costs, while high (\$101,800 to \$128,900), are low enough so that a savings of between \$23,800 and \$56,800 would be realized in the first biennium.

A savings would be realized: it does not necessarily follow that the proposal would be cost-effective. The costs are high. Sixty percent of the state's population would have reduced services. Administrative and supervisory staffs would have the administrative responsibilities of two regions; less time would be available for the type of management needs which are unique to large and fast-growing populations: such as, - coordination of intergovernmental management of the Mississippi, Minnesota and St. Croix rivers; urban forestry planning; discussions with users, lakeshore owners and local units of government about alternative ways to meet the region's public waters access needs; the dissemination of information on natural resource matters and local and statewide recreational opportunities; unique educational efforts (such as the program and materials which have been developed to work with the Hmongs); timely responses to animal nuisance and degradation problems; interdisciplinary management and information coordination for special management units in the Whitewater Valley and along the Minnesota River; responding to the intensive fishing pressures within the regions; and on-going liaison with sportsmen's groups, environmental groups, and service organizations--the list could go on. Is it worth \$23,000 or \$56,000 this biennium to support such programs? The department believes it is and, therefore, does not believe that the five region proposals are cost-effective.

### Conclusions

The department of Natural Resources developed six regional organizations through which it administers all of its varied resource management programs in a decentralized manner which is responsive to local issues and needs. The six regions respect areas of common resource management concerns; forest management in the NE, wildlife habitat protection in the NW and SW, tourism and recreational use pressures in the central region, and the resource impacts and public demands of the populated SE and metro regions. Administrative costs for the regions have been kept to a minimum--less than 1.4 percent of the department's budget--while providing a high degree of coordination and engineering, lands, business and personnel services to program managers; freeing more of their time for resource management concerns. The regions have been designed so that only one regional supervisor is needed by each discipline to handle diverse responsibilities: administrative matters, program management, staff supervision, technical support and advise, training, and local contacts and coordination. Also, the six regions, as designed, allow each discipline to maintain a management level (regional supervisors) with similar levels of responsibilities.

The existing six regions provide a regional organization which respects all four parameters developed for alternative proposals. The alternative proposals set forth in this report all fall short of meeting these guidelines. The existing regional structure is responsive to the needs of each region's public and local units of government and provides an organizational vehicle for efficient resource management activities. Measured

against the adverse impacts and limited dollar-savings of the alternative proposals, the existing six region structure is the most cost-effective alternative.

Adoption of the three or four region proposal would require additional funds and adversely impact resource management in the State of Minnesota; both impacts are undesirable. Implementation of a five region proposal would result in limited savings in the upcoming biennium; however, there would be serious reductions in resource management coordination, public service, and the scope and quality of natural resource management efforts. Compared to the existing level of service and the quality of natural resource management offered by the department, the savings inherent in a five region plan are insignificant.

6193D



Current Projects  
1 January 1983

Attachment #1.

Exhibit G-1

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Wildlife -- Special Management Programs

The following addresses funding, source of funds, and positions associated with each of six (6) Special Management Programs.

(Attached is also a Recapitulation of the six (6) programs as they relate to the total listed in the Biennial Budget Request for Wildlife Management, Ref. 105).

Computerized Licensing -- Present Positions: None

- FY 1983 was the first year for this program. Funding came from a special appropriation out of the Game and Fish Fund. (Current FY 83 Budget, 2/22/83, \$163,582)
- The program implements a computer for random selections of antlerless deer permits and bear licenses.
- Funding for FY 84 and FY 85 will come from an additional \$1.00 raised on deer and bear licenses, resident only. Estimated receipts are \$453,120 and \$477,120 in FY 84 and FY 85, respectively.
- The funds will replenish the Game and Fish Fund for the 1983 "start up" appropriation of \$163,582, provide annual funding for the Computerized Licensing selection function of \$215,000 per year and make available funding for emergency, winter deer feeding and deer/bear management.

Positions: None

Deer Habitat Improvement -- Present Positions: 7.63

- Funding for this program is derived from \$2.00 on deer licenses. (Currently the program only receives \$1.00 per license but 1981 legislation authorized an additional \$1.00 which is to now be appropriated; this explains change level increase.)
- All funds are channeled to the program through the Game and Fish Fund.
- Positions:   2.73 NRS 1, Wildlife Specialists  
                  4.90 NRS 2, Wildlife Specialists  
                  7.63 Total

Waterfowl Habitat Improvement -- Present Positions: 1.80

- Funds for this program are derived from the sale of Migratory Waterfowl Stamps, costing \$3.00 each.
- These funds are channeled through the Game and Fish Fund.
- It is estimated that sales will exceed 151,000 stamps and 153,000 in FY 84 and FY 85, respectively.
- Positions:   .90 Eng. Aide, Intermed.  
                  .90 Waterfowl Habitat Spec.  
                  1.80 Total

Nongame Checkoff -- Present Positions: 9.27

--Funding is received from contributions made by the general public on their Minnesota Income Tax declaration and on the Homeowner's and Renters Minnesota Property Tax Refund Return.

--Receipts are deposited into a special fund and appropriations to the program cannot exceed \$700,000 in any one fiscal year.

--Positions: 1.0 Natural Resources Supervisor  
 1.0 Natural Resources Specialist 1, General  
 6.0 Natural Resources Nongame Wildlife Specialists  
 1.0 Clerk Typist 1  
 .27 EDP Sr. Programmer  
9.27 Total

Scientific and Natural Areas -- Present Positions: 2.00

--This program is funded by the General Fund. (The request for FY 84 of \$70.8 and for FY 85 of \$71.2 has been included in the Governor's request).

--Also appearing on this line is \$59.9 for FY 84 and \$59.9 for FY 85 as a change increase. This is for the existing Heritage Program which we had hoped to convert to the General Fund from LCMR funding.

(The Governor does not wish to recognize this conversion but recommends that the LCMR review such programs for continued funding through the LCMR).

--Positions -- 1.0 Planning Supervisor, State  
 1.0 Natural Resources Specialist 4  
2.0 Total

Heritage -- Present Complement: 3.80

--For FY 84 and FY 85 this is the SNA Planning function which was grouped with Heritage Program in FY 82 and FY 83 and funded by LCMR.

--The total request is for \$40.5 in FY 84 and \$40.5 in FY 85 and the funding source is LCMR.

--Positions: 2.0 Natural Resources Specialist 3, General  
 .90 Natural Resources Aide, Tech.  
 .90 Clerk Typist 4 and Data Clerk  
3.80 Total

(Please note the following relates to both Scientific and Natural Areas and Heritage).

Scientific and Natural Areas and Heritage Budget  
 Request Detail

Source Fund	Actual 1981	Actual 1982	Est. 1983	Request 1984	Request 1985
General Fund - Scientific/Nat. Areas	52.7	51.3	69.2	70.8	71.2
LCMR - Heritage				59.9	59.9
LCMR - Scientific/Nat. Areas	116.3	87.4	87.9	40.5	40.5
	169.0	138.7	157.1	171.2	171.6
		Same Year, 1984		158.3	
				<u>12.9</u>	Increase Change Level

## Recapitulation of Special Management Programs

	Agency 1984 Same	Agency 1984 Change	Agency 1984 Req Total	Agency 1985 Same	Agency 1985 Change	Agency 1985 Req Total	Gov. Recom. 1984	Gov. Recom. 1985
Computer License	--	215.0	215.0	--	215.0	215.0	211.3	207.4
Deer Habitat Imp.	341.5	522.2	863.7	351.9	522.2	874.1	854.3	854.9
Waterfowl Habitat Improvement	453.7	--	453.7	461.3	--	461.3	451.7	457.0
Nongame	610.3	--	610.3	684.3	--	684.3	610.3	684.3
SNA - Regular (Heritage Conversion)	70.8	-- 59.9	70.8 59.9	71.2	-- 59.9	71.2 59.9	70.8 (LCMR)	71.1
Heritage (SNA Planning)	87.5	(47.0)	40.5	87.5	(47.0)	40.5	(LCMR)	
Totals	1563.8	750.1	2313.9	1656.2	750.1	2406.3	2198.4	2274.7

Position Change Level Increases:

There are two (2) position increases listed in the Biennial Budget request:

General Funds:

One (1) NRS 3, General (SNA Planner) to be added to the SNA planning function within the Heritage program.

Special Revenue/Apportionment:

One (1) NRS 3, General (Plant Ecologist) to be added to the Nongame Checkoff program.



Plan for the Management of  
Nongame Wildlife  
in Minnesota

Volume 1 - The Planning Concept  
(review draft)

Date: 12/23/82

Minnesota Department of Natural Resources  
Division of Fish and Wildlife  
Nongame Wildlife Program  
St. Paul, Minnesota

Funded by: Minnesota citizens through their  
donations to the Nongame Wildlife Fund.



