

OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA

PROGRAM EVALUATION REPORT

State-Funded Trails for Motorized Recreation









Program Evaluation Division

The Minnesota Office of the Legislative Auditor was established in 1973, replacing the century-old Public Examiner's Office. Its role is to audit and evaluate public programs and ensure accountability for the expenditure of public funds. In 1975, the Legislature created the Program Evaluation Division within the auditor's office. The division's mission, as set forth in law, is to determine the degree to which activities and programs entered into or funded by the state are accomplishing their goals and objectives and utilizing resources efficiently.

The division conducts a variety of studies for the Legislature, including *program reviews*, which describe state programs; *program evaluations*, which examine whether programs are implemented efficiently and achieving results; and *best practices*

reviews, which identify the most efficient and effective methods of service delivery. The division also conducts follow-up studies and updates previous research findings.

Topics for study are approved by the Legislative Audit Commission (LAC), a 16-member joint, bipartisan commission. The division's reports, however, are solely the responsibility of the Office of the Legislative Auditor. Findings, conclusions, and recommendations do not necessarily reflect the views of the LAC or any of its members.

The Office of the Legislative Auditor also includes a Financial Audit Division, which annually conducts a statewide audit of the 25 largest agencies, an audit of federal funds, and approximately 40 financial and compliance audits of individual state agencies.

Professional Staff

James Nobles, *Legislative Auditor* Roger Brooks, *Deputy Legislative Auditor*

Joel Alter Valerie Bombach David Chein Jody Hauer Adrienne Howard Daniel Jacobson Deborah Junod Carrie Meyerhoff John Patterson Judith Randall Jan Sandberg Jo Vos John Yunker

Support Staff

Geri Britton Denice Malone Theresa Wagner Barbara Wing

This document can be made available in alternative formats, such as large print, Braille, or audio tape, by calling 651/296-8976 Voice, or the Minnesota Relay Service at 651/297-5353 or 1-800-627-3529.

e-mail: auditor@state.mn.us Reports of the Office of the Legislative Auditor are available at our Web Site: http://www.auditor.leg.state.mn.us



Printed on Recycled Paper.

Photo Credits:

The photographs on the *State-Funded Trails for Motorized Recreation* report cover were provided by the Minnesota Office of Tourism and the Department of Natural Resources, Trails and Waterways Division; those on pages 5 and 37 were provided by DNR Trails and Waterways. The picture on page 34 came from the Office of Tourism; those on pages 7, 21, and 39 come from DNR Trails and Waterways, Brainerd; DNR Forestry Division, Bemidji Region provided the picture on page 50; the picture on page 64 was furnished by the DNR Enforcement Division; the picture on page 54 come from the Minnesota Board of Water and Soil Resources; and the pictures on pages 22, 29, and 85 are Legislative Audit staff photos.

January 2003

Members Legislative Audit Commission

Recently, there has been considerable controversy over motorized recreation on Minnesota's trails. Enthusiasts and skeptics have disagreed about how the Department of Natural Resources (DNR) should develop and manage trail systems for snowmobiles and off-highway vehicles (OHVs), which include all-terrain vehicles, dirt bikes, and 4X4 trucks. In April of 2002, the Legislative Audit Commission directed us to evaluate DNR's management of the state's snowmobile and OHV trails that receive state funding.

We found that while DNR's management of snowmobile trails has served Minnesota relatively well, the department needs to improve its management of OHV trails. The DNR needs to improve the planning process for OHV trails, and the state needs to devote more time to enforcing laws and rules pertaining to the operation of OHVs. In addition, DNR and local units of government need to increase the amount of oversight they provide for clubs that develop and maintain snowmobile and OHV trails with DNR grants.

This report was researched and written by John Patterson (project manager), David Chein, and Jan Sandberg. We received the full cooperation of the Department of Natural Resources in the preparation of this report.

Sincerely,

/s/ James Nobles

/s/ Roger Brooks

James Nobles Legislative Auditor Roger Brooks Deputy Legislative Auditor

Table of Contents

		<u>Page</u>
	SUMMARY	ix
	INTRODUCTION	1
1.	MOTORIZED TRAIL RECREATION IN MINNESOTA Programs for Motorized Trail Recreation Minnesota's Designated Trail Systems for Motorized Recreat Providing Information About Trail Opportunities	4
2.	PLANNING Department Planning Off-Highway Vehicle Planning Snowmobile Planning	17 18 19 31
3.	GRANT-IN-AID OVERSIGHT Grant-in-Aid Procedures Other Regulations and Requirements Program Oversight Trails With Violations of Regulations Recommendations	35 36 38 40 49 56
4.	ENFORCEMENT Organization Opinions on the Effectiveness of DNR's Enforcement Efforts Enforcement Activities Enforcement Actions Adequacy of Penalties Education and Training Snowmobile Safety Enforcement Grants Natural Resource Officers	63 64 65 67 73 77 78 79 80
5.	FINANCES Background Receipts Encumbrances Fund Balances Gasoline Tax Studies	83 84 86 88 94 98
	SUMMARY OF RECOMMENDATIONS	103
	APPENDICES A: Events in Off-Highway Vehicle Planning in Minnesota B: Violations of Governmental Regulations	107 115
	FURTHER READING	119
	AGENCY RESPONSE	123
	RECENT PROGRAM EVALUATIONS	Back Cover

List of Tables and Figures

<u>Table</u>	<u>es</u>	Page
1.1	Categories of Riding Opportunities in Minnesota	6
1.2	State Forest Trails Open to OHVs, by Forest Classification and Type of Signing	7
1.3	Designated Trails in Minnesota, November 2002	10
1.4	Designated Trail Mileage for Various Types of Recreation, November 2002	11
1.5	Miles of Designated Snowmobile Trails, November 2002	12
1.6	Miles of Designated OHV Trails, November 2002	12
3.1	Number of Regional DNR Files Missing Grant-in-Aid Documents	43
3.2	Percentage of Counties Providing Direct Grant Oversight at Least Sometimes	47
3.3	Regional Variation in County Oversight for Traditional Snowmobile	40
3.4	Maintenance Grants Breakdown of Trail Development and Maintenance Violations	48 52
3.5	Summary of Violations for the Seven Case Studies	53
4.1	Percentage of Enforcement Hours Devoted to Snowmobiles by	
4.2	Region, FY 2002	72
4.2	Percentage of Enforcement Hours Devoted to OHVs by Region, FY 2002	73
4.3	Types of Snowmobile Violations, FY 2001-2002	76
4.4	Types of OHV Violations, FY 2001-2002	77
5.1	Snowmobile Grant-in-Aid Expenditure Patterns and Snow	0.1
5.2	Conditions, FY 1996-2002 Motorized Vehicle Registration Fees	91 98
Figu	res	
1.1		5
1.1	Categories of Motorized Recreational Vehicles Designated Snowmobile Trails Available During the Winter of	3
	2001-02 and New Trails Added Between May and November 2002	0
1.3	Designated Trails for OHVs, November 2002	8 9
1.4	Snowmobile and ATV Registrations, 1968-2002	13
2.1	DNR Staff Ratings of DNR's Off-Highway Vehicle Planning, 2002	27
2.2	Ratings by County Officials of DNR's Off-Highway Vehicle	20
2.3	Planning, 2002 DNR Staff Ratings of DNR's Snowmobile Planning, 2002	28 32
2.4	Ratings by County Officials of DNR's Snowmobile Planning, 2002	33
3.1	Percentage of Survey Respondents Indicating that DNR is Doing at	
	Least a Good Job Overseeing the Grant-in-Aid Program	51

<u>Figu</u>	res	<u>Page</u>
4.1	Ratings by DNR Field Employees of the Department's	
	Enforcement of Motorized Recreational Vehicle Regulations	66
4.2	Ratings by Counties of DNR's Enforcement of Motorized	
	Recreational Vehicle Regulations	66
4.3	Snow Depth and DNR Enforcement Hours Devoted to	
	Snowmobiles, FY 1991-2002	68
4.4	Enforcement Division Hours Devoted to OHVs, FY 1991-2002	69
4.5	Enforcement Minutes Devoted to Snowmobiles and OHVs per	
	Registered Vehicle, FY 1991-2002	69
4.6	Percentage of Enforcement Division Funding and Activity Related	
	to OHVs, FY 1991-2002	70
4.7	Percentage of Enforcement Division Funding and Activity Related	
	to Snowmobiles, FY 1991-2002	71
4.8	DNR Enforcement Actions Relating to Snowmobiles, FY 1992-2002	74
4.9	DNR Enforcement Actions Relating to OHVs, FY 1992-2002	75
5.1	Snowmobile Account Receipts, FY 1991-2002	86
5.2	ATV Account Receipts, FY 1991-2002	88
5.3	Snowmobile Account Encumbrances, FY 1991-2002	89
5.4	Snowmobile Account Encumbrances per Vehicle, FY 1991-2002	90
5.5	Snowmobile Grant-in-Aid Allotments by Region, FY 2001-2002	92
5.6	ATV Account Encumbrances, FY 1991-2002	92
5.7	ATV Account Encumbrances per Vehicle, FY 1991-2002	94
5.8	Snowmobile Account Fund Balance, FY 1991-2002	95
5.9	ATV Account Fund Balance, FY 1991-2002	95
5.10	Fund Balance of Account for Dirt Bikes, FY 1994-2002	96
5 11	Fund Balance of Account for 4X4 Trucks FY 1994-2002	97

Summary

Major Findings:

- Efforts by the Department of Natural Resources (DNR) to plan an off-highway vehicle (OHV) trail system have been inadequate. DNR was slow to initiate a planning process, and once started, the process lacked key elements (p. 19 of the full report). Ironically, DNR's snowmobile trail planning has been less formal and systematic than the OHV planning; yet, it appears to have served the state relatively well (p. 31).
- The state has consistently devoted relatively less enforcement time to OHVs than snowmobiles even though OHVs generally have a greater impact on the environment and have a longer season than snowmobiles (p. 68).
- DNR and local governments have provided little oversight for the grant-in-aid programs, leaving snowmobile and OHV clubs to operate largely on their own (p. 40). While weak oversight presents a risk to the state, the extent to which clubs are not following grant requirements and land-use regulations is unclear and open to interpretation (p. 49).
- The fund balances in the four recreational vehicle accounts are adequate to meet current spending levels and could be drawn down to support funding for additional needs (p. 94).

Key Recommendations:

- The Legislature should require that **Environmental Assessment** Worksheets be prepared for many types of OHV projects (p. 30).
- DNR needs to develop a better understanding of how many miles of trails the department's OHV budget will potentially support (p. 26).
- DNR should devote at least as much enforcement time per vehicle to OHVs as it provides to snowmobiles (p. 71).
- DNR should take several steps to improve the oversight that the snowmobile and OHV grant-in-aid programs receive (pp. 56-62).
- The Legislature should reexamine the studies that it has used to allocate a portion of gas tax collections to the four dedicated funding accounts for motorized recreation (pp. 100-102).

DNR needs to improve its management of trails for motorized recreation.

Report Summary

Motorized recreation on Minnesota's trails is a hotly debated topic with skeptics and enthusiasts disagreeing about the impact that snowmobiles and off-highway vehicles (OHVs) have on the environment and about the size and nature of the trail systems that the state should have. (OHVs include all-terrain vehicles (ATVs), dirt bikes, and 4X4 trucks.) In light of this debate, the Legislative Audit Commission directed our office to evaluate the state's current system of designated trails for motorized recreation that receive state funding. In fiscal year 2002, DNR committed \$9 million to snowmobile trails and \$3 million to OHV trails.

This report addresses (1) the size of the current trail systems for snowmobiles and OHVs, (2) the efforts of DNR to plan these trail systems, (3) the efforts of DNR to enforce laws and rules concerning the operation of snowmobiles and OHVs, (4) the oversight received by local clubs that use DNR grants-in-aid to develop and maintain trails, and (5) the funding of trails. Overall, we found that while DNR's management of snowmobile trails has served Minnesota relatively well, the department needs to improve its management of OHVs.

Minnesota Has an Expansive Trail System for Snowmobiles but a More Limited System for OHVs

Minnesota has 18,941 miles of designated snowmobile trails. While

the state has only 953 miles of designated OHV trails, OHVs can use roughly 6,000 miles of undesignated trails in state forests and another 1,600 miles of forest roads. In addition, snowmobiles and ATVs can ride in the ditches of thousands of miles of highway right-of-ways throughout the state.² Despite thousands of miles of riding opportunities, OHV enthusiasts want DNR to officially designate more miles of trail for OHVs because the undesignated trails do not have signs, are not mapped, and are harder to identify and navigate than the designated trails. Local clubs that receive grants-in-aid from DNR administer 91 percent of the state's designated trail miles for snowmobiles and 85 percent of the designated trail miles for OHVs.

DNR's Effort to Plan a Statewide OHV Trail System Has Been Inadequate

Despite acknowledging the need to plan for and manage OHVs as early as the mid-1970s, DNR delayed initiating a formal planning process until the Legislature required action in 1993. Once the department started planning in 1996, the process lacked (1) complete information about the recreational needs of OHV riders, (2) a thorough examination of environmental factors, and (3) fiscal information about how much it would cost to annually develop, administer, maintain, and enforce the OHV trails in the plans. These three areas community needs, environmental protection, and economic/fiscal considerations—are, in fact, DNR's own standards for good natural

planning process lacked certain key elements.

DNR's OHV

¹ The miles of designated trails were estimated as of November 2002. These numbers may increase as DNR finishes bringing in snowmobile trails that the 2002 Legislature authorized for the grant-in-aid program and as OHV trails in the development pipeline are completed.

² ATVs cannot ride in the ditches in the state's "agricultural zone," which is the southern half of the state, from April 1 through August 1.

SUMMARY xi

Grant-in-aid clubs have been left to operate largely on their own. resources planning.³ In the last year or two, DNR has rearticulated its policy concerning OHVs, with an emphasis on "managed use on managed trails." It is too early to determine if these changes will be sufficient to overcome the planning shortcomings that have occurred so far.

In contrast, DNR's trail planning for snowmobiles has been less formal and systematic. Snowmobile clubs have largely determined if and where trails are built with limited direction from DNR.⁴ Despite this lack of formal and systematic planning, snowmobiles have gained a level of acceptance in Minnesota and contributed millions of tourism dollars to the state's economy. There is a general consensus that snowmobiles have a smaller overall impact on the environment than OHVs.

OHV Enforcement Has Not Received Sufficient Resources

In the last five years, on a per vehicle basis, DNR has spent 26 percent less time enforcing laws and rules related to OHVs than those related to snowmobiles. This occurred despite the fact that OHVs generally have a greater impact on the environment and have a longer season than snowmobiles. Furthermore, only one-third of DNR field employees and county officials rated DNR's OHV enforcement as "good" or "very good," while two-thirds of them rated the department's snowmobile enforcement efforts as "good" or "very good."

Grant-In-Aid Clubs Have Received Little Oversight

DNR has grant-in-aid programs for motorized recreation, from which snowmobile trails received \$4.5 million and OHV trails received just over \$300,000 in fiscal year 2002. In order to receive grants, clubs must get a local unit of government to sponsor their trails. In fact, the grant agreement between DNR and the local government sponsor makes the sponsor responsible for the development and maintenance of these trails. Yet most counties do not oversee the trail work being done and act largely as fiscal agents passing funds from DNR to the clubs. DNR's own oversight is indirect and ad hoc, with trail staff relying on complaints from the public and occasional spot checks to monitor the trails.

While this weak oversight presents a risk to the state, the extent to which trail clubs are violating grant requirements and land-use regulations (such as wetland laws) is unclear and open to interpretation. In a survey, we asked DNR field employees and county officials to identify state-funded trails that were developed or maintained in violation of a grant requirement or land-use regulation in the last five years. They reported 32 cases of trail work with at least one violation. While some violations may be inevitable with such an expansive and decentralized trail system, the state should strive for no violations. Chapter 3 of the full report recommends several steps that DNR can take to improve oversight and prevent violations.

³ Department of Natural Resources, *Directions 2000: The Strategic Plan* (St. Paul, September 2000), 2-7. With respect to economic considerations, this document primarily focuses on economic development (e.g. tourism and logging). However, it also discusses fiscal responsibility. In addition, according to DNR's regional planners, fiscal responsibility is a key element of natural resources planning.

⁴ With respect to trails on state land, DNR played a role in deciding where and how trails were developed.

Additional Funds Are Available for Motorized Recreation

Each type of motorized vehicle snowmobile, ATV, dirt bike, and 4X4 truck—has its own dedicated account, which the state primarily funds with vehicle registration fees and gas tax collections. The combined balance in the three OHV accounts at the end of fiscal year 2002 was 261 percent of that year's funding from those accounts. DNR is clearly maintaining sufficient reserves in these accounts, which could be drawn down to meet additional needs. The balance in the snowmobile account grew from \$773,000 in 1998 to \$5.4 million in 2002, which is twice as big as the inflation-adjusted, historical balance of about \$2 million. While DNR is concerned about declining snowmobile registrations and the recent addition of about 2,900 new miles of snowmobile trails, the snowmobile account may also have some reserves available.

The Legislature needs to reconsider the studies that estimated the amount of gas consumed by motorized recreational vehicles.

The Legislature, however, needs to revisit and possibly redo the gas tax studies that it has used to determine the portion of overall gas tax collections that the state allocates to each of the four dedicated accounts. These gas tax allocations are out-of-date or based on questionable assumptions. Consequently, the allocations probably do not reflect the amount of gasoline actually consumed by these vehicles. For example, the snowmobile allocation is probably too high because it is based on the amount of gasoline consumed by snowmobiles during the winter of 1996-1997, which had the most days of substantial snow cover of any winter in the last decade. In contrast, the ATV allocation is probably too low because it is based on the number of ATVs that were used in 1984, which is significantly less than the number of vehicles used today.

Introduction

Motorized recreation on Minnesota's trails has become a hotly debated topic.

In the last year, motorized recreation on Minnesota's trails has become a hotly debated topic, especially after a series of articles from the *Minneapolis Star Tribune* highlighted the controversy in February 2002. On the one hand, environmentalists and other skeptics of motorized recreation contend that motorized vehicles—which include snowmobiles, all-terrain vehicles (ATVs), dirt bikes, and 4X4 trucks—damage the environment and disturb the peace and quiet of the state's natural areas. In addition, they claim that the Minnesota Department of Natural Resources (DNR) is not doing enough to monitor and manage the use of these vehicles, the damage that they cause, and the private clubs that develop and maintain many of these public trails.