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## PREFACE

The concept of wildlife as a renewable natural resource belonging to all citizens and managed by the government for the benefit of these citizens is a uniquely American idea. During colonial times, wildlife management consisted of governmental restrictions on killing wild animals. These early restrictions were largely ignored. Nevertheless, citizen demand for the protection of vanishing wildlife continued to grow. By 1865, the first state game department had been established in California to enforce the hunting laws. In the years which have followed, such restrictive actions have evolved into the complex field of modern day wildlife management. Today, each state has a wildlife management agency.

As a growing human population continues to place great pressure on the land and its natural resources, citizens are still concerned that governmental agencies act to maintain all wildlife. This citizen concern has prompted many state wildlife agencies to broaden their scope of actions to include more than just the traditional game species. These expanding efforts now include research and management for endangered species and such wildlife as songbirds, reptiles, and selected invertebrates.

In Minnesota, the authority and responsibility for management of wildlife resides, at the state level, with the Commissioner of the Department of Natural Resources. In 1977, the Department of Natural Resources responded to the citizens' concerns for wildlife by creating

the Nongame Wildlife<sup>1</sup> Program within the Division of Fish and Wildlife. In 1980, the Department was given additional responsibility through the Threatened and Endangered Species Protection Act for nongame wildlife management. Also in 1980, the Department's capability to meet its legal obligations and the citizens' demands was enhanced by the passage of the Minnesota Nongame Wildlife Checkoff law (Minn. Stat. Sec. 290.431 (1981 Supp.)) This law established the nongame wildlife fund with an annual income of over \$500,000 to be expended for management of the nongame wildlife resource.

In order to provide direction for the expenditure of nongame wildlife fund monies, the Nongame Wildlife Program has initiated the Plan for the Management of Nongame Wildlife in Minnesota, which will be comprised of five volumes: Volume 1 - The Planning Concept, Volume 2 - Resource Assessment, Volume 3 - Problem Analysis, Volume 4 - Goals and Strategies, and Volume 5 - Operational Plan. The planning effort will only be as comprehensive and successful as the input it receives from citizens and involved professionals. Therefore, your ideas and comments on each volume that will comprise the Plan for the Management of Nongame Wildlife in Minnesota are important.

---

<sup>1</sup>The term "nongame wildlife" is currently considered to include all vertebrate fauna not traditionally hunted, fished or trapped (including species designated endangered or threatened under Minnesota statute except the timber wolf) and selected invertebrate classes.

You are invited to submit your comments on this first volume to:

Roger Holmes, Acting Director  
Division of Fish and Wildlife  
Box 7, Centennial Building  
658 Cedar Street  
St. Paul, Minnesota 55155

by January 25, 1983. A form for your comments is included in Appendix D. YOU MUST COMPLETE the lower portion of the comment form and submit it if you wish to receive the subsequent volumes, otherwise, your name will be removed from the mailing list. We look forward to hearing from you. Thank you for your participation.

## EXECUTIVE SUMMARY

ACTIVITY: Nongame Wildlife Planning  
PROGRAM: Nongame Wildlife Program  
AGENCY: Department of Natural Resources  
Division of Fish and Wildlife, Section of Wildlife

ACTIVITY DESCRIPTION: This activity consists of actions to develop, write and publish a long-range comprehensive plan for the Nongame Wildlife Program in the Department of Natural Resources. The Program's mission is to protect and preserve the diversity and abundance of nongame wildlife in Minnesota for the benefit of the state's citizens. The plan will direct nongame program activities in a systematic manner reflecting the management needs of the resource and the recreational and educational needs of the citizens.

The principal clientele to be served are Minnesota citizens who enjoy wildlife-related activities, including the 200,000 Minnesota taxpayers who annually donate to the nongame wildlife fund, as well as the professional personnel of the Department of Natural Resources who are involved with the Nongame Wildlife Program.

ACTIVITY GOAL: The goal is to develop a plan for the Nongame Wildlife Program. The OBJECTIVES of the plan are to:

1. Define the nongame wildlife resource and analyze the past, present, and future condition of the resource.
2. Identify important nongame wildlife related problems and analyze their causes and consequences.
3. Define the goals of the Nongame Wildlife Program.

4. Define opportunities and select strategies to resolve the problems and attain program goals.
5. Develop the strategies into a plan and establish a priority of actions to attain goals and resolve problems.
6. Develop standards to evaluate program effectiveness.
7. Insure public participation in the planning process, public benefit from program actions and opportunities for volunteer citizen participation in program activities.
8. Establish a procedure to systematically allocate funds, personnel, and equipment among the various program activities to efficiently attain program goals.
9. Establish a procedure and schedule for the periodic review and update of the operational plan, resource assessment and problems analysis.

ACTIVITY SCHEDULE: The plan shall be completed by March 1984.

It will consist of five volumes:

Volume 1 - The Planning Concept: description of the planning process, procedures for public participation and a work schedule.

Volume 2 - Resource Assessment: summary of current and prospective conditions of the nongame wildlife resource in Minnesota, including assessment of public interest and recreational demand and an analysis of the need for additional basic research and for socio-economic information on resource users.

Volume 3 - Problem Analysis: listing of nongame wildlife management problems compiled from existing sources (agency documents, public workshops) aggregated into major problem areas. A statement of each major problem including a brief background discussion and suggested opportunities to resolve the problems will be presented.

Volume 4 - Goals and Strategies: delineation and ranking of program goals, selection of preferred strategies for

attaining the goals and resolving major problems, including listing of specific objectives.

Volume 5 - Operational Plan: outline of specific actions, budget and personnel allocations, deadlines, policy or administrative changes needed to implement the preferred management strategies presented in Volume 4. This volume will contain operational plans for two biennia.

## INTRODUCTION

The Nongame Wildlife Program's mission is to protect and preserve the diversity and abundance of nongame wildlife in Minnesota for the benefit of Minnesota citizens. Since its creation in 1977, the Program has expanded to a staff of seven full time personnel. To provide direction for the program activities, the staff is developing a nongame wildlife management plan. The timing of the planning effort is opportune. Incorporation of planning during formation of a new wildlife program provides an opportunity to design an organized course of action based on careful analysis of the resource, yet relatively unrestricted by previous actions and attitudes.

A precedent for planning within the Division already exists. Plans have been developed for management of selected game species, for the Division's land acquisition and management program, including the nine major wildlife management areas, and for the Scientific and Natural Areas Program. The current planning effort will complement these existing plans.

The Plan for the Management of Nongame Wildlife in Minnesota shall be completed by March 1984. It will consist of five volumes:

Volume 1 - The Planning Concept: description of the planning process, procedures for public participation, and a work schedule.

Volume 2 - Resource Assessment: summary of current and prospective conditions of the nongame wildlife resource in Minnesota, including assessment of public interest and recreational demand and an analysis of the need for additional basic research and for socio-economic information on resource users.

Volume 3 - Problem Analysis: listing of nongame wildlife management

problems compiled from existing sources (agency documents, public workshops) aggregated into major problem areas. A statement of each major problem including a brief background discussion and suggested opportunities to resolve the problems will be presented.

Volume 4 - Goals and Strategies: delineation and ranking of program goals, selection of preferred strategies for attaining the goals and resolving major problems, including listing of specific objectives.

Volume 5 - Operational Plan: outline of specific actions, budget and personnel allocations, deadlines, policy or administrative changes needed to implement the preferred management strategies presented in Volume 4. This volume will contain operational plans for two biennia.

The plan will direct the Nongame Wildlife Program in a manner reflecting the management needs of the resource and the recreational and educational needs of the citizens. It will be a complex undertaking. The process may be amended even as the plan is being developed.

## PLANNING MANDATE

Motivation for the planning effort is derived from three sources.

First, project personnel, in conjunction with other concerned individuals, have identified the need for a statement of the program's goals, objectives, and priority of future activities. The purpose of the planning effort is to develop such a statement.

Secondly, the 1982 appropriations statement allowing expenditure of revenues from the nongame wildlife fund requires an annual work outline. These outlines and semi-annual performance reports are to be submitted to the Legislative Commission on Minnesota Resources for review and approval.

Finally, public Law 96-366, the federal "Fish and Wildlife Conservation Act of 1980" requires a comprehensive plan in order for State programs to qualify for federal funds for nongame species management.

Currently, the U.S. Fish and Wildlife Service is attempting to develop model plans in order to aid the States in meeting this legislative mandate. The Minnesota nongame plan will be designed to meet federal guidelines so as to qualify for cost share funding when money becomes available. Previously, the federal Endangered Species Act of 1973 set a precedent for nongame species planning through the Recovery Team process.

## PURPOSE AND SCOPE

There is no legal definition in Minnesota of "nongame wildlife." Currently, the operational definition includes all vertebrate fauna not traditionally hunted, fished or trapped and selected invertebrate classes.

The purpose of the Plan for the Management of Nongame Wildlife in Minnesota is to define the problems related to the nongame resource and to delineate the course of action needed to manage the resource. In order to be effective, the plan must be broad in scope, considering all nongame wildlife resources statewide, including endangered and threatened fauna. Specific operational actions will be limited to Minnesota. Particular emphasis may be placed on management of the resource on Department-administered lands. Problem analysis and strategy development will require consideration of a species' full biological range, even beyond state boundaries. Consequently, cooperative actions with other states may be developed.

Administrative responsibility for development and implementation of the plan resides with the Department of Natural Resources, Division of Fish and Wildlife's Section of Wildlife. The Nongame Wildlife Program in the Section of Wildlife will have responsibility for most aspects of the plan. Current Nongame Wildlife Program activities may be deleted, curtailed or receive new priority in the final operational plan. Actions designated for other agencies or groups will be recommendations only, unless required by state statute.

The final operational plan will cover two biennia. Semi-annual progress reports and annual work outlines will be prepared by program personnel and submitted as required. Implementation, revision, and monitoring compliance of the Nongame Wildlife Program's activities with the operational plans will be the responsibility of the Director, Division of Wildlife.

In order to accomplish the planning goal the following objectives have been established:

1. Define the nongame wildlife resource and analyze the past, present, and the future condition of the resource.
2. Identify important nongame wildlife related problems and analyze their causes and consequences.
3. Define the goals of the Nongame Wildlife Program.
4. Define opportunities and select strategies to resolve the problems and attain program goals.
5. Develop strategies into a plan and establish a priority of actions to attain goals and resolve problems.
6. Develop standards to evaluate program effectiveness.
7. Insure public participation in the planning process, public benefit from program actions, and opportunities for volunteer citizen participation in program activities.
8. Establish a procedure to systematically allocate funds, personnel, and equipment among the various program activities to efficiently attain program goals.
9. Establish a procedure and schedule for the periodic review and update of the operational plan, resource assessment and problem analysis.

## PLAN OUTLINE

The work involved in plan development will be undertaken by the Nongame Wildlife Program staff with the advice of an Executive Committee and a Technical Advisory Committee comprised of other Department of Natural Resources representatives. The purpose of the Technical Advisory Committee shall be to:

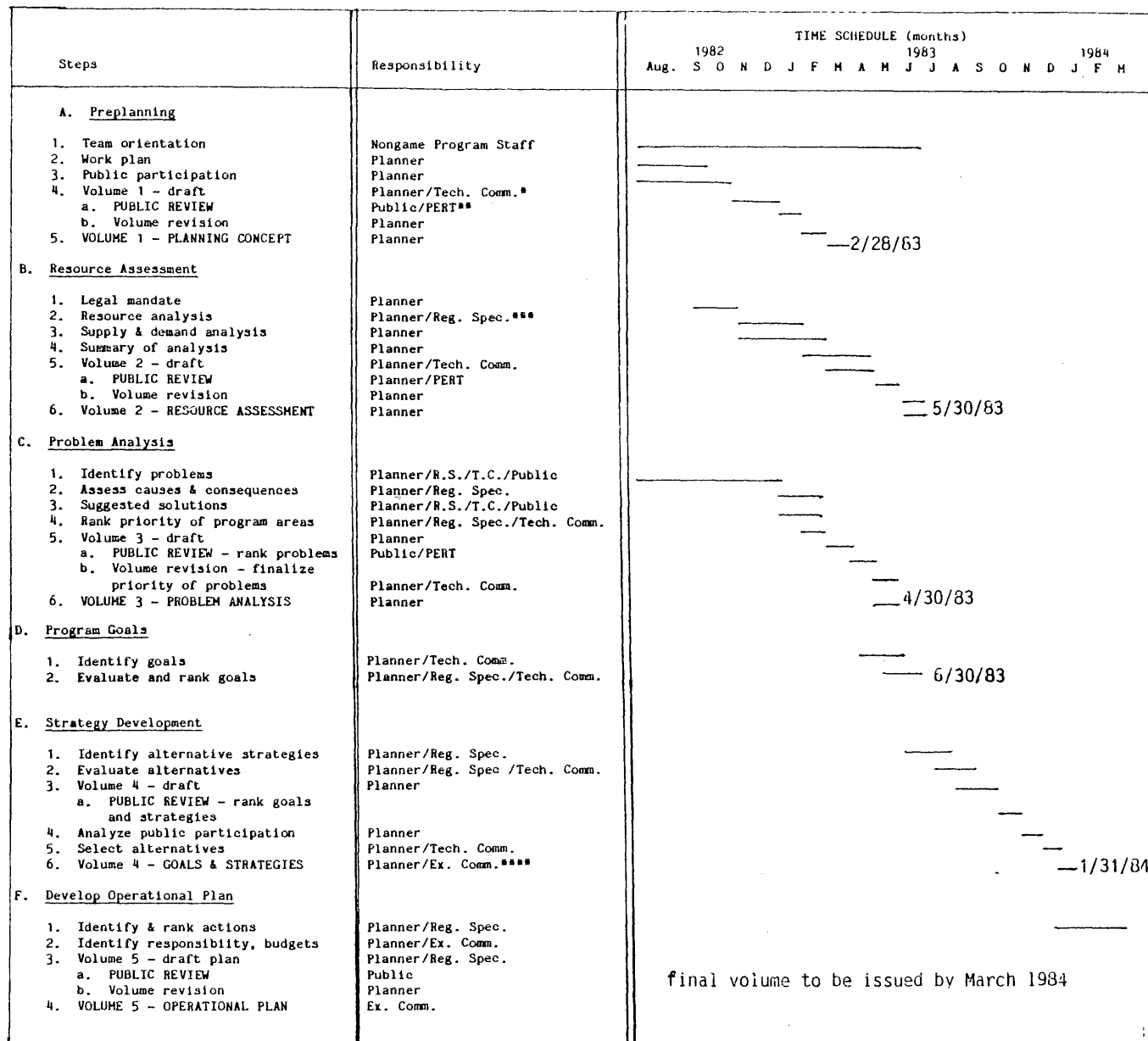
- Insure consideration of all important nongame wildlife issues in the planning process.
- Insure consideration of other Division programs and DNR agency interests during plan development.
- Insure coordination of the operational plan with other Division and agency interests.

The Executive Committee will decide on format, scope, content and direction of the plan. It will also act to assure completion, approval and implementation of the plan.

Public input will be provided, in part, by the Select Public Review Committee chosen to represent citizen interest in plan development. Additional provisions for public participation are more fully discussed in the Section COORDINATION AND PUBLIC PARTICIPATION. Membership of these committees is outlined in Appendix A.

The planning process will be composed of several stages (Figure 1 and Appendix C). The preplanning step is presented in this volume. It provides for development of a work schedule, definition of plan scope and selection of a strategy for public participation. The steps which

Figure 1.  
Planning Schedule



\*Technical Advisory Committee - Tech. Comm. - T.C.  
 \*\*Planning and Environmental Review Team - DNR  
 \*\*\*Regional Nongame Specialists - Reg. Spec. - R.S.  
 \*\*\*\*Executive Committee - Exec. Comm.

will follow include:

- Assessment of past, present and future resource conditions.
- Problem analysis and issue identification including assessment of causes and consequences and suggested solutions.
- Identification of program goals and development and evaluation of alternative strategies for goal attainment.
- Selection of strategies and development of an operational plan.
- Development of a budget and assignment of work responsibilities.
- Implement and monitor operational plans.
- Periodic review and revision of the plan in accordance with the activity schedule.

When complete, the Plan for Management of Nongame Wildlife in Minnesota will consist of five volumes. Each volume will be issued first as a draft for public review and comment. Public comments will be reviewed and considered for incorporation in the final volumes.

## COORDINATION AND PUBLIC PARTICIPATION

The relationship of the Nongame Wildlife Program to other programs within the Division and throughout the Department of Natural Resources is shown in Figure 2. Coordination of the nongame planning effort with other interested parties is shown in Figure 3. Integration of the plan with other DNR plans will be coordinated through the Department's Planning and Environmental Review Team (PERT). The Office of Planning will assist in defining and developing any policies needed to implement the plan.