On the other hand, motorized recreation enthusiasts contend that DNR is not doing enough to develop a designated trail system for ATVs, dirt bikes, and 4X4 trucks—which are collectively referred to as off-highway vehicles (OHVs). The state created dedicated funding accounts to develop and manage ATV trails in 1984 and dirt-bike and 4X4-truck trails in 1993. Yet, DNR is still trying to plan a system of OHV trails. While most trails and roads in state forests are open to OHV use, the vast majority of these trails are not officially designated, which involves signing and mapping them. OHV enthusiasts want DNR to designate trails because they are much easier to use than trails that are not signed and mapped. In contrast, the state has developed an extensive designated trail system for snowmobiles. But some snowmobilers claim that DNR is holding on to and not spending enough of the funds in the dedicated account for snowmobiles.

Issues related to motorized recreation may come to a head during the 2003 legislative session. Last year, the Legislature created an OHV task force that will present by January 15, 2003 recommendations concerning the development of a designated trail system. Also, this report, which was requested by the Legislative Audit Commission on April 2, 2002, evaluates the state's current system of designated trails for snowmobiles and OHVs that receive state funding. Some legislators were particularly concerned about the oversight that DNR provides the private clubs that receive grant assistance from the state to develop and maintain most of the state's designated trails.

Our study posed the following questions:

 What trails does the state have for motorized recreation, and where are these trails located?

I Tom Meersman, "Nature pays the price as ATVs hit the woods," "Even designated trails can present problems," "Legal and Illegal ATV Trails," "In ads, the trails lead to the mud," and "Some drivers are taking illegal spins in wildlife areas," *Minneapolis Star Tribune*, February 24, 2002, sec. A, p. 1, 12, 13, and 15; Tom Meersman, "Inside DNR, memos warned of ATV damage" and "Most favor keeping ATVs on trails," *Minneapolis Star Tribune*, February 25, 2002, sec. A, pp. 1, 4, and 5.

- How effective have the state's efforts been to plan statewide snowmobile and OHV trail systems?
- Is there adequate oversight for the grant-in-aid programs?
- How well is DNR's Enforcement Division enforcing regulations pertaining to the operation of snowmobiles and OHVs?
- How does Minnesota finance the development, maintenance, and management of its motorized recreational vehicle trails, and how are the funds spent?

To address these questions, we surveyed all 87 counties and 1,257 DNR field employees, representing each of the department's divisions. We also visited each of DNR's regional offices and interviewed staff from each of the department's divisions. Finally, we (1) reviewed trail planning documents from DNR and other sources, (2) analyzed data from DNR concerning trail mileage, vehicle registrations, enforcement activities, and trail funding, and (3) interviewed many other stakeholders, including county officials, government officials involved in land-use regulation, officials from trail clubs, representatives of snowmobile and OHV rider associations, environmentalists, and other concerned citizens.

As we discuss in Chapter 1, operators of snowmobiles and OHVs have several different types of places to ride their vehicles, including trails and the ditches of highway right-of-ways. Nevertheless, in this study, we focused on trails that DNR has officially designated for snowmobile or OHV use and have received state funding. These public trails are developed and maintained either by DNR or by private clubs with grants from DNR.

During the recent debates about motorized recreation, there has been a lot of discussion about the "environmental damage" caused by these vehicles; however, we did not try to assess the level of damage that has occurred or the need to repair this damage. While these vehicles, like all types of recreation and human activity, have an impact on the environment, the point at which this impact becomes undesirable is a subjective assessment that is beyond the scope of our work. Nevertheless, in this report, we discuss the need for DNR to (1) establish thresholds at which point the environmental impacts are considered unacceptable (whatever those levels may be), (2) monitor the actual impacts on the trails, and (3) take appropriate action, such as maintaining and possibly closing trails, if these thresholds are exceeded.

Chapter 1 presents data on the state's designated trail system and other riding opportunities along with data on the number of snowmobiles and OHVs in the state. In Chapter 2, we review and discuss DNR's efforts to plan statewide trail systems for snowmobiles and OHVs. Chapter 3 examines the efforts of DNR and local units of government to oversee the development and maintenance of grant-in-aid trails. Chapter 4 presents information about how DNR's Enforcement Division enforces laws and rules pertaining to the operation of snowmobiles and OHVs. Finally, Chapter 5 presents data concerning the four dedicated accounts (one for each type of vehicle—snowmobiles, ATVs, dirt bikes, and 4X4 trucks) that the state has to fund motorized recreational activities.

Motorized Trail Recreation in Minnesota

SUMMARY

Minnesota has an expansive trail system for snowmobiles but a more limited system for off-highway vehicles (OHVs). Over the last several years, OHV recreation has grown significantly with new trails being developed and more vehicles being registered. In contrast, the snowmobile trail system is relatively mature with the state focusing on maintaining, rather than expanding, this system. Most of the state's designated snowmobile and OHV trails are located in northern Minnesota, which receives more snow than the southern half of the state and has most of the state's forests. For snowmobiles and OHVs, local clubs develop and maintain the vast majority of the state's designated trails.

For years, snowmobiling has been a major part of Minnesota's wintertime recreation scene. In recent years, all-terrain vehicles (ATVs), dirt bikes, and 4X4 trucks—which are collectively known as off-highway vehicles (OHVs)—have grown in popularity as recreational vehicles. In response to the popularity of motorized recreation, the state of Minnesota has provided trail-riding opportunities for these vehicles. In this chapter, we address the following questions:

- What programs does the state have to provide trail opportunities for motorized recreational vehicles?
- What designated trails does the state have for motorized recreation, and where are these trails located?
- How has the state's trail systems for motorized recreation changed over time?

To answer these questions, we reviewed literature and documents about the state's trail systems, interviewed staff from the central office of the Minnesota Department of Natural Resources (DNR) in St. Paul and each of the department's regional offices, and examined data on trail mileage and vehicle registrations over the last decade.

PROGRAMS FOR MOTORIZED TRAIL RECREATION

for motorized vehicles. These programs can be categorized by using two

Under the first criterion, the trails are classified by the type of vehicle, which

includes snowmobiles, ATVs, dirt bikes, and 4X4 trucks. Figure 1.1 briefly

Minnesota builds trails for four types of motorized vehicles, each with its own dedicated account.

these funds.

Each of the four vehicles has its own dedicated funding account that the state uses to plan, develop, maintain, and administer trails and enforce vehicle-operating rules. The state primarily funds these accounts through vehicle registration fees and gas tax collections. While the state does use general fund appropriations, lottery revenues, and bonding proceeds to develop and maintain multi-use trails (such as paved trails used by hikers and bikers in the summer and snowmobilers in the winter), the state finances trails designated primarily for motorized vehicles with funds from these dedicated accounts. Chapter 5 of this report will describe

these accounts in greater detail along with information on how the state has spent

Minnesota has several different programs for providing trail-riding opportunities

criteria—the type of vehicle involved and the administrative authority for the trail.

Under the second criterion, the trails are classified by who manages them. The administrative authorities include DNR, counties, the U.S. Forest Service, and private clubs. "Ditch riding" in highway right-of-ways provides another riding opportunity, but these right-of-ways are generally not designated trails or actively managed for trail purposes by anyone. Table 1.1 lays out the different riding opportunities. Our evaluation primarily examined designated trails directly managed by DNR or managed by private clubs with grant money from DNR. (By "designated" we mean trails that the state has formally designated for snowmobile or OHV use and for which the state has provided funding.)

DNR directly manages two types of designated trails. First, it manages 15 trails that the Legislature has designated as "State Trails" in Minnesota Statutes (2002) §85.015. Typically, these are multi-use trails that allow snowmobiles in the winter. Second, DNR directly administers some of the designated trails in state forests and parks. In the rest of this report, we will generally combine the two types of DNR-managed trails into one category called "DNR-managed trails."

Local clubs that receive grant funding from DNR administer the designated trails not directly managed by DNR. The grant program is formally called the Minnesota Trails Assistance Program but is more commonly referred to as the grant-in-aid program. Under this program, private snowmobile or OHV clubs put together plans to develop and then maintain public trails that may go onto federal, state, county, city, township, or private land. To receive state funding for these trails, the clubs get a local government—a county, city, or township—to sponsor the trail and apply for a DNR grant on behalf of the club. The clubs also receive donations of time and money along with support from charitable gambling and

DNR directly manages some trails and oversees grant-in-aid programs for others.

¹ Another ten trails are specified in statute but not yet open for use.

Figure 1.1: Categories of Motorized Recreational Vehicles

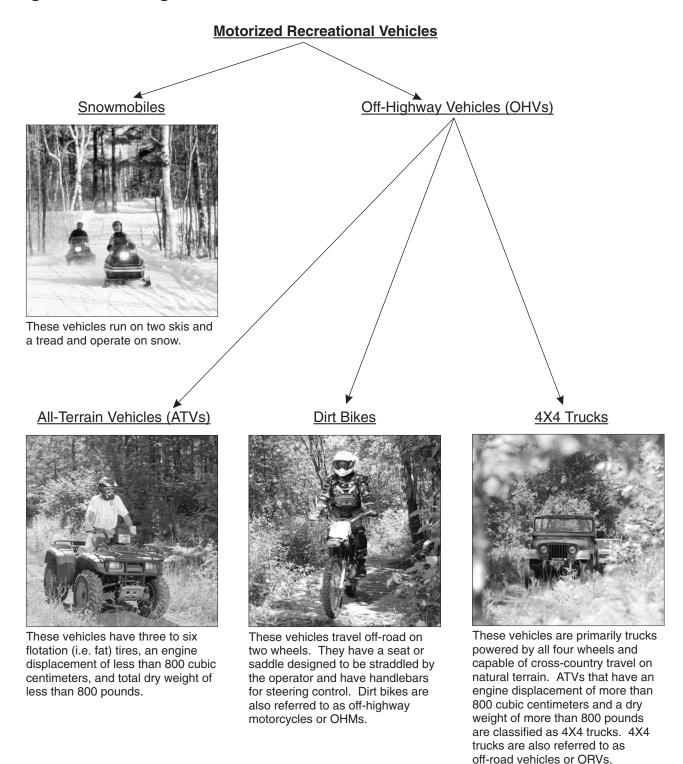


Table 1.1: Categories of Riding Opportunities in Minnesota

DESIGNATED TRAILS THAT ARE STATE FUNDED

DNR-Managed Trails

DNR directly manages and maintains these trails. The trails include 15 trails that the Legislature designated as "State Trails" in Minnesota Statutes §85.015. State Trails are often open to snowmobiles in the winter but closed to OHVs all year. In addition, DNR manages some of the designated trails in state forests and parks.

Grant-in-Aid Trails

These snowmobile and OHV trails were developed and are now maintained by private trail clubs with financial assistance from DNR. These trails run on federal, state, county, municipal, and private land.

OTHER OPPORTUNITIES

Club Trails

These are primarily snowmobile trails that private clubs have developed and are now maintaining on their own without any state support. The trails can run on public and private land.

Trails on Private Land

Obviously, people can ride on their own private land or someone else's with permission. For example, according to the Amateur Riders Motorcycle Association, there are several private racetracks around the state for dirt bikes.

Undesignated State Forest Trails

In addition to the DNR-managed trails that are officially designated, the state allows OHVs on many undesignated trails in state forests.

State Forest Roads

The state also allows OHVs on many state forest roads.

Trails on County-Managed Land

Some counties allow OHVs on the land that they manage. These are in addition to the grant-in-aid and club trails that go on county-managed land.

• Trails on U.S. Forest Service Land

Just like counties, the federal government allows OHVs on U.S. Forest Service land. These are in addition to the grant-in-aid and club trails that go on Forest Service land.

• Ditches of Highway Right-of-Ways

Under Minnesota law, snowmobiles and ATVs are allowed in the ditches of highway right-of-ways. Nobody directly manages these psuedo-trails, but the Minnesota Department of Transportation and county road authorities have had to make repairs when the vehicles have caused damage.

SOURCE: Office of the Legislative Auditor.

other fundraising activities because the grants from DNR do not cover the full cost of the trail work.

Although the focus of this report is on designated trails, we periodically discuss undesignated trails in state forests, which are listed under "other opportunities" in Table 1.1. DNR oversees its designated and undesignated trails through a forest classification system, which has three categories—"managed," "limited," and "closed." Table 1.2 identifies where OHVs can and cannot ride in each type of forest. The trails in "managed" forests that are open to OHVs but not marked

For off-highway vehicles (OHVs), the vast majority of riding opportunities are outside the designated trail system.

² Of the 57 forests, the state has classified 45 as "managed," 8 as "limited," and 4 as "closed."

Table 1.2: State Forest Trails Open to OHVs, by Forest Classification and Type of Signing

Trails in state forests can be open or closed to OHVs.

		Trail Signing	
			No Signing-
	Marked Open	Mark Closed	Not Marked Open or Closed
Trails in Managed Forests	Open to OHVs	Closed to OHVs	Open to OHVs
Trails in Limited Forests	Open to OHVs	Closed to OHVs	Closed to OHVs
Trails in Closed Forests	N/A	Closed to OHVs	Closed to OHVs

SOURCE: Minn. Rules (2002), ch. 6100.1950, subp. 1.

open or closed are "undesignated" trails. These trails are typically old, temporary logging roads and hunting paths and do not receive much oversight from DNR. The trails marked open in the managed and limited forests are "designated" trails because they have been signed, mapped, and officially recognized. OHV groups have been pushing for more designated trails because the signing and mapping make them easier to use.

DNR's Trails and Waterways Division is responsible for essentially all the designated trails for motorized recreation. The division develops and maintains the

DNR-managed trails and administers and oversees the grant-in-aid process. In fiscal year 2002, the division had six regional offices around the state and two or three area offices in each of the regions. The 15 area supervisors are the DNR staff

primarily



Undesignated OHV trails are largely unmanaged by DNR.

responsible for these trails. As we discuss later in this report, other DNR divisions (Forestry, Wildlife, Fisheries, Waters, Parks and Recreation, Ecological Services, Lands and Minerals, and Enforcement) have some involvement in trails, typically examining environmental factors and enforcing regulations.

MINNESOTA'S DESIGNATED TRAIL SYSTEMS FOR MOTORIZED RECREATION

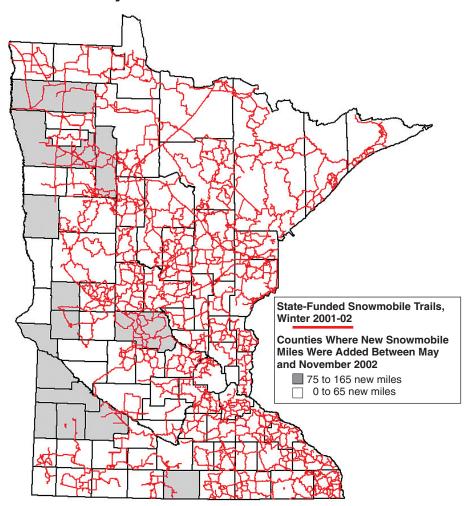
When we examined information concerning the designated trails, we found that:

 Minnesota has an expansive trail system for snowmobiles but a more limited designated system for OHVs.

Figure 1.2 shows the expansive, statewide system of designated snowmobile trails. In this figure, the red lines show the state-designated trails for the winter of

Figure 1.2: Designated Snowmobile Trails Available During the Winter of 2001-02 and New Trails Added Between May and November 2002

Recently, DNR added nearly 2,900 miles of existing but unfunded snowmobile trails to the grant-in-aid system.



NOTE: The map does not show club-funded trails. With respect to the new trails being added, the 14 counties that added 75 or more miles of trail accounted for 64 percent of new trail miles. The remaining miles were added in 43 other counties. Thirty counties added no miles.

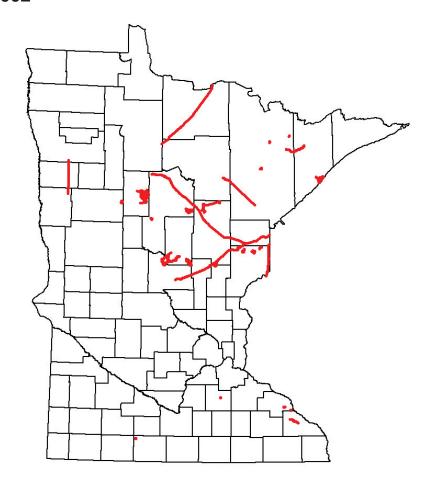
SOURCE: Office of the Legislative Auditor analysis of DNR data.

2001/2002. However, during the summer and fall of 2002, DNR added into the grant-in-aid system roughly 2,900 miles of existing trails that clubs had been financing on their own. The grayed areas indicate counties that have added or are in the process of adding at least 75 miles of these "new" trails to the grant-in-aid system. In contrast to snowmobile trails, there are relatively few miles of designated OHV trails, as shown in Figure 1.3.

Table 1.3 shows the same trail information as the maps but in terms of mileage.³ Minnesota has 18,941 miles of designated snowmobile trails but only 953 miles of designated OHV trails. Most of the designated snowmobile and OHV trails fall under the administration of local clubs, which receive grants-in-aid from DNR.

Figure 1.3: Designated Trails for OHVs, November 2002

OHVs have far fewer miles of designated trails than snowmobiles.



SOURCE: Office of the Legislative Auditor analysis of DNR data.

³ Much of our information on trail miles came from a DNR database that contained a mix of trails with Global Positioning System (GPS) location information and trails with less accurate mapping information. In some cases, even GPS data may not convey the true length of the trail because it does not compensate for hills. Some miles may be those reported by the club maintaining the trail. These were the miles of trails reported in DNR's trail database as of May 2002 and supplemented with 2,899 miles added to the grant-in-aid system between May and November 2002. DNR may add more trails to the grant-in-aid system as the year progresses. Finally, we excluded trails in DNR's database that clubs finance on their own.

Table 1.3: Designated Trails in Minnesota, November 2002

	Snowmobile Trail Miles	OHV Trail Miles ^a
DNR-Managed	1,735	142
Grant-in-Aid	<u>17,206</u>	<u>811</u>
Total	18,941	953

^aThe OHV trail miles are an unduplicated count. If ATVs and dirt bikes are allowed on a trail, the mileage for this trail is only counted once.

SOURCE: Office of the Legislative Auditor analysis of DNR data.

Most designated trails are administered by local clubs through the grant-in-aid program.

The grant-in-aid program accounted for 91 percent of the snowmobile trail miles and 85 percent of the OHV trail miles. Because grant-in-aid trails have dominated the statewide system of designated trails, we devote all of Chapter 3 to the grant-in-aid process and oversight.

While our evaluation focused on designated trails, Table 1.1 showed that the state has numerous other riding opportunities for snowmobiles and OHVs. Snowmobile and ATV operators can ride in the ditches of thousands of miles of highway right-of-ways. In addition, OHVs can use about 1,600 miles of state forest roads, roughly 6,000 miles of undesignated trails in "managed" state forests, and an undetermined mileage of undesignated trails and roads on county and U.S. Forest Service land. With respect to OHVs, the vast majority of riding opportunities are outside of the designated trail system. In fact, DNR believes that addressing this unmanaged use and the impact that it is having on the environment and communities is the state's primary OHV challenge. As we discuss in Chapter 2, DNR plans to (1) designate more OHV trails that the department will actively manage and (2) draw OHV users from the vast undesignated system to a manageable designated system.

As Table 1.4 shows, snowmobile trail mileage in Minnesota far exceeds the mileage for any other type of recreation. While there are 18,941 miles of designated trail for snowmobiles, no other type of recreation has more than 2,000 miles of designated trail. In addition, Minnesota's trail mileage for motorized recreation is very similar to that found in Wisconsin. Wisconsin has roughly 19,000 miles of snowmobile trails, 1,300 miles of ATV trails, and 400 miles of dirt-bike trails. Wisconsin does not have any state-designated 4X4-truck

⁴ Betsy Parker, Government Relations Office, Minnesota Department of Transportation, interview by authors, in person, St. Paul, Minnesota, August 16, 2002. According to Ms. Parker the state has roughly 130,000 miles of public roads and highways, but not all the ditches for all these roadways are suitable for snowmobile or ATV riding. In addition, between April 1 and August 1, the state does not allow ATVs in the highway ditches in the state's "agricultural zone," unless used for agricultural purposes. The agricultural zone is roughly the southern half of the state.

⁵ Department of Natural Resources (DNR), unpublished fact sheet titled "Background Information for Recreational Motor Vehicle Management," presented to the Minnesota Senate Environmental and Natural Resources Committee on March 18, 2002. According to this document, state forests occupy 3.9 million acres while county tax forfeiture land encompasses 2.9 million acres.

Table 1.4: Designated Trail Mileage for Various Types of Recreation, November 2002

	<u>Trail Mileage</u>
Snowmobile	18,941
Hiking	1,867
Cross-Country Skiing	1,792
Horseback Riding	1,011
OHV	953
Biking	424

SOURCE: Office of the Legislative Auditor analysis of DNR data.

trails.⁶ We also compared Minnesota's trail mileage for motorized recreation with that in Michigan, North Dakota, South Dakota, and Iowa and found that Minnesota's mileage is substantially higher than the mileage in these four states with the exception of 3,100 miles of designated OHV trails in Michigan.

Regional Differences



Within Minnesota, DNR administers snowmobile and OHV trails on a regional basis. Our analysis is based on the six regions that existed prior to July 1, 2002; after that date, DNR consolidated its regions from six to four. (The six regions are shown in the figure to the left.⁷) The regions vary in many ways, including size, landscape, and climate. The three northern regions have more state forests, less agricultural land, and more snowfall than the southern regions.

As shown in Table 1.5, most designated snowmobile trails (63 percent) are located in the three northern regions. The northwest region has the most trails (26 percent), and the metro region has the fewest (7 percent). Even the densely populated metro region has nearly 1,300 miles of designated snowmobile trails.

Trails for OHVs are often located in or near one of Minnesota's 57 state forests. As shown in Table 1.6, nearly all designated OHV trail miles are found in the three northern regions. There are no OHV trails in the metro region compared with 351 miles of trails in the north central region.

⁶ Larry Freidig, Coordinator of the Snowmobile and Off-Road Trail Programs, Wisconsin Department of Natural Resources, interview by author, telephone conversation, St. Paul, Minnesota, October 17, 2002. Wisconsin allows ATVs on about 3,000 miles of snowmobile trails during the winter. For these trails, snowmobile clubs get extra funding for allowing ATVs.

⁷ DNR has different regional boundaries for different functions. In this report, we used the boundaries for the grant-in-aid snowmobile program. However, in Chapter 4, we used the Enforcement Division's regional boundaries.

Table 1.5: Miles of Designated Snowmobile Trails, November 2002

	Grant-in-Aid Administrative Region						
	North-	North-	North	South-	South-		State-
	west	<u>east</u>	<u>Central</u>	west	<u>east</u>	<u>Metro</u>	wide
Grant-in-Aid Trails							
County Sponsored	3,978	2,399	3,347	3,196	2,188	1,030	16,138
City Sponsored	595	103	5	0	85	214	1,002
Township Sponsored	0	39	0	0	26	0	65
Total	4,573	2,541	3,353	3,196	2,299	1,244	17,206
DNR-Managed Trails	379	632	468	109	96	51	1,735
G							
Total Miles	4,952	3,173	3,820	3,306	2,394	1,295	18,941

SOURCE: Office of the Legislative Auditor analysis of DNR data.

Unlike snowmobile trails, nearly all OHV trails are in northern Minnesota.

Table 1.6: Miles of Designated OHV Trails, November 2002

	Grant-in-Aid Administrative Region						
	North-	North-	North	South-	South-		State-
	west	east	<u>Central</u>	west	<u>east</u>	<u>Metro</u>	wide
Grant-In-Aid Trails							
County Sponsored	216	222	243	2	13	0	696
City Sponsored	0	26	0	0	0	0	26
Township Sponsored	_50	<u>39</u>	0	<u>0</u>	_0	<u>0</u>	_89
Total	266	287	243	2	13	0	811
DNR-Managed Trails	0	<u>17</u>	<u>108</u>	<u>0</u>	<u>17</u>	<u>0</u>	<u>142</u>
Total Miles	266	303	351	2	31	0	953

SOURCE: Office of the Legislative Auditor analysis of DNR data.

History of Trail Mileage and Vehicle Registrations

When we examined the history of the state's trail systems for snowmobiles and OHVs, we found that:

• While Minnesota's trail system for snowmobiles is relatively mature, the OHV system is still developing.

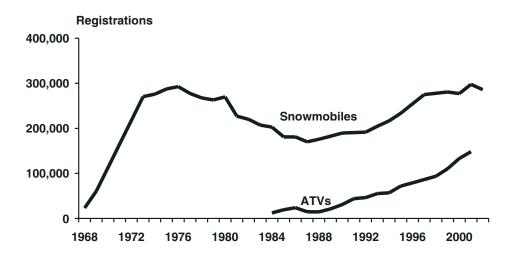
Minnesotans have been building and maintaining snowmobile trails for more than 30 years. By 1985, the state had nearly 10,000 miles of snowmobile trails and gradually added 10,000 more miles over the next 17 years. DNR staff told us that the department only has enough funds to maintain the existing snowmobile system, and there are little or no funds to add new trails.

The department did not report ATV trail mileage until 1994, and for that year, the state had just 278 miles of designated ATV trails statewide. The mileage for designated ATV trails increased by 158 percent between 1994 and 2002, while snowmobile trail miles grew by only 33 percent during the same period. (In this section, we only show miles of ATV trails because we had limited historical data for dirt bikes and 4X4 trucks.) In addition, more ATV trails are in the pipeline for development, and as we discuss in Chapter 2, DNR has been going through an OHV trail planning process for the last several years.

Besides examining how trail mileage has been added to the state's trail system, we examined vehicle registrations over time. As shown in Figure 1.4, registrations for snowmobiles dipped during the early to mid-1980s but are now back to where they were in the mid-1970s. The state began registering ATVs in 1984, and, as shown in Figure 1.4, the number of registered vehicles has grown rapidly. Registration for dirt bikes (about 6,300 in 2001) and 4X4 trucks (about 1,400 in 2001) began in 1994, and these numbers have also increased in the last few years.

Figure 1.4: Snowmobile and ATV Registrations, 1968-2002

ATV registrations have more than doubled in the last decade.



NOTE: Snowmobiles are registered by fiscal year (July 1 to June 30) and ATVs follow the calendar year (January 1 to December 31).

SOURCE: Department of Natural Resources, Trails and Waterways Division.

⁸ DNR, Minnesota Registry of Public Recreational Trail Mileages (St. Paul, July 1994).

⁹ Snowmobile and OHV registrations are good for three years. Snowmobiles are registered by fiscal year (July 1 to June 30), while OHVs follow the calendar year (January 1 to December 31).

¹⁰ We excluded OHVs registered exclusively for agricultural purposes from our analysis.

PROVIDING INFORMATION ABOUT TRAIL OPPORTUNITIES

Providing accurate and timely information about trail opportunities is one of the department's responsibilities. ¹¹ Information about trails for motorized and nonmotorized recreation enthusiasts is available from the DNR Web site and in various state forest, park, and trail maps and other brochures. Each year DNR prepares snowmobile trail maps that depict the location of the state's designated snowmobile trails. There is also an interactive map on DNR's Web site that allows users to identify snowmobile trails in specific parts of the state. For OHVs, the department publishes a brochure each year showing designated trails open for ATVs, dirt bikes, and 4X4 trucks. The DNR Web site reproduces the map from the brochure and provides links to several individual trail maps.

As we put together an inventory of snowmobile and OHV trails for this report, we found several inconsistencies and omissions in DNR's trail database and maps and concluded:

• DNR has had some problems maintaining accurate maps and a trail registry as required by state law.

Through 1996, DNR printed a trail registry that reported trail mileage by county. Now the department uses a trail database to fill individual requests for trail information as they are submitted. DNR staff told us that this database fulfills the department's statutory requirement to publish a trail registry. However, we encountered problems obtaining an accurate list of OHV trails from the database. During our visits to DNR's regions, we identified some existing trails that have received state funding for several years but were not in the trail database or in the department's OHV brochure for 2002-03. 14

We also found some inaccuracies in DNR's snowmobile maps. In the northeast region, a club failed to complete the grant process for two trails in fiscal year 2002 and did not receive any grant-in-aid funding. However, the trails were still identified as grant-in-aid trails in DNR's trail map for that year although they were no longer grant-in-aid trails. As another example, an area supervisor in the Trails and Waterways Division told us that he tried for three years to remove a defunct grant-in-aid trail near Grand Portage from DNR's state trail map before it was finally taken off the map. Obviously, tracking the status of nearly 20,000

DNR's OHV trail map does not include all of its designated OHV trails.

¹¹ Information Services is Element 5 of the 1995 Angela Cook report for the DNR, Comprehensive Recreational Use Plan: Off-Highway Motorized Recreation in Minnesota (St. Paul, January 1, 1995), 17.

¹² DNR, Minnesota Registry of Public Recreational Trail Mileages (St. Paul, June 1, 1996). Data included both motorized and nonmotorized trail miles provided by federal, state, and local government, and private agencies.

¹³ Minn. Stat. (2002) §85.017 states "the commissioner of natural resources shall compile and maintain a current registry of cross-country skiing, hiking, horseback riding and snowmobiling trails in the state and shall publish and distribute the information in the manner prescribed in section 86A.11." OHV trails are not listed. Minn. Stat. §86A.11 refers to the units of the outdoor recreation system, including state forests.

¹⁴ Both the Round River Drive Trail and Agassiz Recreation Trail are in the northwest region. Regional employees were unable to say why these trails do not appear in the OHV brochure.

miles of trail is a complex task. Nevertheless, this information is an important part of the trails program.

RECOMMENDATION

DNR should revise the process that it uses to update information in its trail database in order to increase the accuracy and timeliness of this information.

Snowmobile maps and the OHV brochure are compiled and printed annually. As part of every grant-in-aid application, Trails and Waterways staff in each DNR region annually collect revised trail maps from the clubs that show all trail alignment changes, including reroutes, deletions, and additions. Regional trails staff forward these maps to the DNR trails database administrator who revises the trail database used to generate printed maps. Trails employees also send information to the database administrator about DNR-managed trails. The department should require that clubs and regional trails staff submit trail revisions earlier in the process and send draft maps back to the regional offices for verification before printing.

Planning

SUMMARY

The Department of Natural Resources' efforts to plan a trail system for motorized recreation has achieved mixed results. The department has tried to implement a formal planning process for off-highway vehicles (OHVs), but we identified several shortcomings. First, the Department of Natural Resources (DNR) knew about the need to plan for and manage OHVs for over a decade before it took action in the mid-1990s. Second, once the planning effort started, DNR cut several corners. The process lacked (1) detailed information about how Minnesotans use OHVs, (2) a thorough examination of environmental factors, and (3) information about the total cost of the trail system being proposed. In contrast, although there has been no formal planning process for snowmobile trails, the result has served the state relatively well. It is generally accepted that snowmobiles have a lower impact on the environment than OHVs. In addition, snowmobiling brings millions of tourism dollars into the state each year.

Natural resources planning is often contentious with conflicts over resource use and protection. According to the General Accounting Office:

Using and developing land and resources is generally not compatible with protecting and conserving them. . . . Even deciding among various uses is not easy because using one resource often limits use, development, or protection of others. ¹

Recreational planning, especially for motorized vehicles, can be especially contentious. In the last year, the Department of Natural Resources' planning of the state's off-highway vehicle (OHV) trail system has been criticized and the subject of lawsuits. To examine these issues, we address the following questions in this chapter:

- How has DNR planned for statewide OHV and snowmobile trail systems?
- How effective have the planning efforts been?

To evaluate DNR's planning efforts, we (1) reviewed planning and management documents and internal communications, (2) interviewed managers and supervisors from a variety of disciplines in each of DNR's six regions,

¹ General Accounting Office, Land Use Issues GAO/CED-80-108 (Washington, D.C.: General Accounting Office, June 27, 1980), 8.

(3) compared the planning process to DNR's own standards of good planning, and (4) surveyed 1,257 DNR field staff and all 87 counties. Based on these analyses, we developed a few recommendations about how OHV planning and management can be improved.

DEPARTMENT PLANNING

DNR manages Minnesota's state parks, forests, and other outdoor resources for the present and future needs of its citizens. Although this task requires balancing resource use with resource protection, which are often seen as incompatible objectives, the Legislature has not given DNR any statutory direction by providing the department with a mission statement in statute. The department's strategic plan, *Directions 2000*, guides DNR's activities and planning efforts.² According to *Directions 2000*, natural resources planning incorporates three elements:

- community needs (including recreational opportunities),
- · environmental protection, and
- economic considerations (including tourism and fiscal responsibility).

Some DNR employees refer to these factors as the three legs of the planning stool. DNR tries to balance these factors as it decides when, where, and how to use or protect the state's natural resources. In this chapter, we will use these three elements as criteria in evaluating DNR's efforts to plan statewide trail systems for OHVs and snowmobiles.

Minnesota's *Statewide Comprehensive Outdoor Recreation Plan* (SCORP) guides outdoor recreation in the state. In 1965, Minnesota drafted the first of seven SCORPs in response to federal requirements that made federal funding of natural resource projects contingent upon states developing a plan. Minnesota's first SCORPs were data-rich comprehensive plans that estimated the number of hours that Minnesotans participated in various recreational activities and the demand for recreational facilities. But, largely in response to criticism from the General Accounting Office and the American Planning Association, recent SCORPS are much more targeted and less comprehensive. For example, when developing the state's SCORPs, DNR has stopped collecting statewide data on outdoor recreation

According to DNR, planning should balance community needs, environmental protection, and economic considerations.

² Department of Natural Resources (DNR), *Directions 2000: The Strategic Plan* (St. Paul, September 2000).

³ *Ibid.*, 2-7. With respect to economic considerations, this document primarily focuses on economic development (e.g. tourism and logging), but it also discusses fiscal responsibility. In addition, DNR's regional planners emphasized fiscal responsibility as an economic consideration in our interviews.

⁴ Outside of receiving federal funding, there is no general mandate that DNR's individual planning efforts, such as snowmobile trail planning, conform to the state's overarching SCORP. Nevertheless, Minnesota statutes refer to SCORP in two places. *Minnesota Statutes* (2002) §84.927 states that funds distributed through the all-terrain vehicle (ATV) grant-in-aid program must be guided by SCORP. In addition, there is similar language for dirt bikes in *Minn. Stat.* (2002) §84.794.

participation and demand for facilities. Nevertheless, from the 1970s to today, Minnesota's SCORPs have recognized the growing popularity of motorized recreation.

OFF-HIGHWAY VEHICLE PLANNING

When we examined DNR's planning efforts for OHV trails, we found that:

• DNR's effort to plan a statewide OHV trail system has been inadequate.

For well over a decade, DNR knew it needed to plan for and manage OHVs.

First, DNR knew about the need to plan for and manage OHVs for over a decade before it took action in the mid-1990s. Second, once the planning effort started, DNR failed to fully develop its three planning elements. Specifically, the planning effort lacked (1) detailed information about the communities' recreational needs, (2) a thorough examination to protect the environment, and (3) fiscal information about the cost of developing, administering, maintaining, and enforcing the trail system that was proposed.

Delayed Action

Proper planning and management are needed for OHVs because they are built to operate without a trail, during all seasons, on frozen or unfrozen ground, through mud, and over rocks. Consequently, OHVs have an impact on the environment and people. DNR staff have identified several potential impacts of OHV trails, including:

- 1. Fragmenting and destroying habitats through the loss of vegetation and physical intrusion of the vehicles;
- 2. Opening corridors that allow predators to range more widely and that facilitate the spread of invasive plants;
- 3. Impacting wildlife migration, breeding, and rearing;
- 4. Eroding soils, particularly when they are wet during the spring thaw;
- 5. Filling wetlands and other water bodies with sedimentation; and
- 6. Altering wetland drainage.⁵

The impact from recreational use, however, depends on the type and intensity of use, the type and fragility of the site, and the type and level of site management. Thus, proper planning and management are needed to mitigate the impacts.

⁵ Pam Perry and Doug Norris, DNR Ecological Services, "Presentation to the DNR Motorized Trail Task Force," Brainerd, Minnesota, August 13, 2002.

⁶ David N. Wear and John G. Greis, Southern Research Station (eds.), Southern Forest Resource Assessment, Chapter 11: Forest-Based Outdoor Recreation (U.S. Department of Agriculture Forest Service, modified October 6, 2002), 278-79; http://www.srs.fs.fed.us/sustain/report/pdf/chapter_11e.pdf; accessed October 23, 2002.

Nevertheless,

 Despite acknowledging special OHV needs as early as the mid-1970s, the department delayed initiating a formal OHV planning process until the Legislature required action in 1993.

While DNR released some reports in the 1970s concerning the management of OHVs, the department issued two key reports in 1984—Off-Road Vehicle Use in Minnesota and The Minnesota DNR Trail Plan: A Discovery Process—that clearly identified the need to plan for and manage OHVs. (Appendix A provides a detailed list of key OHV planning documents and activities from the 1970s to today.) The first report addressed OHV management and environmental issues. The second report, which was a trail plan, concluded that (1) OHV recreation in Minnesota is not going to simply go away and (2) the state needs an aggressive and balanced OHV policy, and affirmative steps must be taken to arrive at such a policy.