The role of public participation in the planning process is essential, not simply because Minnesota's citizens will "pay the bill" through donations to the nongame wildlife fund. A citizenry which is well informed, actively involved in the process of government, and concerned about natural resource utilization is our strongest ally in assuring proper wildlife management. Ultimately, the actions which will most directly insure wildlife's survival will be the natural resource laws adopted at all levels of government. Every action from local zoning ordinances to federal environmental quality guidelines which affect the air, land, or water also affect wildlife.

Citizen involvement in plan development will be through a network of existing organizations and interested individuals (Figure 3, Appendix B). As each volume of the plan is drafted, copies will be distributed to interested organizations and individuals. Public comments will be solicited on each volume during 30-day public review periods. All

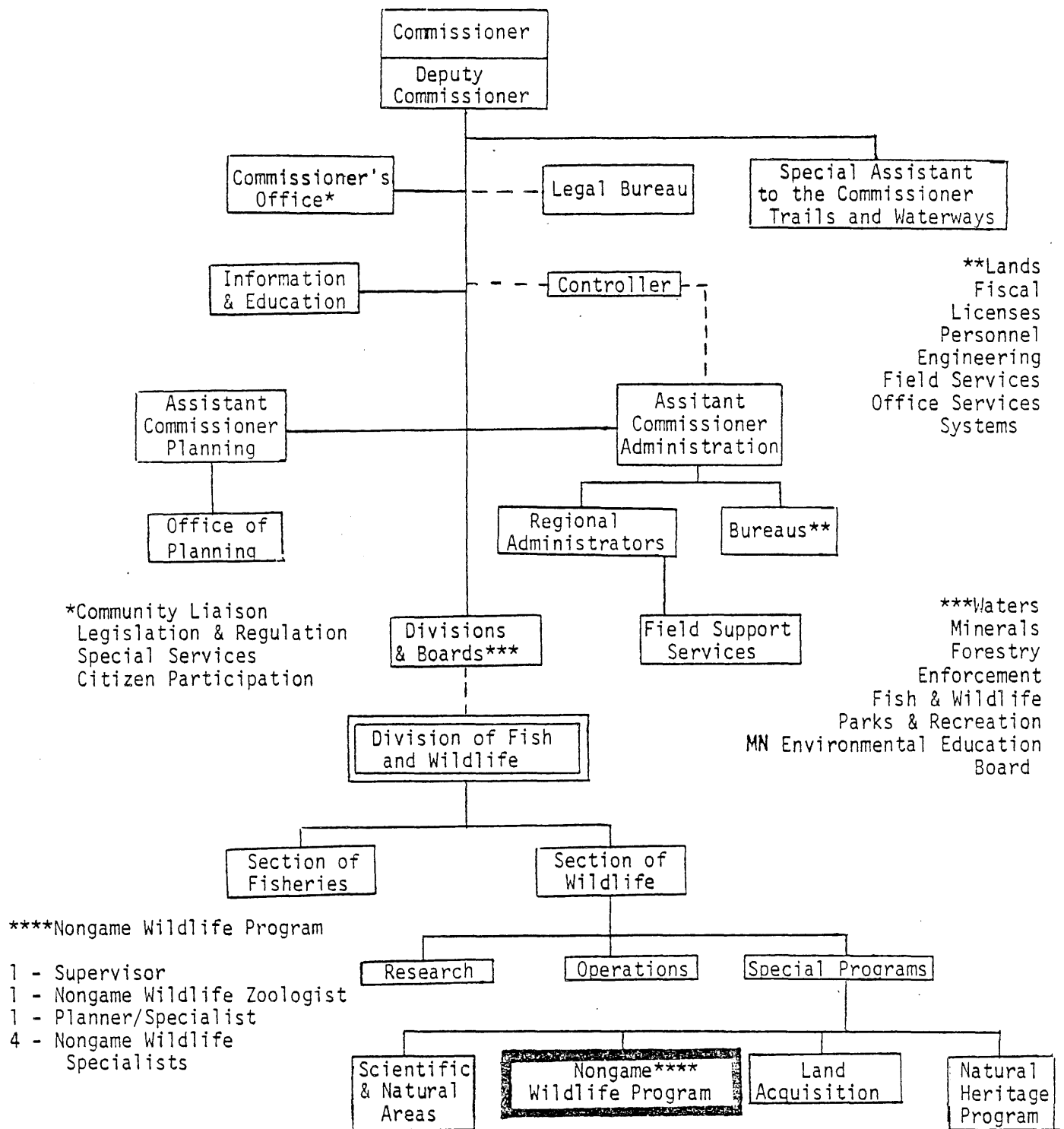


Figure 2. Nongame Wildlife Program in relation to Minnesota Department of Natural Resources-Organization Chart. (Source: Adopted from Minnesota Department of Natural Resources, 1980)

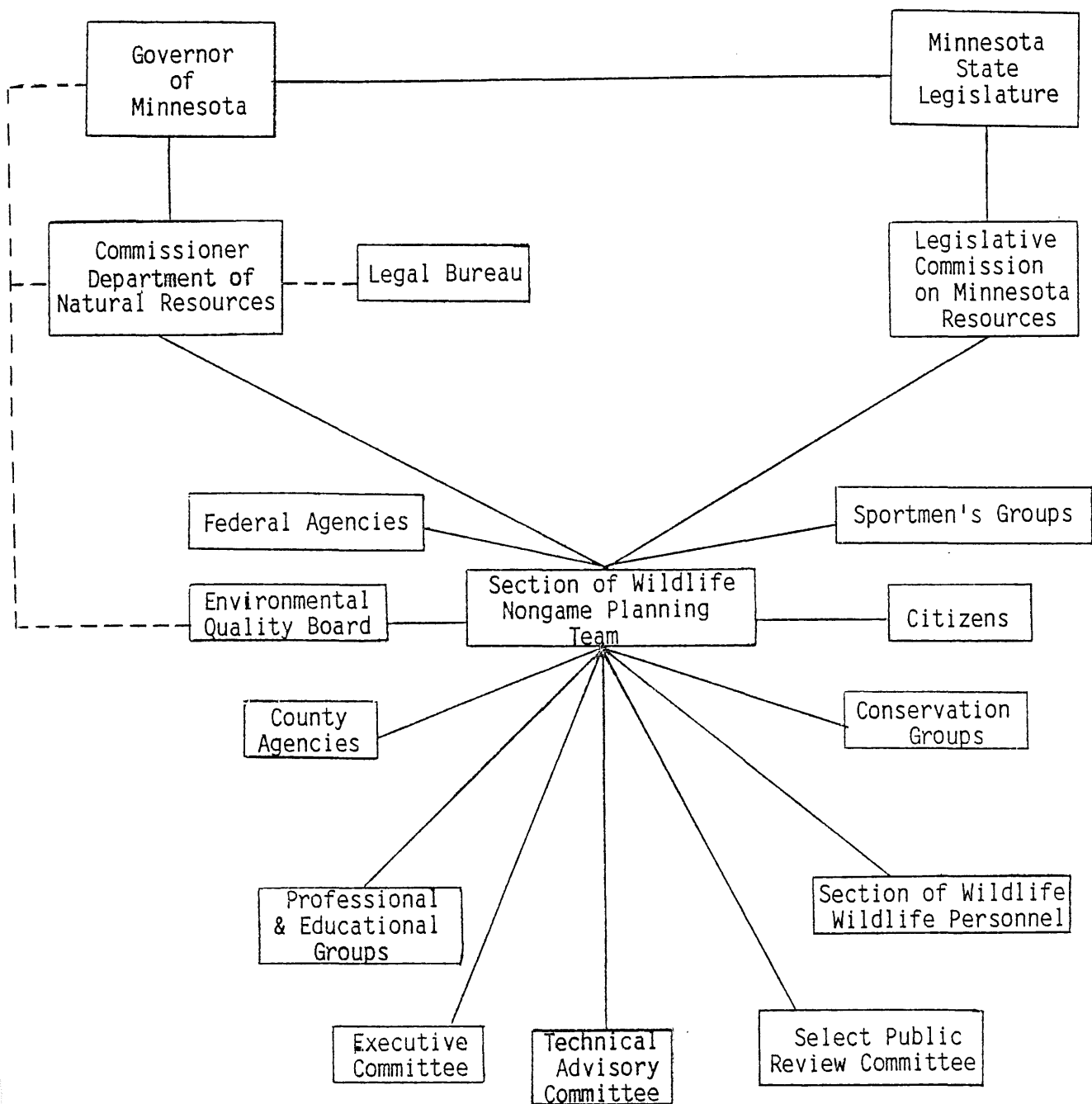


Figure 3. Coordination of nongame program planning process.

comments received will be reviewed. A revised edition of each volume, reflecting public comments, will then be issued as the final version of each volume.