This report recommended that the state manage OHV use on public land, as opposed to simply ignoring it or dealing with it on a site-specific basis. ¹⁰ At this time, DNR allowed OHVs anywhere in state forests, unless the area forester had posted a trail, area, or the entire forest closed. Contrary to DNR's own recommendation, the department largely ignored OHV issues or dealt with them on a site-specific basis until the mid-1990s.

In 1993, the Legislature told DNR to develop a plan for OHVs. Efforts to actively manage OHVs finally started in 1993, when the Legislature directed DNR to develop a comprehensive plan for managing OHVs and to report on their use. ¹¹ In January 1995, DNR published the report on OHV use and proposed the following mission statement for the OHV program:

The Minnesota Off-Highway Vehicle Program will pursue managed, environmentally sensitive motorized recreation on public and private lands. Managed motorized recreation requires rigorous resource protection, social responsibility, and interagency cooperation. ¹²

There are several possible reasons why DNR delayed planning for and managing OHVs, including (1) a belief among some forest managers that OHVs were not a widespread problem, (2) a general recognition by the Forestry Division that state forests should accommodate motorized as well as nonmotorized recreational activities, (3) a belief that a decentralized grant-in-aid program would serve OHVs as well as it had snowmobiles, (4) a perception among some resource managers

⁷ DNR, Off Road Vehicle Use in Minnesota (St. Paul, 1984); and DNR, The Minnesota DNR Trail Plan . . . A Discovery Process (St. Paul, 1984).

⁸ There may be additional relevant documents or activities during this time that we did not identify—most of our work focused on externally available information.

⁹ DNR, The Minnesota DNR Trail Plan . . . A Discovery Process, 246.

¹⁰ DNR. The Minnesota DNR Trail Plan . . . A Discovery Process. 246-248.

¹¹ Laws of Minnesota (1993), ch. 311, art. 2, sec. 18.

¹² Angela Cook, Comprehensive Recreational Use Plan: Off-Highway Motorized Recreation in Minnesota (St. Paul, January 1, 1995), 2.

PLANNING 21

Designating a system of trails was one part of DNR's OHV planning effort. that OHVs did not belong in state forests and recognizing them would encourage that use, and (5) a lack of legislative direction. ¹³

DNR started developing its OHV plan in 1996. The planning process had four components—(1) developing additional operating rules, (2) developing OHV management guidelines, (3) classifying state forests to regulate the use of OHVs in them, and (4) designating a system of OHV trails. Because our study focused on designated trails, we only evaluated the trail designation process. In addition, this component has been the most controversial and the subject of lawsuits.

To plan the trail system, DNR created several area planning teams in each of the six regions. The membership of the planning teams varied but was intended to include DNR field staff, federal and county forestry officers, OHV riders, representatives of environmental groups, and other concerned citizens. The planning teams first identified and evaluated existing OHV opportunities, largely in state forests, and then added new trails if needed to create a system that would meet user needs. 15 As discussed in Chapter 1, most OHV riding opportunities have been on undesignated trails in state forests. A focus of the planning effort was to designate the best of these trails, which would make them easier to use through signing and, in most cases, mapping. In addition, DNR planned to formally and proactively manage the designated trails.



A primary goal of the OHV planning process was to officially designate some existing trails.

¹³ We developed the list based on several telephone conversations and interviews, including Emmett Mullin, DNR Office of Management and Budget, interview by author, telephone conversation, St. Paul, Minnesota, October 31, 2002; and Jack Olson, Planner, North Central Region, interview by author, telephone conversation, St. Paul, Minnesota, October 31, 2002.

¹⁴ Jerry Rose, Director of Forestry, and Dennis Asmussen, Director of Trails & Waterways, memorandum to divisions of Forestry and Trails and Waterways regions and areas, *Off Highway Vehicle Coordination Effort*, May 12, 1998.

¹⁵ Raymond B. Hitchcock, DNR Assistant Commissioner for Operations, memorandum to regional management teams and area supervisors, *Off Highway Vehicle (OHV) System Planning Road Map*, July 6, 1998, 3.

¹⁶ According to some of its OHV system plans, DNR intends to designate and sign, but not map, some dead-end "access" trails used by hunters, berry pickers, and other utilitarian riders.

Overall, DNR hopes to redirect OHV use on the vast undesignated trail system to a manageable designated system. For the most part, when the area teams in each region completed their plans, regional managers consolidated them into a regional system plan, which was sent to the DNR Commissioner for approval.

Community Recreational Needs

DNR's own planning guidelines call for understanding a community's recreational needs; however, we found that:

• DNR lacked complete information about how Minnesotans use OHVs.



Hunters use ATVs to transport their deer.

DNR needs to fully understand how Minnesotans use OHVs if it is to develop an effective program.

Manufacturers design OHVs for use over all sorts of terrain, and thus, people can use them for different purposes—challenge riding on rough terrain, sightseeing on trails, riding in highway ditches, and carrying out utilitarian functions, such as farming, berry picking, and hunting. If DNR is to have an effective OHV program, it needs to know the demand for each of these riding opportunities and how they interact with each other. DNR has collected some data on OHV use in recent years.

In 1998, DNR provided each of the area planning teams a study profiling several groups of OHV users, but the study had several deficiencies. First, it was a synthesis of national research and did not provide much information about OHV riding in Minnesota, and second, the information was quite dated—for example,

PLANNING 23

estimates of the number of users were from 1991. The researcher preparing this report did interview a few Minnesota experts on OHV riding.¹⁷

In 2001, DNR issued a second OHV user study done at the request of some forest managers who were reluctant to finalize OHV trail system plans until they had a better idea of projected demand for OHV riding in state forests. 18 While this study was a significant improvement, it also had a few flaws. First, while the report provides information about the use of ATVs, dirt bikes, and 4X4 trucks in Minnesota, only the sample of ATV riders was large enough for meaningful analysis. Second, the researchers drew their sample from registered ATV owners, not all ATV owners. While Minnesota law requires the registration of all ATVs, sales data suggest that there may be 50 percent more in use than are registered. Third, this study only examined trail riding and excluded ditch riding. Getting information about ditch riding is crucial for planning a trail system and understanding the potential demand for these trails because many ditch riders may start using these trails as they are developed or improved. In contrast to this study, the researchers that prepared the State Comprehensive Outdoor Recreation Plan in 1979 randomly called over 10,000 Minnesotans about their summer recreational activities, including riding OHVs.²⁰

Environmental protection is one of the most contentious issues in OHV planning.

Environmental Protection

In the OHV debate, one of the most contentious issues is environmental protection. DNR faced a very large challenge in meeting the needs of OHV users while protecting the environment. When assessing how well the trail plans addressed environmental protection, we found that:

 While DNR took steps to incorporate some environmental considerations into the planning process, environmental protection ended up being a lower priority than trail designation.

By design, DNR focused the trail designation process on existing trails, typically trails in state forests that OHV riders already liked to use, rather than on first identifying areas appropriate and inappropriate for OHV use and then deciding the best place for a designated trail. While an existing trail on disturbed ground may be preferable to a new trail, there is little basis to assume that existing trails are automatically appropriate for OHV use, especially if they are on old winter logging roads that were never intended for OHVs. In fact, DNR is in the process of developing guidelines for siting, developing, and maintaining trails, and drafts of this document state that many existing trails and temporary logging roads are

¹⁷ Gordon Kimball, Recreational Professionals, Inc., *Profiles of Nine Trail User Populations—A Component of the Border to Border Trail Study* (St. Paul: DNR, June 30, 1998).

¹⁸ John Genereux and Michele Genereux, An OHV Recreation Planning Tool Based on A Survey of Resource Managers and A Survey of Off-Highway Vehicle Riders in Minnesota (St. Paul: DNR, July 2001), 2.

¹⁹ Ibid., 3.

²⁰ DNR, Minnesota State Comprehensive Outdoor Recreation Plan (St. Paul, May 5, 1979), 1.004.

not good places for OHV trails and must be evaluated for ecological sustainability. ²¹

When planning its system of designated OHV trails, DNR used an informal process for evaluating the ecological impact of potential trails. ²² As OHV riders on the planning teams identified trails they would like officially designated for OHVs, the environmentalists and DNR's own resource specialists (such as wildlife specialists and hydrologists) on the planning teams identified trails or segments of trails that should be excluded for environmental reasons. (Only the trail system plans for the three northern regions identified specific trails. The three southern plans did not.) During our interviews with staff from DNR's resource divisions, we learned that this environmental examination was somewhat limited. These staff told us that time and resource constraints prohibited DNR resource specialists from fully participating and going to all the meetings. We also found no indication that DNR formally compared the proposed OHV trails with DNR's databases of sensitive environmental areas. Finally, DNR staff also told us that people representing environmental groups did not always participate in the process. In some cases, they did not apply to be on the planning teams, and in other cases, some lost interest and stopped coming. As a result, the examination of environmental factors largely involved the personal knowledge of the people who had the time to come to the meetings, rather than a systematic evaluation. While the planning process allowed for environmental input, DNR as an agency did not take steps to ensure that this process was a high priority and received sufficient resources. In the end, DNR did route the draft plans through each of its divisions for review and comment. DNR also contends that as individual projects in these plans are identified for actual development, they will receive a more thorough examination.

In its OHV planning process, DNR did not give the examination of environmental factors sufficient resources.

In addition, this review was carried out before DNR developed its guidelines for siting, developing, and maintaining trails, which we discussed above. As of December 16, 2002, these guidelines were still in draft form. While we were told that at various times central office staff distributed information about trail development to regional staff, the department should have completed and finalized this manual before identifying and evaluating possible designated trails. The draft manual addresses issues such as what type of existing trails and roads are appropriate for OHVs and how to site a trail near a wetland or creek.²³ This information would have been helpful when the planning teams were identifying potential trails for designation.

²¹ Troy Scott Parker, Site-Level Design and Development Guidelines for Recreational Trails, Chapter 9: Off-Highway Vehicle Trails (unpublished draft) 9.1; http://www.natureshape.com/mndnr/chapter files/TG Chap 9 07.29.02.pdf; accessed October 12, 2002. In contrast, the grant-in-aid manual suggests that good options for trails can be areas of current use in forested public land. DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, Off-Road Vehicle Instruction Manual (St. Paul, March 2001), 20.

²² DNR tries to use an informal process for early environmental coordination in planning and designing projects. The process may lead to a formal environmental review under the Minnesota Environmental Policy Act. DNR, Environmental Review Study Committee, *Environmental Review Study Committee Report* (St. Paul, May 1, 1996), 6-7.

²³ Troy Scott Parker, Site-Level Design Guidelines: Chapter 9, 9.2 and Chapter 2: Ecological Sustainability and Trails, 2-2.

PLANNING 25

As we discussed at the beginning of this chapter, DNR's own planning guidelines discuss balancing community recreational needs, environmental protection, and economic considerations. Determining an appropriate balance for these three factors is largely a subjective and value-laden process outside the scope of this study. Nevertheless, the evidence we examined indicates that environmental protection ended up being a lower priority than the community's need to officially designate popular OHV trails, which drove the process.

We can assume that DNR was only trying to do the best job that it could under the resource constraints that it faced and the pressure it was receiving to finally plan and actively manage an OHV trail system. Nevertheless, the national literature—including documents from Minnesota—warns against cutting corners when doing natural resources planning. Specifically,

 Not addressing broad-scale ecological issues upfront can lead to lawsuits and delays in natural resources planning.

A 1997 GAO report found that when the U.S. Forest Service did not address broad-scale ecological issues upfront in its forest plans, it "faced environmental and other challenges to the legality of its plans and projects, and courts have required the agency to delay, amend, or withdraw [the plans]." Similarly, the Council on Environmental Quality found in 1997 that agencies sometimes engage in consultation only after a decision has—for all practical purposes—been made. In such instances, other agencies and the public believe that their concerns have not been heard and may oppose even worthy projects. Furthermore, in 1996, DNR approved the *Environmental Review Study Committee Report*, which identifies the importance of early coordination as part of a broad process of environmental assessment within DNR.

Minnesota's OHV planning process has been the subject of lawsuits.

Consistent with these warnings, the OHV planning process has been the subject of lawsuits that have delayed the planning process. In mid-2000, the north central region completed the first set of trail system plans, and lawsuits quickly followed. Citizens petitioned, under the Minnesota Environmental Policy Act, for DNR to conduct a formal environmental assessment of the plans, and when DNR denied this petition, the citizens sued. A similar chain of events followed the release of the regional plans from northwest and northeast Minnesota in 2001. The Minnesota Court of Appeals ruled in October 2002 that while environmental

²⁴ General Accounting Office, Forest Service Decision-Making: A Framework for Improving Performance GAO/RCED-97-71 (Washington, D.C.: General Accounting Office, April 29, 1997), 3.

²⁵ Council on Environmental Quality, *The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-five Years* (Washington, D.C.: Executive Office of the President, January 1997), iii.

²⁶ DNR, Environmental Review Study Committee, *Environmental Review Study Committee Report*, 7.

²⁷ DNR contended that the plans were conceptual and not detailed enough for an environmental review. The DNR deferred decisions on the need for Environmental Assessment Worksheets (EAWs) on the projects contained within the plans for one year. Minnesotans for Responsible Recreation vs. Department of Natural Resources, No. C201616 (Cass County District Court, January 2002).

²⁸ In the same year, the department initiated Environmental Assessment Worksheets on several projects in those regions.

reviews were not needed for system plans, environmental reviews were needed before DNR started to work on certain projects within those plans.²⁹

Economic Considerations—Fiscal Responsibility

According to DNR, the final piece of a good planning process involves determining if there are sufficient resources to carry out the proposed plan. Nevertheless, we found that:

• DNR has never estimated how much it will cost to annually develop, administer, maintain, and enforce the OHV trails that it is planning.

There is little discussion about costs in the OHV trail system plans.

The 1998 planning guidelines that DNR management distributed to the regional and area offices had essentially no discussion about cost issues limiting the size of the system being planned. Consequently, there is little if any discussion of costs in the OHV trail system plans that DNR has developed. In contrast, DNR's 1984 report on OHV use in Minnesota discussed the need to determine the cost of planning, designing, developing, administering, and maintaining a trail system. ³¹

RECOMMENDATION

If DNR plans to develop a statewide system of OHV trails, it should develop a better understanding how many miles of trails the department's OHV budget will support.

Obviously, the specific location and condition of a proposed trail and its potential use will affect the initial development and on-going maintenance costs, but DNR should at least develop some parameters for how much a mile of OHV trail will potentially cost the state. If this is not done, DNR may run into the situation that it will develop more trails than it can administer, maintain, and enforce on an on-going basis.

Survey Opinions

We also sent surveys to 1,257 DNR field employees and to all 87 counties and asked them to rate various aspects of DNR's planning effort—for example, understanding recreational needs, providing recreational opportunities, addressing environmental impacts, and addressing potential user conflicts (such as between ATV and horseback riders recreating in the same area). The DNR employees that we surveyed represented all of the department's divisions. County officials who are involved in the grant-in-aid process or other aspects of trail development

²⁹ The Court directed DNR to complete EAWs on eight of the nine projects included in the lawsuit. Minnesotans for Responsible Recreation vs. Department of Natural Resources, 651 N.W.2d 53 (Minn. Ct. App. 2002). The opinion was issued October 1, 2002.

³⁰ Rod Sando, DNR Commissioner, memorandum to DNR regional managers and area supervisors, Off-Highway Vehicle Planning Procedures, June 30, 1998; and Raymond B. Hitchcock, Off Highway Vehicle (OHV) System Planning Road Map.

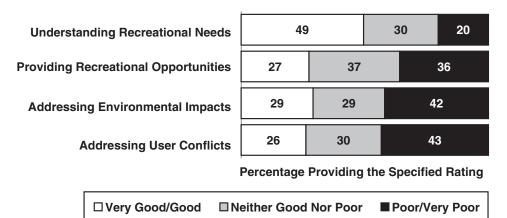
³¹ DNR, Off-Road Vehicle Use in Minnesota, 88-94.

³² We received responses from 1,089 DNR employees and 81 counties.

completed the county survey. Fewer than half of DNR's employees rated the department's OHV trail planning as "good" or "very good," although county officials were somewhat more positive, as Figures 2.1 and 2.2 show. DNR employees were especially likely to report that the department was doing a "poor" or "very poor" job, particularly in addressing user conflicts and environmental impacts. Within DNR, staff from Ecological Services, Wildlife, and Fisheries were most likely to have concerns about how well DNR has addressed environmental impacts, with between 58 and 67 percent rating the department's performance "poor" or "very poor."

In our survey, DNR staff said the department did a better job understanding recreational needs than other aspects of OHV planning.

Figure 2.1: DNR Staff Ratings of DNR's Off-Highway Vehicle Planning, 2002



NOTE: For each question we excluded respondents who (1) indicated they were not at least "somewhat familiar" with DNR's management of motorized recreation or (2) omitted the question or answered "don't know." The number of respondents answering the four questions ranged from N=660 to N=682.

SOURCE: Minnesota Office of the Legislative Auditor, Survey of DNR Staff, June-July 2002.

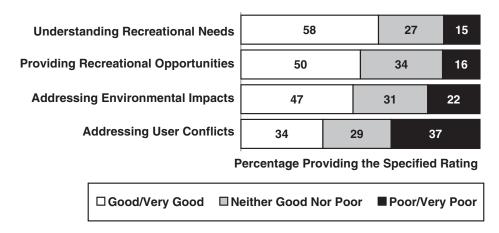
DNR's New OHV Philosophy

Coincidentally or not, the recent lawsuits and media attention concerning the state's OHV trail system has corresponded with DNR reforming the way it deals with OHV trails. Specifically, we found that:

 Changes made in DNR's OHV policy in the last year or two have improved planning and management, at least on paper, but it is too early to determine if these changes will be sufficient to overcome the shortcomings in the OHV planning done so far.

As we discussed earlier in this chapter, OHVs need to be proactively managed. Thus, DNR's new OHV philosophy of "managed use on managed trails" is appropriate, and DNR has taken several steps to articulate this new policy.

Figure 2.2: Ratings by County Officials of DNR's Off-Highway Vehicle Planning, 2002



NOTE: For each question we excluded respondents who (1) indicated they were not at least "somewhat familiar" with DNR's management of motorized recreation or (2) omitted the question or answered "don't know." The number of respondents for the four questions ranged from N=32 to N=35.

SOURCE: Minnesota Office of the Legislative Auditor, Survey of County Officials, June-July 2002.

In 2001, DNR developed a five-step process for planning and reviewing OHV trail projects. First, in early 2001, DNR developed a new five-step process for planning and reviewing projects for OHV trails.³³ These steps include (1) selecting a project and preparing a proposal, (2) determining the need for and preparing an Environmental Assessment Worksheet, (3) coordinating public review, (4) evaluating comments and revising as needed, and (5) putting the project on the ground. This process is still evolving, and in light of budget constraints and other demands on DNR resources, completing the plan will be challenging.

Second, as we already mentioned, DNR is developing guidelines for siting, developing, and maintaining OHV trails. When completed, this document should help DNR formalize and improve its trail management policies. One regional manager from the Trails and Waterways Division, however, described the drafts as a "text book" rather than a "cook book." In his opinion, the draft document is too theoretical and not practical enough.

Third, DNR's northwest region is piloting a system for monitoring trail conditions so that trails needing maintenance or alterations are reported and scheduled for repair. DNR staff record initial and follow-up assessments on a form that records the location, type, and extent of impact. The department intends to implement this system statewide.³⁴

³³ DNR, *Plan Implementation and Modification* (St. Paul, May 16, 2001), 4. According to Brian McCann, DNR OHV planner, drafts were distributed to regional planning teams several months earlier.

³⁴ DNR, Trails and Waterways Division, Northwest Region, *Trail Assessment* (undated). Brad Moore, Assistant Commissioner of Operations, memorandum to DNR field staff, *Direction for OHV Management*–2002 Field Season, May 8, 2002, 4.

PLANNING 29



In recent years, DNR has tried to more actively manage OHV trails.

DNR has initiated a coordinated effort to seasonally close trails to avoid damage.

Fourth, in the spring of 2002, DNR initiated a coordinated effort to close trails in sections of state forests to OHVs during the spring thaw, citing the need to avoid harmful impacts to trail and road surfaces.³⁵ Some closures continued through the summer, and an October 4, 2002 update on the DNR Web site listed trails in 11 state forests and 3 counties as closed.

Fifth, during the 2002 session, the Legislature required DNR to create an OHV task force, consisting of various stakeholders, to make recommendations by January 15, 2003 about a wide range of use and management issues including planning, monitoring and maintenance, environmental concerns, user conflicts, and the financial resources needed to support an OHV system.³⁶

RECOMMENDATION

DNR should fully implement its new concept for OHVs of "managed use on managed trails."

If DNR fully implements this policy, trail managers will be able to (1) use best practices to site and develop trails, including adequate environmental evaluation and public notification, (2) monitor the condition of these trails, and (3) actively manage them, including repairing damage and closing or altering trails as needed. DNR's most recent *Statewide Comprehensive Outdoor Recreation Plan*, which the department released in October 2002, makes a similar recommendation by calling for outdoor recreation managers to determine an appropriate level of impacts that

³⁵ DNR press release, *DNR Closes Wet Trails and Forest Roads to OHVs* (April 10, 2002). DNR has routinely closed sections of state forest roads during the spring thaw.

³⁶ Laws of Minnesota (2002), ch. 351, sec. 33.

recreational activities can have on the state's natural resources and then develop appropriate management actions to ensure that those limits are not exceeded.³⁷

To clarify the need for a formal environmental review, the Legislature should formalize the process.

RECOMMENDATION

The Legislature should require that Environmental Assessment Worksheets be prepared for many types of OHV projects.

Under the Minnesota Environmental Policy Act (MEPA), if a project (1) involves the physical manipulation of the environment, (2) requires one or more permits or governmental approval (including grant funding), and (3) may have the potential to significantly impact the environment, the governmental entity responsible for the project needs to prepare an Environment Assessment Worksheet (EAW). An EAW is a formal screening tool to determine if an Environmental Impact Statement is needed.³⁸ The Minnesota Environmental Quality Board oversees this process and promulgates rules to implement it. The debate over when state law requires an EAW largely deals with the determination that a project may or may not have the potential for significant environmental effects. It was on these grounds that citizens filed a lawsuit against the north central OHV system plans.

MEPA avoids the whole debate over significant impact for certain projects that fall into one of several mandatory EAW categories as defined in the rules for environmental review. For projects that meet specific criteria, an EAW is required without having to show that the project may potentially have a significant impact on the environment. We believe that OHV trail projects should also be a mandatory category for three reasons. First, many projects in other "linear corridors" such as pipelines, transmission lines, and roads are already mandatory categories. Second, as we discussed earlier in this chapter, in many cases, OHV trails may have the potential for significant environmental impact. Third, OHVs are highly controversial and likely to be the subject of lawsuits as demonstrated by the OHV plans. Minnesota could avoid some future litigation and its associated costs and delays by requiring an EAW upfront and making environmental assessment more transparent to the public.

We are not necessarily recommending that all OHV projects receive a mandatory EAW. Projects that will likely have little environmental impact, such as a minor reroute of a designated trail, could be excluded from the mandatory EAW category.

Requiring an "EAW" up front would make environmental assessment more transparent to the public.

³⁷ DNR, Enjoying and Protecting Our Land & Water, Minnesota's 2003-2008 State Comprehensive Outdoor Recreation Plan, Final Draft (St. Paul, October 1, 2002), 35.

³⁸ *Minn. Rules* (2002), ch. 4410.1000, subp. 3. The Minnesota Environmental Policy Act of 1973 is found in *Minn. Stat.* (2002) §116D.

³⁹ Minn. Rules (2002), ch. 4410.4300. The rules also address mandatory categories for environmental impact statements (Minn. Rules (2002), ch. 4410.4400) and exemptions to reviews (Minn. Rules (2002), ch. 4410.4600). Review is discretionary for projects that do not fall into one of these categories.

⁴⁰ Minn. Rules (2002), ch. 4410.4300, subp. 6, 7, and 22.

PLANNING 31

In fact, DNR is already heading in this direction. DNR environmental review staff plan to propose to the Environmental Quality Board criteria for mandatory EAWs and Environmental Impact Statements for OHV trail projects. While we only assessed the need for mandatory EAWs, DNR's consideration of criteria for mandatory Environmental Impact Statements is an appropriate proactive step to evaluate OHV projects.

While the cost of EAWs largely depends on the nature of the projects, some can be very time consuming. The six-page document requires governmental entities (DNR is the responsible governmental unit for most OHV trails) to complete 31 sections, many requiring considerable detail. For example, under one section, the person preparing the EAW must (1) identify fish and wildlife resources and habitats on or near the site, (2) describe how they would be affected by the project, and (3) list any measures to minimize or avoid impacts.⁴¹

SNOWMOBILE PLANNING

We also examined how DNR planned the existing 18,941 miles of designated snowmobile trails. After reviewing DNR's planning documents and interviewing DNR employees, we found that:

• DNR has never had a formal process for planning its snowmobile trail system that even attempted to incorporate and balance the department's key planning elements; yet, this process appears to have served the state relatively well.

As we found in Chapter 1, most snowmobile trails in the state are grant-in-aid trails that local clubs developed (and now maintain) at their own initiative rather than under a formal plan initiated by DNR. As long as the dedicated funding account for snowmobile trails has had enough money, DNR has added grant-in-aid trails proposed by clubs into the system without formally assessing the need for the trail or the impact on the environment.

DNR has done some planning, but it has been informal and reactive. Until 1997, by which time most trails were already developed, Minnesota had no statewide snowmobile plan other than some grant-in-aid funding priorities, such as connecting existing trails and population centers. In 1997, a committee of DNR staff and stakeholders issued a report titled *Statewide Snowmobile Trail System Plan*, which was a list of recommendations and priorities for the trail system. These included (1) providing adequate funding for existing grant-in-aid trails, (2) bringing existing trails that clubs developed on their own into the grant-in-aid system for maintenance support, (3) adding new trails, and (4) modernizing the system. Because of this effort, the state recently added about 2,900 miles of

In the absence of formal planning by DNR, local clubs initiated many snowmobile trails.

⁴¹ Minnesota Environmental Quality Board, *Environmental Assessment Worksheet* (St. Paul, February 1999); http://www.mnplan.state.mn.us/pdf/1999/eqb/eaw.pdf; accessed November 7, 2002.

⁴² Northeastern Minnesota Development Association and Klaers, Powers, and Associates, *The Economic Impact of Snowmobiling in Northeastern Minnesota: Preparing for the Future* (Duluth: Snowmobile Legislative Advisory Committee, December 1989).

⁴³ Minnesota Snowmobile Advisory Committee, 1997 Statewide Snowmobile Trail System Plan (St. Paul: DNR, 1997). An updated 2001 document addressed funding shortfalls. Neither study rigorously addressed the demand for new trails.

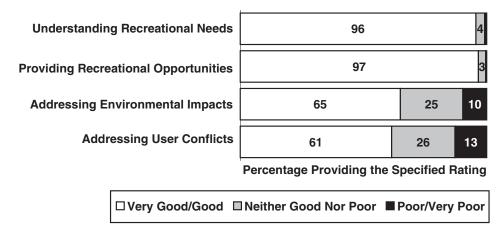
trails that clubs developed on their own into the grant-in-aid system for trail maintenance support.

DNR has also repeatedly surveyed snowmobilers to understand their needs. For example, the department used a phone survey in 1983 and a mail survey in 1986 to better understand who rides snowmobiles and their willingness to travel to use trails. A 1992 study authorized by the Legislature focused on the financial concerns of grant-in-aid clubs. A 1996 study asked snowmobilers about possible conflicts with winter all-terrain vehicle (ATV) riders using snowmobile trails⁴⁴

In contrast to our survey findings for OHV planning, 96 percent or more of DNR field employees and counties said that DNR is doing at least a "good" job addressing user needs in planning snowmobile trails, as shown in Figures 2.3 and 2.4. These DNR employees and county officials were less positive about DNR's handling of environmental concerns and user conflicts in the planning process, although over 60 percent still rated the department's efforts as at least "good." These ratings are considerably higher than those provided for OHVs in Figures 2.1 and 2.2.

In our survey, DNR employees and county officials were very positive about the department's efforts to understand snowmobile rider needs and provide trails.

Figure 2.3: DNR Staff Ratings of DNR's Snowmobile Planning, 2002



NOTE: For each question we excluded respondents who (1) indicated they were not at least "somewhat familiar" with DNR's management of motorized recreation or (2) omitted the question or answered "don't know." The number of respondents answering the four questions ranged from N=690 to N=715.

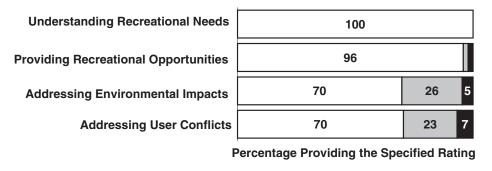
SOURCE: Minnesota Office of the Legislative Auditor, Survey of DNR Staff, June-July 2002.

⁴⁴ DNR, Minnesota Snowmobiling: Telephone Survey of Registered Snowmobile Owners Winter of 1983-84 (St. Paul, July 1984). The study also asked about three-wheeled ATV use on snowmobile trails. DNR, Minnesota Snowmobiling: Results of the 1986-87 Snowmobile Survey (St. Paul, August 1988); DNR, A Survey of Minnesota Snowmobile Clubs: Gauging Satisfaction with DNR Reimbursement Policies for Trail Grooming Expenditures Final Report (St. Paul, 1992); and James C. Vilter, Dale J. Blahna, and Ron Potter, Winter ATVers and Snowmobilers: The Potential for Greater Co-use of Minnesota's Trails (St. Paul: DNR, September 29,1996).

⁴⁵ DNR staff ratings were one or two percentage points lower for most questions after we removed Trails and Waterways staff responses.

PLANNING 33

Figure 2.4: Ratings by County Officials of DNR's Snowmobile Planning, 2002



☐ Good/Very Good ☐ Neither Good Nor Poor ■ Poor/Very Poor

NOTE: For each question we excluded respondents who (1) indicated they were not at least "somewhat familiar" with DNR's management of motorized recreation or (2) omitted the question or answered "don't know." The number of respondents for the four questions ranged from N=43 to N=48.

SOURCE: Minnesota Office of the Legislative Auditor, Survey of County Officials, June-July 2002.

Compared with OHVs, there may be less need to plan for and manage how and where snowmobiles are used.

There are a few explanations why such an informal process for planning snowmobile trails received higher ratings than OHV planning, which was more formal and systematic. First, because snowmobiles are less likely to damage the environment and disturb other people than OHVs are, there is less of a need to plan for and manage how and where they are used. While it is well accepted that all recreational activities have an impact on the environment, snowmobiles avoid more damage than OHVs do because they run on snow and frozen ground. Furthermore, during the winter, other people are more likely to be indoors than in the summer, and a lot of wildlife is hibernating or absent. In fact, according to staff from the Minnesota Environmental Quality Board, no one has ever filed a petition asking DNR to carry out a formal environmental assessment for a proposed snowmobile trail. The same cannot be said for OHV trails.

Second, many snowmobile trails are on private land, especially in the southern part of the state where there is little public land. DNR employees and counties may have fewer concerns about trails on private land for which they have no direct responsibility. In contrast, OHV trails are more likely to be on public land.

⁴⁶ A 1971 Minnesota study found that snowmobiling can change the physical environment of the soil, differentially affecting certain plants. For example, alfalfa appeared to be harmed but grasses were probably not affected and may even have benefited. Wallace J. Wanek, *A Continuing Study of the Ecological Impact of Snowmobiling in Northern Minnesota (Final Research Report for 1971-72)* (Bemidji, Minnesota: Center for Environmental Studies, Bemidji State College, 1972), 18.

⁴⁷ Greg Downing and John Hynes, interview by author, in person, St. Paul, Minnesota, October 6, 2002. Under the Minnesota Environmental Policy Act, citizens can petition for an EAW to be prepared if they gather 25 signatures and present facts showing that something about the location and nature of the project makes it more deserving of review than similar projects. Minnesota Environmental Quality Board, *The Environmental Review Process* (St. Paul, July 2001); http://www.mnplan.state.mn.us/eqb/pdf/envreview.PDF; accessed August 2, 2002.

Snowmobiling has had a positive impact on Minnesota's economy.

Third, while we were told that snowmobiles were the subject of controversy in the 1970s, they have since gained a level of acceptance. 48 For example, people recognize the impact that snowmobiling has on the state's economy. According to a 1996 study by the Department of Trade and Economic Development (DTED), snowmobile-related tourism from non-residents coming to Minnesota added \$16 million to the state's economy and generated \$1.9 million in tax revenues. In addition, DTED estimates that Minnesotans annually spent about \$74 million on snowmobile-related tourism within the state.



Because snowmobiles run on frozen ground and snow, they generally have a lower impact on the environment than OHVs do.

DTED, however, believes that tourism dollars spent by Minnesotans in Minnesota have no net impact on the state's overall economy. Nevertheless, in-state tourism can have a large impact on the economies of specific communities. When snowmobilers from the Twin Cities spend the weekend in the Brainerd area, their tourism dollars contribute to the Brainerd-area economy even if there is a corresponding loss of economic activity in the Twin Cities. Furthermore, if Minnesota did not have a trail system, Minnesota snowmobilers may have spent some of the \$74 million snowmobiling in another state, such as Wisconsin.

⁴⁸ T.B. Knopp and W. Wieland, *Demand and Response: The Case of Snowmobiling in Minnesota* (St. Paul: University of Minnesota, 1983), 9-12.

⁴⁹ Department of Trade and Economic Development, *Economic Activity and Economic Impact of the Snowmobile Industry in Minnesota* (St. Paul, October 1996), 3-5.

Grant-In-Aid Oversight

SUMMARY

The Department of Natural Resources (DNR) needs to improve the oversight that it and local government sponsors provide the grant-in-aid programs for snowmobile and off-highway vehicle trails. While DNR administers the grants, reviews proposals for new trails, and provides technical assistance, the department relies on the local governments that sponsor the trails to oversee the grants and local clubs carrying out the trail work. Nevertheless, most trail sponsors act largely as fiscal agents passing grant funds from DNR to the clubs and provide little or no direct oversight. While this lack of oversight presents a risk to the state, the extent to which clubs have not followed federal, state, and local regulations when developing and maintaining trails is open to interpretation. Through surveys of DNR staff and county officials, we found 32 cases of trails allegedly being developed or maintained in violation of regulations in the last five years. While some violations may be inevitable in a decentralized system that has nearly 20,000 miles of trails, DNR should take steps to prevent violations in the future.

s we discussed in Chapter 1, the grant-in-aid programs for both snowmobiles and off-highway vehicles (OHV) are currently the core of the state's designated trail system for motorized recreation. These grant programs rely on local clubs, under the supervision of local government sponsors, to develop and maintain 91 percent of the state's snowmobile trail mileage and 85 percent of the state's designated OHV trail mileage. Snowmobiles and OHVs have separate grant programs. Over the last few years, allegations have been made that DNR and local government trail sponsors are not providing enough oversight for the grants. In this chapter, we address the following questions:

- What efforts do DNR and the local government trail sponsors make to ensure that trail clubs follow federal, state, and local regulations when developing and maintaining trails?
- Is there evidence that trails are being built and maintained in violation of federal, state, or local regulations?
- Is there adequate oversight for the grant-in-aid program, and how can oversight be improved?

To document and assess the oversight activities of DNR and local government trail sponsors, we (1) reviewed grant-in-aid policies and procedures, (2) reviewed documents relating to land-use regulations, such as wetland policies, (3) interviewed field managers and supervisors from all six DNR regions, (4) surveyed all 87 counties about their oversight activities, and (5) carried out more in-depth interviews with several of these counties. In addition, we surveyed 1,257 DNR field employees and all 87 counties to identify trails that have been developed or maintained in violation of federal, state, or local regulations. Finally, based on these survey results, we selected seven trails with violations and investigated them more closely. These investigations provided us with insights into the nature and circumstances of the violations. Based on these analyses, we make several recommendations to DNR about how the department can improve grant oversight.

GRANT-IN-AID PROCEDURES

There are two types of trail grants—traditional and performance-based. For the traditional grants, DNR signs grant agreements with local government trail sponsors (counties, cities, or townships) stipulating that DNR will provide grant funding and technical assistance in exchange for the trail sponsors developing and maintaining specified trails. In almost all cases, private snowmobile and OHV clubs develop and maintain these public trails for the governmental trail sponsors. In fact, the clubs usually initiate the trail projects and get local units of government to sponsor the trails so that the clubs have access to DNR's grant funds.

For a traditional grant, a club puts together an annual grant application for trail work that will occur in the upcoming year. The application includes (1) an application form, (2) a resolution from a local government specifying that it will sponsor the trail, (3) a map showing the trail alignment and areas that will receive significant trail work in the upcoming year, and (4) a list of the landowners who have granted permission for the trail to be on their land.