Considerable public input has already been received through a series of 20 statewide workshops. The workshops, co-sponsored by the Minnesota Chapter of the Wildlife Society, Minnesota Environmental Education Board, and the Section of Wildlife, were designed to identify, discuss and rank nongame conservation problems. Potential solutions were also discussed. Input from the first workshop in St. Paul attended by 150 individuals has been summarized (Pfannmuller, 1981; MN Department of Natural Resources, 1981). This report, combined with input from the 19 outstate meetings will serve as a basis for the Problem Analysis (Volume 3). Some current Program activities were initiated in response to citizen concern expressed at these workshops.

To date, nearly 400 individuals have commented on nongame wildlife problems and solutions. Additional comments are welcome and may be submitted by completing the questionnaire in Appendix D.

## USERS, EXPECTED RESULTS, BENEFITS

The principal clientele to be served by the plan are the Minnesota citizens and visitors who enjoy or benefit from wildlife-related activities, including the 200,000 taxpayers who annually donate to the nongame wildlife fund, sportsmen, conservationists, personnel within the Department of Natural Resources and other natural resource professionals. The plan will facilitate the coordination of the program's actions with departmental activities. The public will have concise information on the nongame wildlife resource, program activities, and the future direction of the Nongame Wildlife Program. The plan will insure program continuity despite personnel changes, and should encourage evaluation of program effectiveness. It will serve as a justification and explanation of future actions undertaken by the program.

Benefits to the Department and Division will include:

- Concise definitions of nongame resource problems and management alternatives.
- Establishment of resource policy.
- Establishment of the program's priority of action and standards of performance.

Benefits to the public will include:

- Statement of the program's policy, priorities and operational plans.
- Opportunity to participate in policy formation and program activities.
- Statement of costs and benefits of management actions.
- Standards of accountability for expenditure of citizens' money.

## ACTIVITY SCHEDULE

The plan will be completed by March 1984 and will consider 2 biennia (4 years: FY 1985-1988). The first revision will be due in 1988 for the 1989-92 Fiscal Years. The resource assessment (Volume 2) will be revised in 1988 and every six years thereafter. The problems, goals and strategies (Volumes 3 and 4) will be reviewed every six years and revised as needed. The operational plan (Volume 5) will be reviewed in the second year of each biennium to allow revisions based on new data, progress to date, and any changes in legislative policy or budget constraints.

#### REFERENCES CITED

- Minnesota Department of Natural Resources. 1980. Biennial Report, 1980-81. St. Paul, Minnesota.
- Minnesota Department of Natural Resources, 1981. Priorities for Nongame Conservation in Minnesota. 37 pp.
- Pfannmuller, Lee Ann. 1981. Priorities for nongame conservation - the public response. The Naturalist 34:(4) 11-15.

## APPENDIX A

### Nongame Program Planning Committees

#### A. Executive Committee:

Membership: Roger Holmes, Acting Director, Division of Fish and Wildlife  
Carrol Henderson, Nongame Supervisor  
Joan Galli, Nongame Planner

#### B. Technical Advisory Committee:

Membership: Executive Committee members and  
Lee Pfannmuller - Nongame Wildlife Program, Zoologist  
Blair Joselyn - Section of Wildlife, Research Supervisor  
Roger Johnson - Section of Wildlife - Regional Wildlife Supervisor  
Barbara Coffin - Natural Heritage Program  
Bruce Hawkinson - Section of Fisheries  
Frank Knoke - Division of Parks  
Dave Zumeta - Division of Forestry  
Ray Quinn - Minnesota Environmental Education Board  
Charlotte Cohn - DNR Office of Planning

#### C. Select Public Review Groups:

Membership: Endangered Species Technical Advisory Committee  
Commissioner's Advisory Committee on Scientific and Natural Areas Program  
Minnesota Conservation Federation  
Minnesota Audubon Council  
Minnesota Ornithological Union  
and other interest groups (see Appendix B).

## APPENDIX B

### List of Interest Groups

#### Federal Agencies

U.S. Dept. of Interior - Fish and  
Wildlife Service

U.S. Dept. of Agriculture - Extension  
Service, Soil Conservation Service,  
Forest Service (Chippewa & Superior  
National Forests, North Central Forest  
Experiment Station)

National Park Service

U.S. Army Corps of Engineers

#### Other Government Bodies

County parks and recreation  
departments

Association of County Land  
Commissioners

Association of Minnesota Counties

#### Educational Groups

College and university natural  
resource departments

Interpretive naturalists

ECOL library

#### Other State Entities

Legislative Commission on  
Minnesota Resources

Minnesota Environmental  
Education Board

Environmental Quality  
Board

#### Private Organizations

Conservation organizations

Humane groups

Sportsmen's organizations

Professional wildlife  
organizations

## APPENDIX C

### Outline of Planning Process

#### PREPLANNING - design the planning process

Action A: Develop draft concept document describing actions required to complete the plan, methods to ensure public participation, and schedule of planning activities.

RESULT: Review draft of Volume 1 - PLANNING CONCEPT.

Action B: Develop interagency information and participation scheme.

1. Establish interagency communications network and interagency agreements on scope of responsibility.
2. Establish interagency technical review team.
3. Solicit comments from key interagency personnel on draft of Volume 1.

RESULT: Interagency coordination during planning.

Action C: Develop public information and participation scheme.

1. Establish communication network.
2. Identify Select Public Review Committee.
3. Solicit public comments on draft of Volume 1.

RESULT: Public participation in planning.

Action D: Establish procedure to identify issues and incorporate public comment.

RESULT: Inclusion of public concerns in plan development.

Action E: Revision of concept document to reflect input from Action B<sub>3</sub>, and C<sub>3</sub>.

RESULT: Volume 1 - PLANNING CONCEPT, final version.

Action F: Secure executive approval of concept document from Division

Director and the Commissioner of Department of Natural Resources.

PREPLANNING PRODUCTS

1. Final version of VOLUME 1 - PLANNING CONCEPT, including work schedule.
2. Establishment of an Executive Committee, Technical Advisory Committee and Select Public Review Committee.
3. File of persons/organizations involved in planning process.
4. File on public comments/concerns and procedure for incorporation into plan.

PHASE I - Resource assessment and problem analysis.

Action A: Assemble existing data on resource conditions, public interest and attitude, laws, policies, funding, projection of trends in land use and recreational demands, and other relevant information.

RESULT: Data file.

Action B: Conduct assessment of current and prospective resource situation including analysis of informational needs.

RESULT: Review draft of Volume 2 - RESOURCE ASSESSMENT.

Action C: Solicit Technical Advisory Committee and public review and comment on Volume 2.

RESULT: Analysis of comments.

Action D: Revise Volume 2 to reflect comments.

RESULT: Volume 2 - RESOURCE ASSESSMENT, final version.

Action E: Compile list of problems and management concerns from review of public workshop proceedings, comments of DNR personnel comments

and existing reports. Categorize into problem areas, including discussion of cause, consequences and opportunities for resolving problems.

RESULT: Review draft of Volume 3 - PROBLEM ANALYSIS.

Action F: Solicit Technical Advisory Committee and public review and comment on Volume 3. Establish criteria for ranking problems, include ranking to reflect priority for management action.

RESULT: Analysis of public comment.

Action G: Revise Volume 3 to reflect public comment and ranking of issues.

RESULT: Volume 3 - PROBLEM ANALYSIS, final version.

#### PHASE I PRODUCTS

1. RESOURCE ASSESSMENT - VOLUME 2.

2. PROBLEM ANALYSIS - VOLUME 3.

PHASE II - Develop goals and objectives for the Nongame Wildlife Program.

Action A: Develop preliminary statement of Program goals,

RESULT: Interim report on goals.

Action B: Circulate interim report to Technical Advisory Committee, Select Public Review Committee and agency personnel for evaluation and ranking.

RESULT: Preliminary statement of goals.

Action C: Develop alternative strategies for goal attainment, including an analysis of their outputs, impact and tradeoffs. Combine with revised list of goals.

RESULT: Review draft of Volume 4 - GOALS AND STRATEGIES.

Action D: Submit review draft of Volume 4 to PERT for review.

RESULT: Revised review draft of Volume 4.

Action E: Obtain broad public review of Goals and Strategies volume including delineation of each reviewer's preferred strategies

RESULT: Analysis of public preference for management strategies.

Action F: Revise strategies document to reflect public input.

RESULT: Volume 4 - GOALS AND STRATEGIES, final version

## PHASE II PRODUCTS

1. GOALS AND STRATEGIES - VOLUME 4.

## PHASE III - Develop Nongame Wildlife Program operational plan.

Action A: Allocate responsibility for implementation of strategies among various Division or departmental programs based on resource capabilities, legal authority and budgetary and personnel constraints.