After DNR reviews and accepts an application, the department and governmental trail sponsor enter into a grant agreement, and the club can begin its trail work. As the work is carried out, the club must document its efforts by keeping logs of its activities and collecting receipts for purchases over \$100. During the year, the club periodically submits these records to DNR, through the trail sponsor, along with requests for reimbursement. After reviewing and accepting these requests, DNR reimburses the club, again through the trail sponsor, based on a schedule of allowable costs. For example, in fiscal year 2002, the allowable cost for running a Tucker 2000 snow-grooming machine was \$48 per hour. DNR, however, only reimburses the clubs 90 percent of the allowable costs for grooming existing trails

There are two types of grants for OHV and snowmobile trails traditional and performancebased.

¹ We received surveys from 1,089 of the DNR employees and 81 of the counties.



DNR awards grants to clubs to groom snowmobile trails.

and 65 percent of the cost for developing new trails.² The clubs rely on donations of time and money along with support from charitable gambling and other fund raising activities to cover the rest of their costs. For example, while DNR currently pays the clubs \$11.50 per hour for trail-related work, many club members donate their time, which allows clubs to use these funds for other purposes, such as making loan payments for their grooming machines.³

DNR initiated the performancebased grant program in 1997. In 1997, DNR initiated an alternative grant program for maintaining and grooming trails, referred to as performance-based grants, which are available only for snowmobile trails. The application process for this grant program is very similar to the traditional snowmobile program discussed above, but the reimbursement process differs. Rather than getting reimbursed on a periodic basis as detailed work records are submitted, a club gets reimbursed after its trail sponsor certifies that the club has completed its work satisfactorily. Once the

² Information about the grant programs comes from (1) Department of Natural Resources (DNR), *Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual* 2001-2002 (St. Paul, April 16, 2001), and (2) DNR, *Minnesota Trail Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual* (St. Paul, March 2001). The manual for the snowmobile program has been revised for the 2002-2003 snowmobile season and is largely the same as the previous one. DNR, *Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2002-2003* (St. Paul, April 30, 2002). In our study, we typically used the 2001-2002 manual because this was the primary period of our analysis.

³ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2002-2003, 43.

⁴ There are two minor differences in the grant applications for the traditional and performance-based grants. First, under the performance-based grant, the trail sponsor signs a certification form that it has on file agreements from all the landowners granting permission for the trail to be on their land, rather than the list of landowners submitted by the club under the traditional program. In addition, under the performance-based grant, the club submits its grooming logs from the previous year, while under the traditional grants, the previous year's logs were already submitted.

trail sponsor submits to DNR a trail map and a certification that the sponsor has on file all the permission forms from the landowners, the club gets 15 percent of its grant. The club gets another 35 percent once the trail sponsor certifies that the trails are open and available for use. The DNR provides another 25 percent after the trail sponsor certifies that the club has satisfactorily groomed its trails through January 31. The club gets the final 25 percent of its grant after the sponsor certifies that the club has satisfactorily groomed the trails through the end of the season. The clubs and trail sponsors have the choice of applying for the traditional snowmobile grant or the new performance-based grant.

OTHER REGULATIONS AND REQUIREMENTS

There are many other regulations and requirements that clubs must follow in developing and maintaining trails. These can be classified into three primary categories: (1) landowner requirements, (2) water and wetland policies, including the Wetland Conservation Act and DNR's regulation of public waters, and (3) local zoning restrictions.

A wide range of land-use regulations affect trails in Minnesota.

Landowners, particularly public entities that allow trails on their land, may impose a wide range of requirements and restrictions. For example, if a trail goes onto state forest land, the local forester is supposed to inspect the proposed trail alignment and may make adjustments to the alignment, restrict the trail width, or specify how the trail is to be developed. Counties and the federal government may have these and other requirements and restrictions for their land.

Federal, state, and local policies concerning bodies of water and wetlands are extremely complicated with a maze of federal, state, and local agencies administering a patchwork of laws, each often dealing with specific activities in certain types of water bodies and wetlands. Nevertheless, these laws can overlap with each other. The following list identifies the primary water-related laws affecting trail development in Minnesota.

- The federal government has laws, primarily the Clean Water Act of 1972, that regulate wetlands and require permits from the U.S. Army Corps of Engineers for dredging or filling.
- Minnesota's Work in Public Waters Law regulates activities that alter the
 course, current, or cross-section of Minnesota's "public waters," which
 include specified lakes, marshes, and streams. DNR has identified and
 mapped these public waters in the Protected Waters Inventory. Trail work
 in these waters may require a permit from DNR's Waters Division.

⁵ DNR, Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2001-2002 (St. Paul, April 16, 2001). The manual for the 2002-2003 snowmobile season is largely the same as the 2001-2002 manual. DNR, Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2002-2003 (St. Paul, April 30, 2002).



A permit is needed to install a low-water crossing in a public water body.

Minnesota's Wetland Conservation Act of 1991 is a comprehensive law that protects essentially all wetlands not covered under the Work in Public Waters Law. Trail work that fills or drains a wetland may require a permit from a designated local unit of government.

To help citizens through this maze of regulations and permits, DNR, the Minnesota Board of Water and Soil Resources (which oversees the Wetland Conservation Act), and the U.S. Army Corps of Engineers have developed a joint water/wetland application process. While there is a single application, trail projects may still require multiple permits. Furthermore, trail projects that disturb more than five acres of soil also require a stormwater permit from the Minnesota Pollution Control Agency. The threshold for this permit will drop from five acres to one acre on March 10, 2003.8

On top of all this, counties and cities may also have ordinances that affect the development or maintenance of trails for motorized recreation. These could include wetland ordinances that are more restrictive than those specified above or zoning ordinances that regulate how or where trails are developed. For example,

A single, joint application covers federal and state wetland and public waters permits.

⁶ Unspecified author, draft chapter titled "The History of Wetland Regulation" in Wetlands in Minnesota (to be printed by University of Minnesota Extension, late 2002). We received this document from the Minnesota Board of Water and Soil Resources on September 17, 2002. The Work in Public Waters Law is codified in Minn. Stat. (2002) §103G and further elaborated in Minn. Rule (2002) ch. 6115. The Wetland Conservation Act of 1991—Laws of Minnesota (1991) ch. 354—is codified in Minn. Stat. (2002) §§ 103A, 103B, 103F, and 103G and further elaborated in Minn. Rule (2002) ch. 8420.

⁷ DNR, Minnesota Pollution Control Agency, Minnesota Board of Water and Soil Resources, and U.S. Army Corps of Engineers, Minnesota Local/State/Federal Application Forms for Water/Wetland Projects (undated).

Reed Larson, Minnesota Pollution Control Agency, interview by author, telephone conversation, St. Paul, Minnesota, December 3, 2002.

under Minnesota's rules addressing shoreland management, the state requires local units of government to enact a set of zoning ordinances that protect shoreland areas. These ordinances may prohibit the placement of trails next to and parallel to a shoreline. In addition, if a snowmobile trail runs perpendicular to the shoreline and onto a lake, these ordinances may require those developing the trail to receive a permit if the project will remove a large amount of material or vegetation from the shore area. ¹⁰

Local units of government may have a variety of land-use regulations that affect trails. Another example of a local zoning policy is Lake County's requirement that the construction or alteration of any public trail (including grant-in-aid trails on private land) may proceed only after the county's planning commission has approved a conditional land-use permit. The permit process includes a public hearing before the planning commission. The county advertises the hearing by sending a notice to all neighbors within one-quarter mile of the proposed trail, placing ads in the local newspapers, and directly notifying the affected governmental agencies, including the Army Corps of Engineers and DNR Waters Division. In addition, any project (with some exceptions) that disturbs more than 100 cubic yards of soil requires a land-use permit from the county. This requirement applies to all types of land, not just those in wetlands or shorelands.

PROGRAM OVERSIGHT

We examined the extent to which DNR and the local government sponsors oversee the grant-in-aid programs to ensure that trail clubs abide by the programs' requirements and other regulations. We found that:

 DNR and the local government trail sponsors have provided little oversight for the grant-in-aid programs, leaving clubs to largely operate on their own.

Oversight Provided by DNR

To examine DNR's role in overseeing the grant-in-aid process, we reviewed the grant-in-aid manuals developed by DNR, interviewed trail staff in each of DNR's six regions, and reviewed grant-in-aid files maintained in each regional office. In our examination, we found that:

 DNR has taken an indirect and ad hoc approach to monitoring the trail work carried out by the clubs.

⁹ Minn. Rule (2002) ch. 6120.2500 - 6120.3900 and Minn. Stat. (2002) §§ 103F.201 - 103F.221.

¹⁰ Bob Merritt, DNR Waters Division, interview with author, telephone conversation, St. Paul, Minnesota, November 4, 2002.

¹¹ Lake County Ordinances, Sections 6.10.

¹² Dick Spigel, Lake County Land Use Administrator, interview by author, in person, Two Harbors, Minnesota, September 4, 2002.

¹³ Lake County Ordinances, Sections 6.11-6.12. Furthermore, if the project disturbs more than 1,000 cubic yards of soil, it requires a *conditional land-use permit* from the county, which involves a public hearing.

DNR's grant-in-aid documents do not clearly state the department's role in overseeing the clubs.

DNR's grant-in-aid program documents do not clearly state the department's role in overseeing the clubs and their work. While the background sections of the grant-in-aid manuals for the traditional snowmobile and OHV grants mention that DNR is supposed to directly monitor the trail work of the clubs, the body of the manuals do not refer to any direct monitoring by DNR. ¹⁴ In fact, the grant agreements signed by DNR and the local government trail sponsors state that the sponsors are responsible for the development and maintenance of the trails and that DNR's only responsibility to is to give "technical assistance...[and] provide funds to the local unit of government." ¹⁵

When we interviewed regional managers and supervisors in each of DNR's six regions about their role in monitoring the trail work of the clubs, we found that:

• In general, DNR relies on complaints to monitor the work of clubs, but it has no formal process for tracking and addressing complaints.

Across the state, trail staff told us that direct oversight is primarily the responsibility of the local government sponsors and not DNR's responsibility. Not only do the grant agreements make the sponsors primarily responsible, but the Trails and Waterways Division does not have enough personnel to monitor every trail in the state. Thus, DNR trail employees often rely on members of the club receiving the grant, other trail clubs, landowners, and concerned citizens to be their monitors and report problems. For example, one regional manager within the Trails and Waterways Division told us that someone would complain if something were going wrong. He described a system that does not need a lot of oversight because of peer pressure among clubs to efficiently provide good trails. In addition, the clubs need to keep landowners happy because the landowners could withdraw their permission for the trails to go on their land.

Despite the reliance on complaints, DNR trail employees from across the state told us that they generally do not keep a formal record of them. When a complaint arises, they just refer the person making the complaint to a club representative, or they may call the club themselves in order to resolve the issue. Some DNR trail employees told us that under certain circumstances they have included information about a complaint in a club's grant-in-aid file, especially if the complaint is ongoing. But this is not the typical practice. DNR does not have a process for logging and tracking complaints about a club over time or for verifying that complaints have been addressed and resolved.

DNR staff occasionally inspect trails.

Nevertheless, trail staff occasionally inspect the trails. While DNR does not have a formal inspection process, DNR trail employees informally inspect trails while riding them and carrying out other duties, such as providing technical advice to

¹⁴ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2001-2002, 5; and DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 7. The snowmobile manual states that DNR is to monitor "trails for actual performance of reimbursed activities," while the OHV manual states that DNR is responsible for "environmental monitoring of use areas and trail activities ..."

¹⁵ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2001-2002, 50; DNR, Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2001-2002, 20-21; and DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 42.

the clubs. In addition, staff members from one region told us they try to ride new trails shortly after they are built. Other staff mentioned occasionally inspecting trails in response to complaints or after receiving a particularly large request for reimbursement.

Although DNR trail employees typically do not monitor the actual trail work of the clubs, they do collect, review, process, and retain various grant-in-aid documents, including (1) grant applications, (2) trail maps, (3) lists of landowners who are allowing trails on their land, (4) resolutions from local units of government stating that they will sponsor trails, (5) grant agreements, (6) requests for reimbursement, (7) invoices for purchased items, and (8) work and grooming logs. For snowmobile performance-based grants, DNR collects the certifications of completed work from the local government trail sponsors instead of the requests for reimbursement and other documentation of completed work.

We reviewed 62 of these grant-in-aid files from around the state for fiscal year 2002 (10 to 12 from each of the six regions 16) and found that:

 Although DNR's field offices generally kept proper documentation for the grant-in-aid programs in fiscal year 2002, they did not consistently (1) collect from each club an up-to-date list of landowners or (2) retain maps showing the trail alignment changes and location of major trail work.¹⁷

Landowner lists allow DNR to know who is directly affected by trails. As Table 3.1 shows, we found that 39 percent of the files for the traditional snowmobile and OHV grants were missing an up-to-date list of landowners. These landowner lists are supposed to include the name of the owner and a legal description of the property's location. Keeping an up-to-date list of landowners allows DNR to know who is affected by the trails that the department is financing. This is important if a problem or complaint arises. Under the performance-based snowmobile grants, DNR collects certifications that the land-use agreements are on file with the local government sponsor. In all the cases concerning performance-based grants that we reviewed, DNR collected and retained all of these certifications.

In addition, we found that just over 60 percent of the grant-in-aid files that we reviewed were missing a map of the trail alignment. These maps not only show the location of the trail but areas that will receive significant trail work in the upcoming year, including changes to the trail alignment and bulldozer work. For all the files that had a map missing, DNR trail staff told us that they had collected only one trail map from the club and had passed it on to DNR's central office in

¹⁶ We randomly selected ten grants from each region. Because the southeast region was our first site visit, we reviewed 12 files to acquaint ourselves with the format and structure of the files.

¹⁷ This review was purely a compliance review for collecting and retaining the documents. We only checked that a document was on file and did not verify if the information in the document was accurate or complete.

¹⁸ We counted a stack of individual land-use agreements as a substitute for the formal list. In addition, some of the landowner lists were undated, and we counted them as being on file as long as they were with the fiscal year 2002 application materials. Finally, some of the lists lacked a legal description of the property, but we still counted it as being on file. The grant-in-aid manuals contain conflicting information. While the grant agreement requires the governmental trail sponsors to submit each land-use agreement to the state, the application procedures in the manual only refer to the annual submission of the landowner lists.

Table 3.1: Number of Regional DNR Files Missing Grant-in-Aid Documents

	Number of Reviewed	Percentage of Reviewed
Type of Grant and Document	Files Missing the Document	Files Missing the Document
Traditional Snowmobile and OHV Grants		
Application form	0	0%
Resolution from local sponsor	0	0
Trail map	22	58
List of landowners	15	39
Grant agreements	0	0
Requests for reimbursement	0 0	0
Worksheets documenting work activities Grooming logs	0	0 0
Invoices	0	0
Total Number of Traditional Grants Reviewed	38	N/A
Performance-Based Snowmobile Grants		
Application form	0	0%
Resolution from local sponsor	2	8
Trail map	16	67
Landowner certification form	0	0
Grooming logs from previous year	6	25
Grant Agreement	0	0
Trail completion certification form	0	0
Certification of satisfactory grooming for first half of the	0	0
Season Contification of potiofostory grooming for accord half of	0	0
Certification of satisfactory grooming for second half of the season	0	0
Total Number of Performance-Based Grants Reviewed	24	N/A
SOURCE: Office of the Legislative Auditor.		

Trail maps that are submitted with grant applications show areas that will receive substantial trail work.

St. Paul so that the department could compile the individual trail maps from across the state into a set of statewide trail maps. In some regions, such as southeastern Minnesota, the trail staff had tried to collect multiple copies of the maps so that the field staff could keep a copy in addition to the one that they passed on to the central office in St. Paul. We believe that it is important for the field offices to keep a copy of the map submitted with the grant application because field staff should have readily available information about trail segments that will receive significant work.

When DNR reviews an application to develop a new snowmobile or OHV trail, the department routes the proposal through all of its divisions for review and comment. For example, the Wildlife Division will review a trail proposal and comment on the effects that it could have on wildlife. However, we found that:

• DNR's process for reviewing new grant-in-aid trail proposals lacks consistency and structure.

Under DNR's grant-in-aid policies, all divisions within DNR are supposed to review applications for new trail developments, while ongoing maintenance

projects are not reviewed. 19 However, the distinction between a "new trail development" and "maintenance project" is ambiguous in DNR's program documents for the snowmobile program. Specifically, the snowmobile grant-in-aid manual defines a new trail development, among other things, as the addition of "a section of trail onto an existing GIA [trail]...[but] does not include relocating a short section of an existing trail," while the manual defines a maintenance project, among other things, as the relocation of a "section of trail currently in the GIA program."²⁰ When we asked staff from each of DNR's six regions when the relocation of a section of an existing trail is a "new trail development" or "maintenance project," we received several different and inconsistent answers. Staff in two regions said that the relocation of five or more miles of trail is a new trail development, while anything less is a maintenance project. Staff in two other regions said that there is not a precise standard but the decision is based on the judgment of trail staff. For example, one staff person said that a typical cutoff point for a reroute to be considered a new trail development is one or two miles, but if the reroute goes through an environmentally sensitive area, the cutoff would be shorter. The program manual for the OHV program is much clearer and defines the relocation of one mile or less of an existing trail as a maintenance project. Anything longer is a new trail development.²¹

In addition, trail staff from across the state described the review process as informal and occurring in the area offices within each region. When we asked the regional managers from DNR's divisions other than the Trails and Waterways Division about their reviews of new trail proposals, a few were not aware that their divisions did these reviews. Although the reviews may occur within the area offices and never rise up to the regional manager, the fact that some regional managers were unaware of these reviews confirms their informal nature.

DNR employees from these other divisions also raised several other concerns about the review process, including:

- Trails and Waterways employees do not consult with other divisions until after the trail alignment has been largely decided, which leaves little room for addressing the concerns of the other divisions;
- Trail proposals do not provide sufficient information to carry out an adequate assessment;
- These other divisions do not have sufficient staff and resources to thoroughly review the proposals;
- Trails and Waterways Division employees, who coordinate the reviews, do not take environmental protection and the concerns of the other divisions seriously; and

DNR staff have several concerns about the review process for grant-in-aid trail proposals.

¹⁹ DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 12. While the manual for the snowmobile program does not outline a similar process, we were told by staff in each of DNR's regions that a similar process is followed for snowmobiles.

²⁰ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2001-2002, 25 and 31.

²¹ DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 10 and 12.

• Divisions within DNR sometimes appear to contradict each other. For example, one division may tell a club it has no problems with a proposed trail, while another division may later raise concerns.

As we discuss at the end of this chapter, DNR needs to formalize its review process and provide a single decision to the public.

Finally, we compared DNR's oversight of the snowmobile and OHV grants with other grants and found that:

• DNR's lack of oversight of the snowmobile and OHV grants is typical of the oversight provided to other grants issued by the state.

In January of 2002, our office issued a report on *Minnesota Grants Administration*.²² To prepare that report, our office examined a sample of 50 grants from a range of departments and programs and found loose oversight in general. For 32 of those 50 grants, the granting agencies gave the grantee all or a portion of the grant amount in advance of the services being provided. Only 14 grants were paid solely through reimbursements based on the performance of measurable tasks.²³ In contrast, DNR only pays the snowmobile and OHV grants once the grantee has performed its work and either submitted (1) invoices of purchased items and logs of the work completed or (2) certifications from the trail sponsor that the work was satisfactorily completed.

Of the 50 grants in the earlier study, the granting agency did not independently verify the financial and program information submitted by the grantee in 17 cases. ²⁴ With respect to the snowmobile and OHV grants, DNR typically does not independently verify that the trail work is actually carried out. The department relies on the local government trail sponsors, who are the grantees, to verify the work of the clubs, who are sub-grantees. However, as the next section of this report will show, most counties rarely or never verify the work being performed by the clubs.

Michigan reports that it provides significant oversight for its snowmobile grant program. Through interviews, we also investigated the extent to which snowmobile and OHV grants receive oversight in North Dakota, South Dakota, Iowa, Wisconsin, and Michigan. For the most part, the five states immediately bordering Minnesota provide a similar level of oversight. However, officials from the state of Michigan r`eport that they provide a higher level of oversight for their snowmobile grant program than Minnesota provides for its program. Michigan state employees inspect all new trail developments before the state will reimburse the snowmobile club for the work. In addition, these state employees (1) inspect all the trails before the season starts to ensure that the clubs have satisfactorily completed pre-season maintenance (such as brushing and signing) and (2) ride each trail at least once during the season to inspect the clubs' grooming efforts.²⁵

²² Office of the Legislative Auditor, Minnesota Grants Administration (St. Paul, January 31, 2002).

²³ Ibid., 15.

²⁴ Ibid., 21.

²⁵ Dan Moore, Michigan Forestry Management Division, interview by author, telephone conversation, St. Paul, Minnesota, October 30, 2002.

Oversight Provided by Local Government Trail Sponsors

The grant-in-aid contract makes the local government sponsor the primary overseer of trail work.

As we have already pointed out, the grant agreements for the snowmobile and OHV programs make the local government trail sponsor legally responsible for the development and maintenance of those trails. In addition, in all six of DNR's regions, DNR trail employees told us that they expect counties to be the primary overseer of the clubs. To assess the level of oversight provided by the trail sponsors, we surveyed all 87 counties in Minnesota and asked them questions about the type and frequency of oversight that they provide. While cities and townships can also sponsor trails, we did not include them in our survey largely because they only sponsor 6 percent of the state's grant-in-aid trail mileage for snowmobiles and 14 percent of the OHV mileage. From our surveys, we found that:

• Most counties have acted largely as fiscal agents, passing funds from DNR to the clubs and providing very little, if any, direct oversight.

Table 3.2 lists various oversight activities and the extent to which counties reported doing them. Only about one-third of the counties that sponsor trails provide the types of oversight activities listed in Table 3.2 at least sometimes; the rest provide them rarely or never. This low level of oversight is particularly troublesome for the performance-based grants because the program relies on the trail sponsors to certify that the clubs are spending state money and carrying out their work appropriately.

The level of oversight varies across the state. As Table 3.3 shows, the snowmobile clubs receiving a traditional grant in the southern half of the state generally receive a lower level of oversight from the counties than the clubs in the north receive. With respect to most of the oversight activities listed in Table 3.3, the southwest and southeast regions rank fifth or sixth out of DNR's six regions in frequency of oversight.

Counties in DNR's northern regions are more likely to have land (typically tax-forfeiture land) directly managed by the county. In many cases, these counties have assigned the responsibility for overseeing the DNR trail grants to the county land manager and his or her staff, which may explain the higher level of reported oversight in the northern regions. All 13 of the counties in Minnesota that have a lands or natural resources department are in the three northern regions. In fact, roughly 50 percent of the counties with a lands or natural resources department said that they at least sometimes carry out the oversight activities listed in Table 3.2, which is higher than the statewide average.

To get a better sense of the regional variation in oversight activities, we interviewed several counties to ask questions more detailed than those in our survey. Of these counties, the two reporting the highest level of oversight, Cass and Lake, are in northern Minnesota and have a lands department that is directly responsible for the grant-in-aid programs. In both of these counties, staff members from the lands department periodically check the clubs' work. The counties reporting a lower level of oversight have the grant-in-aid program

Table 3.2: Percentage of Counties Providing Direct Grant Oversight at Least Sometimes

Percentage of Counties Providing the Specified Type of Oversight at Least Sometimes, by Type of Grant

	or Oversight at Least Connettines, by Type or Chart				
	Performance-				
	Traditional	Based			New
In the Last Five Years,	Snowmobile	Snowmobile	New	OHV	OHV
How Frequently	Maintenance	Maintenance	Snowmobile	Maintenance	Trail
Did the County:	Grant	Grant	Trail Grant	Grant	<u>Grant</u>
Review work plans before the work was done?	28%	29%	31%	30%	33%
Inspect work while it was being done?	22	29	22	30	33
Inspect work after it was completed?	33	32	33	40	33
Verify that government approvals and permits were obtained?	39	35	19	30	33
Verify requests for reimbursement?	44	N/A	36	40	33
Audit the financial records of clubs?	N/A	9	N/A	N/A	N/A

NOTE: We asked each county that reported it had sponsored the specified grant in the last five years to indicate the frequency that it had provided the listed oversight activities. The possible responses were: (1) "always or almost always," (2) "usually," (3) "sometimes," (4) "rarely or never," or (5) "don't know." If a county indicated that it sponsored the specified type of grant but did not answer the oversight questions or said "don't know," we categorized the county as not providing the oversight at least sometimes. In addition, we automatically classified 18 counties as "rarely or never" providing the specified oversight because they had their local clubs help them fill out the survey. We called all 18 counties and found that in each of these cases, the county "rarely or never" provided the oversight, regardless of what the clubs indicated on the survey. This automatic classification only applied if the county reported that it had sponsored the specified type of grant.

The N for the traditional snowmobile maintenance grant questions was 64, while it was 34 for the performance-based maintenance grant questions and 36 for the new snowmobile trail grant questions. The N for the OHV maintenance grant questions was 10, while it was 3 for the new trail grant questions.

N/A means "not applicable." We did not ask this question for this type of grant.

SOURCE: Office of the Legislative Auditor, Survey of County Officials, June-July 2002.

overseen by a department, typically the county auditor's office, which lacks field staff to directly monitor trail work.

Cass County has a reputation for providing substantial grant oversight. Cass County, which has the reputation across the state for providing the most oversight of any snowmobile trail sponsor, has a very systematic approach to snowmobile oversight. Right after a snowmobile trail has been groomed, the groomer operator calls the county with the information, which is entered into a database that tracks grooming activity. Periodically, the county Lands Department assigns a staff member to inspect the work right after it is finished. Cass County also has an environmental evaluation process for trails in the county. The Lands Department passes any new trail plan to the county's Environmental Services Department for an evaluation, including trail plans with a minor reroute to an existing trail if the new alignment involves a wetland or other environmentally sensitive area. Cass County officials told us that the county became more

Percentage of Counties Providing the Specified

Table 3.3: Regional Variation in County Oversight for Traditional Snowmobile Maintenance Grants

According to our survey, counties in the southern regions of the state generally provide less oversight than those in the north.

	Percentage of Counties Providing the Specified					
	Type of Oversight at Least Sometimes, by Region				Region	
In the Last Five Years, How	North-	North-	North	South-	South-	_
Frequently Did the County:	west	<u>east</u>	<u>Central</u>	west	<u>east</u>	<u>Metro</u>
Review work plans before the work was done?	21%	50%	25%	30%	25%	20%
Inspect work while it was being done?	14	50	38	9	25	40
done:	14	30	30	9	23	40
Inspect work after it was completed?	36	67	50	17	25	40
Verify that government approvals						
and permits were obtained?	43	50	38	30	25	80
Verify requests for reimbursement?	57	50	63	26	38	60

NOTE: We asked each county that reported it had sponsored the traditional snowmobile maintenance grant in the last five years to indicate the frequency that it had provided the listed oversight activities. The possible responses were: (1) "always or almost always," (2) "usually," (3) "sometimes," (4) "rarely or never," or (5) "don't know." If a county indicated that it sponsored this type of grant but did not answer the oversight questions or said "don't know," we categorized the county as not providing the oversight at least sometimes. In addition, we automatically classified 18 counties as "rarely or never" providing the specified oversight because they had their local clubs help them fill out the survey. We called all 18 counties and found that in each of these cases, the county "rarely or never" provided the oversight, regardless of what the clubs indicated on the survey. This automatic classification only applied if the county reported that it had sponsored the traditional snowmobile maintenance grant.

The *N* for the traditional snowmobile maintenance grant questions was 64 for the entire state and ranged from 5 in the metro region to 23 in the southwest region.

SOURCE: Office of the Legislative Auditor, Survey of County Officials, June-July 2002.

proactive in its oversight of the grant-in-aid process when staff became concerned about the accuracy of the grooming logs being submitted by snowmobile clubs. While they did not have any proof of clubs submitting false documents, they suspected that clubs were submitting requests for reimbursement for work that was not actually performed. The Cass County officials also reported that their approach is more costly than the approach that many other counties are willing or able to undertake. In fact, Cass County dedicates 5 percent of its net timber sale revenue to a trails fund, which helps pay for the county's trail program.²⁶

Lake County's approach is less formal than Cass County's. Staff members from the county Lands Department do not inspect the trails for that sole purpose; nevertheless, they periodically inspect the trails while carrying out other forestry-related work. For example, they may stop at the point where a snowmobile trail crosses a road to make sure that the club has groomed the trail. In other cases, a staff member may ride a trail and informally inspect it while getting back into an area where the county is selling timber. In addition, as we discussed earlier in this chapter, Lake County also requires a conditional land-use

²⁶ Norm Moody and Joel Lemberg, Cass County Lands Department, interview by author, in person, Backus, Minnesota, August 13, 2002.

²⁷ Tom Martinson, Lake County Land Manager, interview by author, in person, Two Harbors, Minnesota, September 4, 2002.

Dodge County reports that it uses the Sheriff's Department to verify that clubs are grooming trails. permit from the county and a public hearing for any trail in the county, including a grant-in-aid trail on private land.

Other counties have found alternative ways to provide at least some direct oversight. In Dodge County, the sheriff's department receives a grant from DNR to enforce laws and rules pertaining to the operation of snowmobiles. While this enforcement grant does not cover the inspection of grooming work done by the clubs, the sheriff's department informally inspects the trails while riding them and carrying out their enforcement duties. The Dodge County finance director told us that before she signs off on a snowmobile club's request for reimbursement, she gives the sheriff's department the club's grooming logs to make sure that the reported grooming activity is consistent with what the sheriff's department had seen when they were riding these trails.²⁸

Nevertheless, most counties are like Rice County and provide very little or no direct oversight. The Rice County Auditor administers the grant and acts purely as a fiscal agent who (1) reviews and signs off on the grant paperwork, (2) passes money from DNR to the clubs, and (3) provides no direct oversight or verification of the work being done. According to the Rice County Auditor, the county does not have the staff to provide direct oversight and would need additional funding to take on this role.²⁹

Several counties, especially in southwestern Minnesota, have developed snowmobile trail associations that represent all the clubs in the county and coordinate a single trail grant that all the clubs share. When we interviewed some of these counties, they told us that the county acts as a fiscal agent and relies on the people in charge of these associations to inspect and verify the work being carried out by the individual clubs in the association. For example, Todd County relies on a paid employee of the Todd County Snowmobile Association, and not a county employee, to inspect and verify the work of the clubs that are part of the association. In our opinion, this person appears to be accountable to the snowmobile association and clubs and not the county.

TRAILS WITH VIOLATIONS OF REGULATIONS

In assessing the consequences of the low level of oversight provided by DNR and the local government trail sponsors, we concluded that:

 While weak grant oversight presents a risk to the state, the extent to which trail clubs are not following federal, state, and local regulations is unclear and open to interpretation.

²⁸ Donna Welsh, Dodge County Finance Director, interview by author, telephone conversation, St. Paul, Minnesota, September 26, 2002.

²⁹ Fran Windschitl, Rice County Auditor-Treasurer, interview by author, telephone conversation, St. Paul, Minnesota, September 26, 2002.

³⁰ Bernard Mumm, Trail Administrator for the Todd County Snowmobile Association, interview by author, telephone conversation, St. Paul, Minnesota, August 28, 2002; and Karen Bush, Todd County Auditor, interview by author, telephone conversation, St. Paul, Minnesota, August 28, 2002.

We surveyed 1,257 DNR field employees and all 87 counties to identify trail work with regulatory violations. In an attempt to measure the extent to which trails have been developed and maintained in violation of regulations, we surveyed 1,257 DNR field employees and all 87 counties and asked them to identify any trail that was state-funded and developed or maintained "inappropriately" in the last five years. We defined inappropriate trail work as activities that violated a federal, state, or local law, rule, or other regulation, such as a grant-in-aid requirement or a provision of the



In our survey, we were told about a snowmobile trail being widened beyond the 16 feet specified by the landowner in the land-use agreement.

Wetland Conservation Act. In addition, we received information about trails with violations from concerned citizens, such as representatives of Minnesotans for Responsible Recreation. Through this process, we were told about 32 cases of trail work for snowmobiles or OHVs that allegedly violated at least one regulation. This may or may not represent all of the violations in the past five years. Our review was contingent on violations being identified by DNR employees or the counties and on these parties reporting the violations in our survey. In addition, because of limited staff, we only investigated 7 of these 32 cases.

Furthermore, the number of violations needs to be put in some context. First, Minnesota uses a decentralized system that has relied on the work of clubs, and in many cases volunteers, to develop and maintain 17,206 miles of snowmobile grant-in-aid trails and 811 miles of OHV grant-in-aid trails. For example, 100 local units of government currently sponsor grant-in-aid trails for snowmobiles and over 200 snowmobile clubs receive grant funding. Furthermore, as we discussed in the beginning of this chapter, regulations that affect trail development and maintenance can be complex. Thus, we are not surprised by some violations.

We were told about 32 cases of trail work that involved violations. Despite some violations, snowmobile clubs provide a cost-effective service to the state.

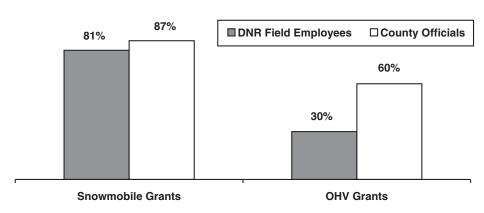
Second, we found that:

 Snowmobile clubs have provided a cost-effective service to the state and their communities.

As we discussed at the end of Chapter 2, snowmobile trails annually generate millions of tourism dollars for the state's economy. Most of this economic activity can be attributed to the grant-in-aid system and the clubs. Clubs have developed and now maintain 91 percent of the state's mileage for designated snowmobile trails. This work is done at a lower cost than if DNR did the work itself. For example, we estimated that DNR spent about \$43 per hour to have the clubs groom their trails last year, while the department spent about \$70 per hour to do similar work itself. If DNR, rather than the local clubs, had groomed the 17,206 miles of club-administered trails on average twice a week for a 12-week snowmobile season statewide, the state would have spent roughly \$2 million more than it did on grooming.³¹ This analysis only includes grooming costs and excludes other types of necessary trail work and administration.

Third, the vast majority of county officials and DNR employees think that DNR is doing a good job overseeing at least the snowmobile program. In the surveys discussed above, we asked DNR field staff and county officials to assess how well the department is overseeing the grant-in-aid process. As Figure 3.1 shows, over

Figure 3.1: Percentage of Survey Respondents Indicating that DNR is Doing at Least a Good Job Overseeing the Grant-in-Aid Program



NOTE: For DNR employees, N=615 for snowmobile grants and 484 for OHV grants. For county officials, N=46 for snowmobile grants and 25 for OHV grants. We excluded respondents who (1) indicated that were not at least somewhat familiar with DNR's management of motorized recreation, (2) did not answer the question, or (3) indicated that they did not know how well DNR was overseeing these programs.

SOURCE: Office of the Legislative Auditor, Survey of DNR Staff and County Officials, June - July 2002.

³¹ This assumes a grooming speed of five miles per hour. The 17,206 miles of trail include 14,306 miles of grant-in-aid trails during the 2001/2002 snowmobile season and another 2,900 miles of club trail that were being used at that time but were not incorporated into the grant-in-aid system until the 2002/2003 season. The DNR cost figure is based on the purchase price, maintenance and operating costs, and DNR labor costs for five grooming machines in northeastern Minnesota. The cost figures are an illustrative example rather than a precise estimate.

81 percent of counties and DNR field employees think that DNR is doing a good job overseeing the snowmobile grant-in-aid program, but only 30 percent of DNR field employees believe that DNR is doing a good job overseeing the OHV grant program. Yet, the oversight process for the snowmobile and OHV grant programs has been essentially the same. The difference in opinion may be explained by the fact that several DNR staff told us that the grant-in-aid program is acceptable for most snowmobile trails but not appropriate for many OHV trails. They think OHV trails should be directly managed by DNR because clubs lack the technical expertise to develop and maintain OHV trails, which is a more difficult task than managing a snowmobile trail.

Nevertheless, the state should strive for having no violations. To determine if DNR, the trail sponsors, or the clubs can take additional steps to prevent violations, we examined how and why these violations occurred by categorizing the 32 cases of trails with alleged violations and picking 7 to investigate. Of the 32 cases, 24 applied to snowmobile trails and 5 pertained to ATV trails. In the remaining 3 cases, the person making the allegation did not specify the type of trail. As Table 3.4 shows the primary violations were: (1) not complying with

Violations of land owner permission have been the primary trail infraction.

Table 3.4: Breakdown of Trail Development and Maintenance Violations

	Number of <u>Violations</u>
Violation of public landowner permission	11
Violation of private landowner permission	4
Violation of wetland regulations	7
Violation of public waters regulations	6
Other specific violations	7
Ambiguous allegations ^a	6

NOTE: Some trails have more than one violation.

^aThe ambiguous allegations included statements like, "The club developed the trail without proper permits"

SOURCE: Office of the Legislative Auditor.

conditions imposed by the landowner—primarily trail location and width, (2) violating wetland regulations, and (3) violating public waters regulations. The survey respondents also identified trails that they considered "inappropriate" but were not violations of federal, state, or local regulations. Thus, we did not include these trails in our tabulation. The other problems cited by survey respondents usually involved poor trail siting, design, and/or maintenance.

In Appendix B, we provide brief descriptions of the seven trails with violations that we investigated more closely. We chose these cases to represent trails from different parts of the state and with different types of violations. In addition, in most cases, these trails received numerous references in our surveys. Table 3.5 summarizes the types of violations in these seven cases.