RESULT: Working paper for review by Technical Advisory Committee and public review.

Action B: Based on responsibility defined in A, outline specific actions, deadlines and budgets, assign personnel needed to implement strategies and obtain objectives.

RESULT: Review draft of Volume 5 - OPERATIONAL PLAN.

Action C: Submit draft for Technical Advisory Committee and public review.

RESULT: Analysis of review comments.

Action D: Revise plan to consider comment.

RESULT: Volume 5 - OPERATIONAL PLAN.

Action E: Prepare report on policy, and recommended law, budgetary or

organizational changes needed to implement operational plan.

RESULT: Written report on recommendations.

Action F: Submit Volume 5 and associated recommendations to PERT and Commissioner for approval and implementation authorization.

RESULT: Approval to implement operational plan.

Action G: Define criteria and assign responsibility for monitoring success of implementation.

Action H: Initiate activities outlined in Plan for Management of Nongame Wildlife in Minnesota.

#### PHASE III PRODUCTS

1. OPERATIONAL PLAN - VOLUME 5

## APPENDIX D

### Participation Forms

1. Comment on Volume 1
2. Problems Questionnaire

Plan for Management of Nongame Wildlife in Minnesota

Volume 1 - Plan Concept

Comment Form

The following are my comments on Volume 1 of the Plan for Management of Nongame Wildlife in Minnesota:

\_\_\_\_\_ I am interested in participating in review of future documents. Please retain my name on the mailing list.

\_\_\_\_\_ I am not interested in further participation. Please remove my name from the mailing list.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

Agency/Organization

City/State: \_\_\_\_\_ Zip: \_\_\_\_\_

\_\_\_\_\_

Phone: (     ) \_\_\_\_\_

Submit by Jan. 25, 1983 to Roger Holmes, Acting Dir.,  
Div. Fish & Wildlife, Box 7, Centennial Building,  
658 Cedar St., St. Paul, Mn 55155

### Nongame Wildlife Problems

1. Please indicate any problems involving nongame wildlife in Minnesota. Also indicate which nongame species you feel need attention.

Birds \_\_\_\_\_

Mammals \_\_\_\_\_

Reptiles/Amphibians \_\_\_\_\_

Other \_\_\_\_\_

2. Please indicate areas of concern such as habitat loss, drainage, or development in habitats of your area, as they relate to nongame concerns.

Forest \_\_\_\_\_

Agricultural \_\_\_\_\_

Prairie \_\_\_\_\_

Wetland \_\_\_\_\_

Urban \_\_\_\_\_

3. Considering the problems that you have outlined above, which types of programs could best address the problems? Management, education, rehabilitation, research and acquisition are examples of programs which could be implemented.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Do you have any comments or ideas which you would like to add?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. How would you like to participate in the Nongame Program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Your name: \_\_\_\_\_

Address: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

RETURN FORM TO:

Nongame Wildlife Program

Section of Wildlife, Box 7

Centennial Building

658 Cedar Street, St. Paul, MN 55155

Please feel free to use additional sheets for your comments.



helped to fund enough trails until the local proposals enjoying the most public support have been completed.

Of course, the legislature, through its appropriations, has the final say in how many trails will be built. Present economic conditions suggest that any future additions to Minnesota's recreational trail system will require considerable public support before the legislature will finance them.

### 3. Supply and Demand Indicators

To explore the question of trail supply and demand, several sources of information were used:

- a. public response to questions posed at a statewide series of meetings and displays in the spring of 1981;
- b. 1978 SCORP data and projections;
- c. documented use of four existing state trails;
- d. multi-seasonal use of existing DNR trails;
- e. snowmobile registration trends;
- f. bicycle sales and surveys; and
- g. additional observations and recommendations by the public and by DNR field staff.

This investigation of trail supply and demand considers all trails in the state, whether operated by federal, state or local governments, or by private groups.

#### a. Public Response

At the spring 1981 series of meetings and displays, information was presented on trail mileage, trail use, crowding on trails, and 1985 crowding projections for each of the five major trail uses (see Figure 7).

The public was asked to indicate whether more trails, fewer trails, or no change was desired for each type of trail use, based on crowding or other factors.<sup>1</sup>

<sup>1</sup> The Survey Instrument, with statewide tabulations, is included in the Appendix.



1735 mi.

PEAK DAY USE

41 PEOPLE PER  
MILE, MEETING  
ONCE EVERY  
3 MINUTES.



MINNESOTANS WENT  
CROSS/COUNTRY SKIING  
2,006,166 TIMES IN 1978



9746 mi.

PEAK DAY USE

16 PEOPLE PER  
MILE, MEETING  
ONCE EVERY  
2 MINUTES.



MINNESOTANS WENT SNOWMOBILING  
3,148,370 TIMES IN 1978



3,511 mi.

PEAK DAY USE

28 PEOPLE PER  
MILE, MEETING  
ONCE EVERY  
6 MINUTES.



4,338,966 HIKE IN 1978



689 mi.

PEAK DAY USE

86 PEOPLE PER  
MILE, MEETING  
ONCE EVERY  
36 SECONDS.



4,916,503 BIKE TRIPS ON TRAILS IN 1978  
(THIS FIGURE IS 10% OF TOTAL BIKE TRIPS)



1060 mi.

PEAK DAY USE

12 PEOPLE PER  
MILE, MEETING  
ONCE EVERY  
18 MINUTES.



727,462 TRIPS IN 1978

Minnesota

1980 TRAIL  
MILEAGE AND 1978  
LEVELS OF USE.

Derived from SCORP data files

Fig. 7

8/5/81 GGP

(Please keep in mind that this was not a scientific survey of a representative sample of the population. The results represent the opinions of a self-selected group of people who have some interest in trails, either positive or negative.)

The public response to the trail supply question indicated that, on a statewide basis, Minnesotans interested in trails say they need or want more trails. Overall, 62 percent opted for more trails, 30 percent said there are enough, and 8 percent said some trails should be eliminated. Response on individual trail types was generally the same with the exception of snowmobile trails, of which most people thought there were already enough (Figure 8).

Fig. 8: Statewide Trail Supply and Demand Questionnaire Responses. 6/17/81

Trail Demand	Total # of Responses	More Trails		No Change		Fewer Trails	
		# of responses	% of responses	#	%	#	%
All Uses	2413	1489	62	716	30	208	8
Bicycling	585	417	71	136	23	32	5
XC Skiing	578	435	72	117	24	26	4
Hiking	581	409	69	154	28	18	3
Horseback*	80	51	64	19	24	10	12
Snowmobiling	589	177	30	290	49	122	21

\* Write-in only — not on questionnaire.

This general pattern was repeated in the response to the question, "What trail activity should the DNR emphasize?" Sixty-two percent opted for expansion-related activities (planning, 10%; acquisition, 18%; and development, 34%),

while 35 percent recommended maintaining the status quo (management and maintenance).

Written (and some verbal) comments offered by those attending the meetings also reflect a pro-expansion stance. Although strong anti-trail feelings were exhibited by some (e.g., "Trails are a foolish waste of money," and "Sell the Root River Trail"), they were outnumbered nearly 4-to-1 by those urging cautious expansion (e.g., "Develop land already owned," and "Connect trails already built"), and were outnumbered more than 10-to-1 by those advocating the development of new trails (e.g., "Want horseback trails in southwestern MN," and "Why aren't there any finished biking and hiking trails . . . older people are biking more and more.").

b. SCORP Indicators

One of the functions of SCORP is to predict the future of recreation in Minnesota so that agencies charged with providing it can set future goals and objectives. Based on surveys both of the general population and of identified trail users, two basic indicators were derived: (1) expressed desire/level of need for trails, and (2) predicted changes in participation levels in the future.

Two cautions are in order in using this data. First, the data represent averages, which can be misleading because they may mask important variables. Rigid interpretation of the data may provide a picture of the "averaged" user rather than the "average" user. Furthermore, a determination to provide for the average user may effectively eliminate a sizeable portion of the clientele from the consideration to which their numbers would otherwise entitle them. Second, SCORP was written before the current economic slump. The same surveys might yield different results if taken today. Nonetheless, this data is the best that has ever been available for recreation planning in Minnesota.

(1) Expressed Desire/Level of Need

Analysis of the data on expressed desire for more trails (Figure 9, p. 40, column 2) indicated that more trails were desired by 2-19 percent of Minnesotans, depending on the type of trail. Additional bicycle trails were most desired (19%); additional horseback trails were least desired (2%).

Respondents who requested more trail opportunities were asked to rate how strongly they felt the need for the additional opportunities on a scale of 1 (low) to 5 (high). As can be seen in Figure 10, column 3, responses ranged from 2.9 to 3.3 for the selected uses. SCORP regards any reading of 3.0 or above as an indication that a high level of need exists. The table appears to indicate that trail users feel quite strongly that more opportunities are needed.

However, this response must be viewed with some caution. It should come as no surprise that trail users who feel more opportunities are needed should feel strongly about it.

(2) Predicted Changes in Participation Levels

In the SCORP process, predictions of future needs for recreational trails were based on demographic characterizations of current Minnesota trail users, and demographic forecasts to determine what proportions of the state's population would compose these user types in the target years. If a given age-sex group were found in 1978 to contain the bulk of a particular type of trail user, demographically predicted changes in the size of this group over time were hypothesized to be in direct proportion to changes in the amount of trail use in the same period.

Columns 6 and 7 of Figure 9 show the SCORP-predicted changes in participation levels by 1985 and 1990. A decline in horseback and bicycle use are projected by 1985, but a rebound for bicycle use is expected by 1995. The implications for planning are not clear. One uncertainty involves use of these SCORP projections, which were not designed to detect new users due to enhanced program emphasis, technological improvements, or other changes to the world which would influence use (e.g., energy). It is also uncertain whether the projected decline in use would eliminate the need for more trails, if there is a significant lack of trail opportunities for current users.

In summary, two observations about the SCORP data can be made:

- Additional bicycle trails are the most desired trail type, though some desire was expressed for more of all kinds of trails.
- Age-sex group projections indicate long-term growth in all trail activities, with the most growth occurring in cross-country skiing and hiking and the least in horseback riding.

FIGURE 9. 1978 SCORP INDICATORS OF RELATIVE NEED FOR TRAIL ACTIVITIES

	(1)	(2)	(3)	(4)	(5)	(6)		(7)
	1980 Per Capita Participation Rates	% of Population Desiring More Trail Opportunities	Expressed Level of Need 1-5 scale	Utility Index*	Mean Age	Age-Sex Group Projected Changes in Participation Levels		
						1978-1985	1978-1990	
Bicycling	11.9	18.9	3.3	62	NA	- 3.6%	+ 2.5%	
X-C Skiing	1.1	10.5	3.0	32	31.4	+ 4.8%	+11.4%	
Snowmobiling	2.7	8.7	2.9	25	33	+ 1.7%	+ 6.6%	
Hiking	1.2	7.1	3.1	22	NA	+ 5.8%	+10.5%	
Horseback Riding	0.2	2.1	3.2	7	NA	- 4.6%	- 1.4%	

Source: 1978 SCORP

\* "Utility index" is derived by multiplying column 2 by column 3, and is defined as the relative public benefit that could be achieved by increasing the opportunity for an activity.

c. Use of Existing Trails

The DNR has monitored use on four state trails through on-site counting and surveys of users. Two trails, the Luce Line which runs from suburban Minneapolis to Winsted, and the Heartland which connects Park Rapids and Walker in northern Minnesota, have been monitored over two summers, 1980 and 1981. The other two, the Sakatah which connects Faribault and Mankato, and the Douglas just outside of Rochester, were monitored only during the summer of 1981.

The preliminary findings of the monitoring program show that during the summer:

- approximately 54,000 people used the Luce Line Trail;
- approximately 37,000 people used the Heartland Trail;
- approximately 5,000 people used the Sakatah Trail;
- approximately 13,000 people used the Douglas Trail;
- approximately 58 percent of all summer use was by bicyclists.

For comparison, 40,000 people every year are estimated by the Wisconsin DNR to bicycle the well-known Sparta-Elroy Trail near La Crosse, Wisconsin.

It should be noted that 1981 was the first year that the Sakatah Trail was completely developed. As trails become better known over time, they typically experience proportionate increases in use.

d. Multi-Seasonal Use of Existing Trails

While most state and unit trails are for multiple uses, many are now used during only one season. Figures from the SCORP inventory of trails (Figure 6, page 30), show that at least 13 percent of the state's estimated total trail mileage is unusable during the winter months. During the summer,

at least 55 percent of the total mileage is unavailable for use.

e. Snowmobile Registration Trends

Records of snowmobile registrations are especially valuable for planning purposes: registration is mandatory and thus can be assumed to be a fair indicator of the number of machines in Minnesota; and records have been kept for a relatively long period of time (13 years).

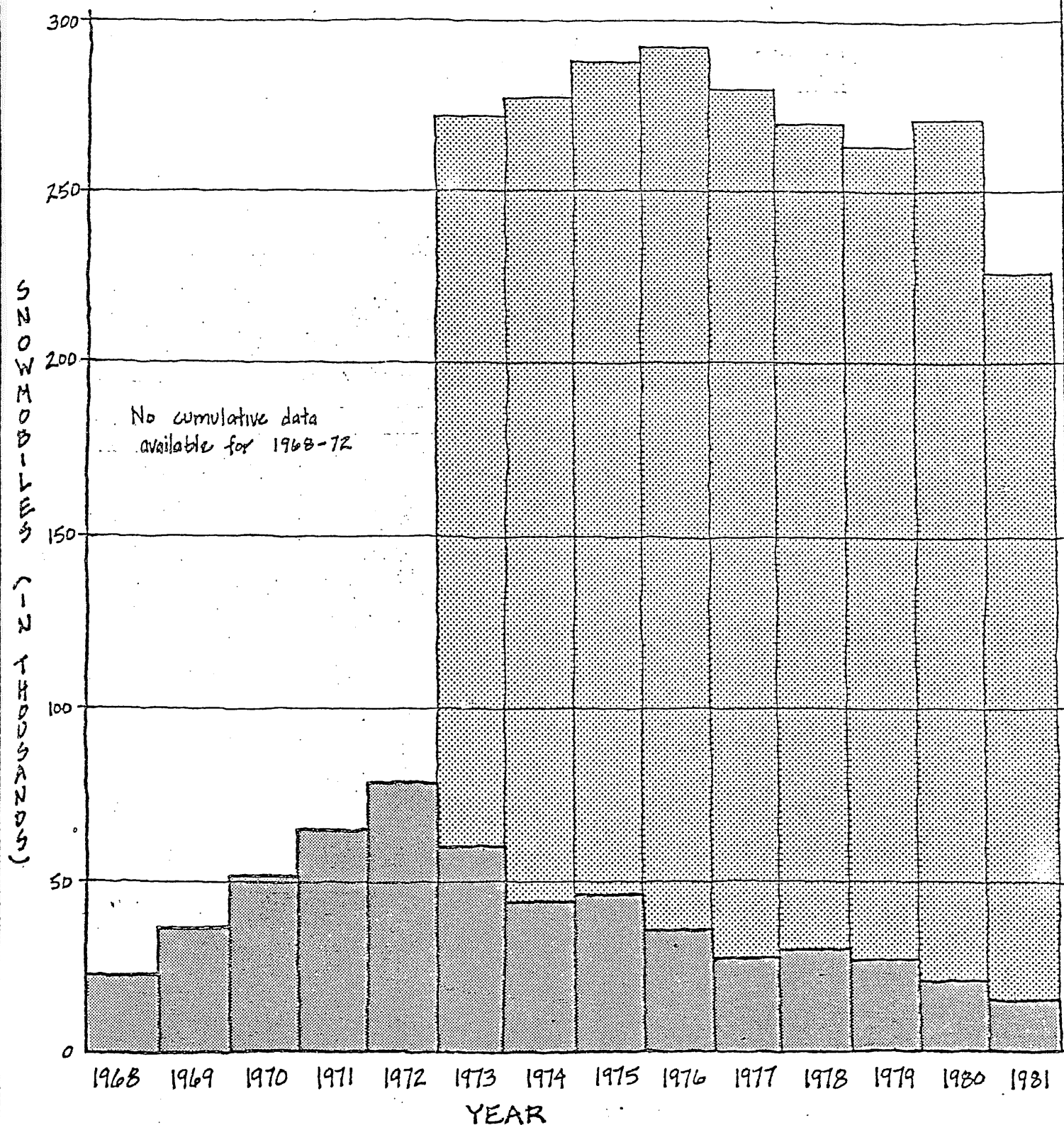
Figure 10 shows that a peak in first-time snowmobile registrations occurred in 1972, with a leveling off and slight downward trend to the present. Total cumulative registrations has also declined somewhat to approximately 225,000 snowmobiles.

f. Bicycle/Equipment Sales

Bicycle sales figures indicate that the sport of bicycle touring has grown significantly in the past few years. According to figures from the Bicycle Manufacturers Association, bicycle sales have risen steadily for the past five years and are now leveling off nationwide at approximately 10 million per year. Fifty-nine percent of sales are of the lightweight type of bicycle used in touring.

Bicycle touring equipment sales volume is also up. In the past few years touring equipment sales volume has risen from 20 percent to 100 percent per year, depending on the manufacturer. Major bicycle manufacturers, who expect touring to compose a large share of the 1980s market, are gearing up for the young adult market, which does the majority of touring.

The number of commercial bicycle touring organizations in this country has also increased. Ten years ago there were only a few such organizations; now there are well over 100.



### Minnesota YEARLY SNOWMOBILE REGISTRATIONS

- First year registrations (estimated)
- Cumulative current 3 year registrations

Fig. 10

Note: for Fiscal Year ending June 30

Source: DNR License Bureau

9/8/81 GDP

Subscriptions to Bicycling Magazine have also doubled in the past two years, to 184,500.

Results of Bicycling Magazine's 1980 subscriber survey indicate an increasing interest in bicycle touring. Sixty-seven percent of the magazine's subscribers use bikes for short-distance touring. A substantial number of them camp overnight. A majority of subscribers own touring equipment, and almost half planned to buy touring equipment in the next year.

g. Public and DNR Staff Observations

A substantial number of people, both at the spring 1981 meetings and displays and at other meetings with interest groups, indicated that they were unaware of the existence and location of available trails. The same concern was voiced by DNR trails staff, who identified more effective information dissemination to the public as a high-priority task.

DNR staff also recommended more monitoring of actual trail use before launching any major new trail initiatives as the single most important need of the DNR Trails and Waterways Unit.

4. Conclusions

At a general statewide level, most of the information presented so far seems to support expansion of bicycle, ski and hiking trails, and not to support additional snowmobile or horseback trails.

Figure 11. Summary of Supply and Demand Indicators

Indicator	Trail Type				
	Bike	Ski	Snow-mobile	Hike	Horse
a) June '81 public mtg response	1	1	-1	1	1
b-1) SCORP: utility index	1	0	0	0	-1
b-2) SCORP projections	-1	1	0	1	-1
c) Use of 4 existing trails	0	0	0	0	0
d) Multi-seasonal use of trails	0*	-1	0**	-1	-1
e) Other observations	0	0	0	0	0
TOTAL: General relative support for additional trail devel.	1	1	-1	1	-2
f) Registrations/equip. sales	1	NA	-1	NA	NA
TOTAL: including registrations/sales data	2	NA	-2	NA	NA

1 = evidence tends to support the development of more trails

0 = indicates uncertainty; need to proceed with caution

-1 = evidence tends not to support development of more trails

\* Any existing trails would require a considerable investment in surfacing in order to be suitable for bicycling.

\*\* There may be some existing trails that could accommodate snowmobile use, but not many, due to restrictions on their use in some areas.

Note: Interpretations of the SCORP figures are provided by Bill Becker to Tom Balcom memo, "State Trail Plan Comments," Sept. 10, 1982.

The implication seems to be that there are not enough trails. However, a number of factors cloud this conclusion:

- With the possible exception of those for bicycling, the SUPPLY AND DEMAND INDICATORS ARE INCONSISTENT--for any given use, some indicate a need for expansion, others imply just the reverse. And because of the possibility of roadways removing the need for many bicycle

trails (see Special Topics, p. 176) some caution is in order here as well.

- The LACK OF PUBLIC AWARENESS of existing trails suggests that people expressing a desire for more trails may simply not know of trails already in existence.
- With the exception of four state trails, the DNR DOES NOT KNOW, WITH ANY DEGREE OF CERTAINTY, HOW MUCH USE individual trails are receiving.
- While SCORP projects increases in participation levels for most trail uses through 1990, it is likely that EXISTING TRAILS CAN HANDLE ADDITIONAL USE.

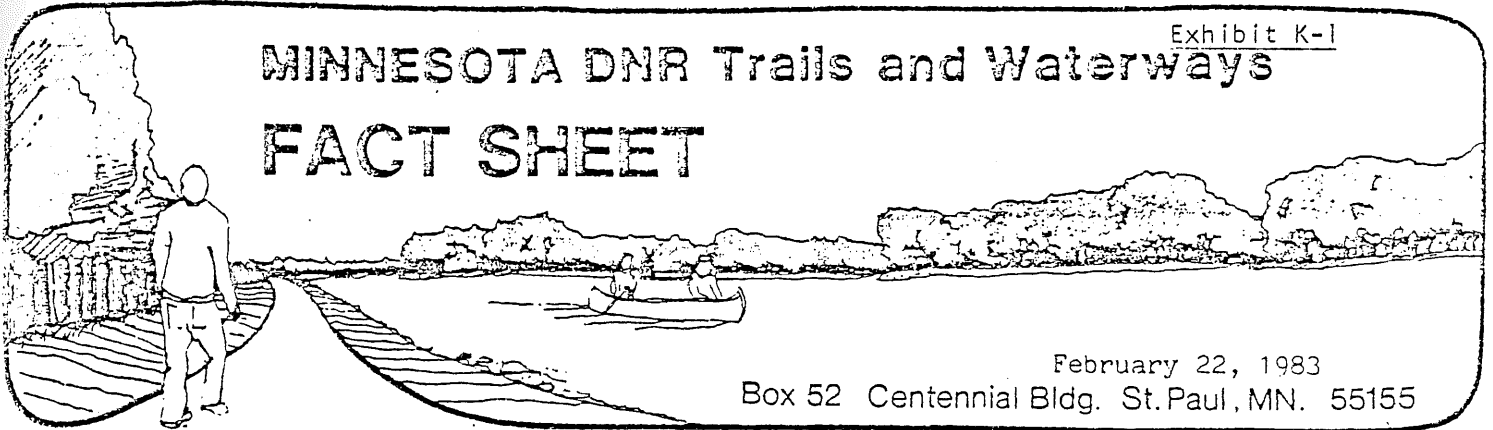
The above considerations, the supply and demand indicators, and questions as to the appropriateness of the locations of existing trails, combine to make one of three different conclusions possible:

- a. There are not, in fact, enough trails (therefore more should be built); or
- b. there are enough trails, but not in the right locations, and/or not of the appropriate type or quality (therefore appropriate modifications should be made); or
- c. there are enough good trails, but people are not aware that they exist (therefore information should be more effectively disseminated to the public).

Particularly in view of current economic constraints and the DNR's desire to stress quality over quantity, it seems wise to give the benefit of the doubt to the third, and to a degree, the second, conclusions. Therefore, a period of limited growth and extensive use monitoring appears indicated.

# MINNESOTA DNR Trails and Waterways

## FACT SHEET



February 22, 1983  
Box 52 Centennial Bldg. St. Paul, MN. 55155

### GASOLINE USE IN MOTORBOATS AND SNOWMOBILES IN THE STATE OF MINNESOTA (study requested in Chapter 580, Laws of MN: 1982)

1. Present relationship between DNR and gasoline tax revenue: a proportion of the total gasoline tax revenue has been allocated for water access facilities and snowmobile trails.
2. Present proportion of total gasoline tax revenue appropriated to DNR (based upon MN Stat. 296.16, subd. 1, as amended by MN Laws, 1976, Ch. 319, Sect. 1):

- motorboat gasoline formula:

3/4 of 1% of total gasoline tax revenue (approximately \$1,560,000.00 annually, based upon December 1982 MnDOT estimates)

- snowmobile gasoline formula: (same as above)

3. Gasoline Tax Study of motorboats and snowmobiles:

The DNR recognizes that no definitive gasoline consumption figures are available for motorboats and snowmobiles. However, the best available information has been assembled and utilized in a variety of methods to better estimate gasoline use by motorboats and snowmobiles.

4. Proposed Motorboat Formula:

Findings show that motorboats use more fuel than the current tax formula indicates. Appropriations based upon a proportion of 1.35% to 1.63% of the total gasoline tax would best represent motorboat use.

Based upon December 1982 MnDOT estimates, this change in formula would increase the present \$1,560,000.00 annual motorboat allocation to between \$2,808,000.00 (at 1.35%) to \$3,385,200.00 (at 1.63%).

5. Proposed Snowmobile Formula:

The findings show that snowmobiles use more fuel than the current formula indicates. Appropriations based upon a proportion of 0.81% to 1.44% of the total gasoline tax would best represent snowmobile use.

Based upon December 1982 MnDOT estimates, this change in formula would increase the present \$1,560,000.00 annual snowmobile allocation to between \$1,684,800.00 (at 0.81%) to \$2,995,200.00 (at 1.44%).