³² In our analysis, we only included county officials and DNR employees who said that they were at least somewhat familiar with DNR's management of motorized recreation.

We did seven case studies to more closely examine violations of trail regulations.

Table 3.5: Summary of Violations for the Seven Case Studies

	Violation of Public Landowner <u>Permission</u>	Violation of Private Landowner Permission	Violation of Wetland Regulations	Violation of Public Waters Regulations	Other Issues
Weaver Snowmobile Trail in Wabasha County	✓				
Plainview-Kellogg Snowmobile Trail in Wabasha County	е	✓		✓	
Hardwood Trail Blazers in Mahnomen County		✓			
Two Inlets Snowmobile Trail in Becker County	\checkmark		✓	✓	
Forest Riders ATV Club and Clover Township ^a					\checkmark
Moose Walk Snowmobile Trail in Lake County ^b			✓		\checkmark
Heartland State Trail in Cass County			✓		

^aIn this case, a person alleged that the ATV club received reimbursement from DNR for a member to attend Clover Township board meetings as a representative of the club when the township was paying the same person to be at the same meetings as the township clerk. While this is a questionable practice, it is not forbidden under the grant-in-aid program.

^bBesides filling wetlands, the Silver Trail Riders snowmobile club failed to get a land-use permit from the county.

SOURCE: Office of the Legislative Auditor.

From these case studies, we developed some findings. First,

• In several cases, clubs did substantial trail work without first notifying or getting permission from the landowner.

Four of the seven cases involved a club doing work or making changes without first notifying or getting permission from the landowner. In the Plainview-Kellogg case, the club installed a permanent bridge over the East Indian Creek without getting permission from the landowner, while in the Mahnomen County case, the club made the trail wider than the landowner specified in the agreement allowing the club to use his land. (The Plainview-Kellogg trail was not a grant-in-aid trail at the time of the work but is now becoming one.) In both the Weaver and Two Inlets cases, DNR officials told us that the clubs did not get permission from the department's Forestry Division for the trail alterations that the clubs carried out in state forests.

In addition, we found that:

• At times, DNR has taken a hands-off approach to dealing with complaints from private landowners.

In the Mahnomen County case, where the club made the trail wider than the landowner specified in the land-use agreement, the landowner complained to DNR about the trail work. However, the DNR employee in charge of this trail just referred the landowner to a club representative without taking the time to ensure that the issue was resolved. Because of bad contact information from the DNR, the landowner told us that he spent several weeks trying to track down those responsible for the work.

During our interviews of trail employees from all six of DNR's regions, we found that this was a common approach to dealing with complaints. In addition, when we asked a top manager at the central office of the Trails and Waterways Division about complaints from landowners, he said that the land-use agreement and the work that is carried out are between the landowner and club and do not involve DNR. However, we believe that these cases are an issue for DNR because the trails are part of DNR's designated trail system and financed largely with state funds. Furthermore, as Table 3.4 showed, violations of landowner conditions were the most frequent type of violations reported in our survey.

When we were investigating the Moose Walk case, which involved a club filling in wetlands with dirt, we found that:

• Identifying a wetland requires expert training and may be beyond the expertise of an untrained club member.

When clubs develop or modify trails, particularly on private land, the DNR and trail sponsors typically rely on club members to identify wetlands. If done appropriately, identifying a wetland involves examining the water content of the soil, the type of soil, and the type of vegetation in an area. It is far more complex than looking



Some wetlands in forests may look perfectly dry.

for boggy areas with cattails growing. An area that looks perfectly dry to a layperson can be a wetland based on the type of vegetation growing in the area.

The Board of Water and Soil Resources (BWSR) teaches a five-day course in identifying and measuring wetlands, which is referred to as wetland delineation. Typically, people who take the BWSR course have a background in soil, water, or vegetation resources. BWSR is now in the process of trying to establish a certification requirement for wetland delineators.³³

often just pass complaints about trail work on to the clubs doing the work.

DNR staff

³³ John Jaschke, Board of Water and Soil Resources, interview by author, telephone conversations, September 17 and 24, 2002.

When we were investigating the work of the Forest Riders ATV club and the Two Inlets trails, we found that:

• Some local units of government are not in a good position to sponsor the trails currently under their purview because they have a conflict of interest or the trail is outside their jurisdiction.

Governmental trail sponsors need to maintain an arms-length relationship with the clubs they oversee. Clover Township in Hubbard County sponsors an ATV trail that is administered by the Forest Riders ATV club and that goes into other jurisdictions, including Becker County. Furthermore, we were told by an official from the ATV club that four of the township's five officers were members of the club at one time, including the township clerk, who is the current secretary/bookkeeper for the club. As the township clerk, this person has been responsible for signing off on the club's financial records as part of the grant process. This person has been overseeing and signing off on her own work. Generally accepted criteria for auditing a program's internal controls call for one person to prepare the books and another person to review and sign off on them.³⁴ In addition, we came across records showing that the Forest Riders ATV club was receiving compensation from the grant-in-aid program for the secretary/bookkeeper to attend Clover Township board meetings on behalf of the club while she was also being paid by the township to be at the same meetings as the township clerk. We question whether Clover Township has been in a position to provide appropriate "arms-length" oversight over the Forest Riders ATV club.

We found other cases in which a county sponsors a trail outside its jurisdiction. For example, Hubbard County sponsors the Forest Riders snowmobile trail, which is largely located in Becker County. In another case, Beltrami County sponsors the Becida snowmobile trail that is in Hubbard County. While these county sponsors may provide appropriate oversight, citizens who live near these trails but outside the sponsoring county may have limited influence over the administration of the trails. While landowners have direct input into how a trail is developed and maintained on their land, the only time neighbors and other citizens affected by the trail have input into the management of a grant-in-aid trail is when the local government sponsor passes an annual resolution to sponsor the trail. A citizen who lives next to the Becida Trail in Hubbard County may have little influence over the Beltrami County Board who sponsors this trail because the board is accountable to the residents of Beltrami County, not Hubbard County. In contrast, as we have already mentioned, Lake County is concerned enough about citizen input that it requires a conditional land-use permit from the county and a public hearing for all trails that are developed in Lake county, even grant-in-aid trails that are on private land and sponsored by another county.

Finally, we found that:

• DNR has not reduced the grants of clubs that have built trails in violation of federal, state, and local regulations.

³⁴ Committee of Sponsoring Organizations of the Treadway Commission, *Internal Control—Integrated Framework* (Jersey City, NJ: American Institute of Certified Public Accountants, September 1992), 45-47.

In each of the cases that we investigated, DNR's Trails and Waterways Division only reprimanded the clubs verbally or in writing. In addition, when clubs failed to get wetland or protected waters permits, the responsible entities provided the permits retroactively as long as the clubs largely came back into compliance.

RECOMMENDATIONS

DNR should balance the need to prevent trail work that violates federal, state, and local regulations with the cost advantages of having a decentralized system that relies on clubs, and in many cases volunteers, to carry out the trail work. Thus, we have developed some recommendations for DNR to improve the oversight process without eliminating the benefits of the grant-in-aid system.

OHV Oversight

RECOMMENDATION

DNR should increase the level of oversight that it provides OHV grant-in-aid trails and not rely on indirect and ad hoc oversight.

In Chapter 2, we recommended that DNR fully implement its new policy of "managed use on managed trails." Part of this recommendation would include taking a more active role in overseeing the development and maintenance of OHV grant-in-aid trails. In fact, DNR should evaluate on a case-by-case basis if it is appropriate for an OHV club to develop a trail. As we discussed in Chapter 2, OHVs have a greater potential to impact the environment than snowmobiles. In addition, some DNR employees told us that OHV trail work might be too technical for clubs. In cases where DNR determines that the grant-in-aid program is appropriate, Michigan's oversight process is a potential model for Minnesota. Officials from Michigan reported that they (1) require clubs to submit engineering plans before trail work on public land is carried out and (2) inspect the work after it is completed.³⁵

Michigan reports that it closely monitors how clubs develop OHV trails.

Snowmobile and OHV Oversight

The following recommendations apply to both the snowmobile and OHV grand-in-aid programs. We have broken the recommendations into three sections: (1) improving oversight by DNR, (2) improving oversight by local government trail sponsors, and (3) improving trail club operations.

³⁵ Steve Kubsiak, Michigan Forestry Management Division, interview by author, telephone conversation, St. Paul, Minnesota, December 3, 2002.

Improving Oversight by DNR

RECOMMENDATION

If DNR is to rely on complaints as a monitoring and management tool, the department needs to develop a system for recording, tracking, and addressing complaints and program violations.

Earlier in this chapter, we found that DNR often relies on club members, other clubs, landowners, and concerned citizens to monitor trail work and report problems. Nevertheless, the department does not have a system for recording, tracking, and addressing complaints. In addition, we found that, at times, DNR has taken a hands-off approach to addressing complaints.

Maintaining a complaint log would not be a time-consuming management tool.

The complaint tracking system does not need to be complex. It could be a simple paper log kept in each club's grant-in-aid file. The logs would record: (1) the name and telephone number of the person making the complaint or reporting a violation, (2) the club and trail involved, (3) the nature of the complaint or violation, (4) the actions taken by the DNR staff, and (5) if and how the situation was resolved. These descriptions could be very brief. In addition, DNR trail employees would not have to pursue each complaint. They could still refer the person making the complaint to the responsible club or trail sponsor but would have to get back in touch with the complainer to ensure the complaint was addressed or at least adequately acknowledged. Keeping such a log should not be too time consuming. Across the state, DNR trail employees told us that they do not receive many complaints.

RECOMMENDATION

DNR should require local government trail sponsors to share information with DNR about any complaints or program violations that they hear about. In turn, DNR should share its information about complaints and problems with the local sponsor.

This will ensure that DNR has a more complete record of complaints and violations. With a complete record, DNR could use the logs as an evaluation tool indicating how well the clubs are doing their jobs and highlighting areas were DNR could work with the clubs to improve their operations. In addition, DNR should share the complete logs with the respective local government trail sponsors, who have been the primary overseers of the clubs.

RECOMMENDATION

DNR field offices should annually collect from the clubs and keep on file an up-to-date list of landowners for each trail and a map that shows trail alignment changes and trail segments that will receive significant maintenance work in the upcoming year.

To address problems as they arise, DNR trail employees need to know what the clubs are doing and who is affected by their work. The trail maps and landowner lists that are part of a club's application material provide this information. Nevertheless, earlier in this chapter, we found that DNR field offices have not always collected and retained this information.

The grant agreements for the traditional snowmobile and OHV programs already require clubs and trail sponsors to provide the landowner list with the grant application. ONR just needs to enforce this requirement. With respect to the performance-based snowmobile grants, DNR does not require a landowner list but a certification from the local sponsor that it has on file all the land-use agreements from the landowners. DNR should require this certification to include a listing of the landowners and a legal description of each property's location.

We found that some DNR field offices collect only one copy of the trail maps, which is passed onto the central office in St. Paul to develop statewide trail maps. At the start of the application process, DNR should provide the clubs with four sets of maps that show the existing trail alignments. On each set, the club should show proposed changes to the trail alignments and identify any areas that will receive significant trail work, including widening, filling, grading, installing bridges and culverts, and extensive brushing. The club would not need to identify routine and low-impact maintenance projects, such as grooming, mowing, clearing deadfalls, and signing. The club, the sponsor, the DNR field office, and DNR's central office would each receive and keep a set of these maps. Having clubs mark up multiple sets of maps was the policy in DNR's southeastern region.

RECOMMENDATION

DNR should set up a schedule of reductions in future grants for violations of program requirements, including not following federal, state, and local regulations.

Earlier in this chapter, we found that DNR and local government trail sponsors provide little oversight for the grant-in-aid programs, which rely on club members, other clubs, landowners, and concerned citizens to report problems. Yet, when clubs have violated federal, state, or local regulations, DNR has only reprimanded them verbally or in writing and has not lowered their grant.

If the state is going to rely on a decentralized program with limited oversight, the program needs some incentive for clubs to meet their obligations. A grant reduction would provide this incentive. The schedule of grant reductions must balance the need to have clubs and trail sponsors exercise due diligence in following regulations with the fact that well-intentioned volunteers occasionally make honest mistakes. The schedule could range from a probationary period (in

Trail clubs need an incentive to exercise due diligence in following grant-in-aid and land-use regulations.

³⁶ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program: Instruction Manual 2001-2002, 50; and DNR, Minnesota Trails Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 42.

³⁷ DNR, Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2001-2002, 15 and 21.

which clubs are put on notice but do not receive a financial penalty) for honest mistakes to severe reductions in future grants for intentional and substantial disregard for program regulations. The log of complaints and violations, which we recommended above, would provide additional documentation and evidence in penalizing noncompliant clubs.

RECOMMENDATION

DNR should develop explicit criteria for determining the type of grant-in-aid projects that will be reviewed by all DNR divisions and procedures for addressing and settling concerns raised during these reviews.

Some DNR employees are uncertain about their role in reviewing grant-in-aid trail proposals. Earlier, we found that DNR is not consistently reviewing new trail developments. Part of the problem is that the distinction between a "new trail development" (which is reviewed by all DNR divisions) and a "maintenance project" (which is not reviewed) is ambiguous in DNR grant-in-aid documents. In addition, the review process is informal and lacks a structured procedure for raising and resolving concerns, which has led to confusion about the purpose of the reviews and the roles of each of the divisions. A regional staff person from the Ecological Services Division told us that he has asked the Trails and Waterways Division for clarification and has yet to receive it. Models for a written policy already exist within DNR, such as the Wildlife/Forestry coordination policy concerning state administered lands.³⁸

Improving Oversight by Local Government Trail Sponsors

RECOMMENDATION

If DNR expects the local government trail sponsors to be the primary overseer of the clubs, the department needs to provide more guidance in the program manuals regarding the steps that the sponsors need to take to appropriately oversee the clubs.

In this chapter, we found that while most governmental trail sponsors act largely as fiscal agents and provide little or no direct oversight over the clubs, DNR field employees expect the sponsors to be the primary overseer of the clubs and their work. In addition, the direction that DNR's grant-in-aid manuals provide the sponsors is unclear. The manuals for the traditional snowmobile and OHV grants only state that the sponsor is "accountable to the state for expenditures charged to the program," and nothing more concerning oversight. The manual for the performance-based snowmobile grants provides a little more detail by stating that the sponsor is responsible for "certifying to DNR completion [by the club] of several significant benchmarks necessary to provide a quality snowmobile

³⁸ DNR, Minnesota Department of Natural Resources Policy: Wildlife/Forestry Coordination 0064D (St. Paul, September 28, 1980).

³⁹ DNR, Minnesota Snowmobile/Cross-Country Ski Trails Assistance Program Instruction Manual 2001-2002, 6; and DNR, Minnesota Trail Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instructional Manual, 8.

experience... [and] verifying that the local club is adhering to the various guidelines contained in this instruction manual."

If DNR expects the local government trail sponsors to provide some direct oversight and be more than just fiscal agents, the grant agreements and the grant-in-aid manuals need to lay out the level of oversight that DNR expects. Some people told us if DNR required every county to provide the level of oversight provided by Cass County, many counties would drop out of the program because of the staff time and expense required. Nevertheless, in some cases, the oversight could be as simple as the Dodge County model, which involves periodic spot checks by a county employee (such as from the sheriff's department) who regularly drives around the county and may be on the trails. In fact, as we will discuss in Chapter 4, 68 of the state's 87 counties receive grants from DNR for the Sheriff's department to patrol snowmobile trails.

RECOMMENDATION

DNR should prohibit the local government sponsor from assigning responsibility for overseeing the trail grants to a local government official who is also an officer or the bookkeeper of the club receiving the grant.

While we only came across one case (Clover Township in Hubbard County) where a local government official was responsible for overseeing a trail grant that was received by a club in which the government official was an officer, this recommendation is simple and straightforward and should not impose any hardship on the trail sponsors. As a good oversight practice, trail sponsors should maintain an "arms-length" relationship with the clubs they oversee.

Improving Club Operations

RECOMMENDATION

DNR should require club officials to participate in periodic training concerning grant processes and federal, state, and local regulations that affect the development and maintenance of trails.

Club officials need more training.

As we showed at the beginning of this chapter, grant procedures, wetland and public waters regulations, and local zoning requirements are quite complex. Before clubs carry out trail work, they should be familiar with these regulations and whom they should contact for more guidance as they address these issues. A club official with the Silver Trail Riders club, which filled in a wetland along the Moose Walk trail in Lake County, told us that it is difficult to keep up with all the regulations and changes in law. In fact, DNR employees, who are paid professionals, became confused by wetland regulations and committed violations when the department was adding a second treadway to the Heartland State Trail.

⁴⁰ DNR, Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2001-2002, 14.

A daylong training session could be held once a year in each region or if needed at each area office within a region. DNR should require all new trail officials to attend the next training session but may only have to require veteran officials to attend periodic sessions, such as every three years. The trainers for these sessions should include officials from DNR's Trails and Waterways, Forestry, and Waters divisions, the Minnesota Pollution Control Agency, the Army Corps of Engineers, a local unit of government that is responsible for the Wetland Conservation Act, and a local zoning department. While DNR trail employees generally meet with club officials on a regular basis, these meetings only cover issues of the day rather than a comprehensive agenda. DNR needs a formal training program in addition to these meetings.

RECOMMENDATION

DNR should require clubs to provide landowners with a written project description before any substantial work is done on their land and provide landowners the opportunity to walk the project area with a club official and the contractor(s), so the landowner, club, and contractor(s) are all in agreement about the nature of the work.

Clubs need to communicate better with landowners.

In our case study examinations of inappropriate trails, we found that clubs are not always telling landowners about the work that the clubs will carry out on the owners' land. In an attempt to avoid this situation in state forests, DNR foresters and club officials are supposed to walk proposed trail alignments before the work is done. If this is a good policy for state land, other landowners should be given the same opportunity. While a landowner may find the walk-through unnecessary and decline, the DNR should require the clubs to at least extend this courtesy.

This requirement would only apply to substantial trail work, including (1) putting in a new trail, (2) changing the alignment of an existing trail, (3) widening a trail, (4) extensive brushing, (5) grading or filling, or (6) installing a culvert, bridge, or other water crossing. The requirement would not apply to routine trail maintenance, including grooming, mowing, clearing deadfalls, and signing.

RECOMMENDATION

DNR should require clubs to annually contact each of the landowners that have granted them permission to use their land to verify that nothing has changed in ownership and to provide the landowner an opportunity to ask questions or raise concerns.

Clubs need to keep landowners happy or else the owners will withdraw the permission that they have granted the clubs to use their land. Coordinating a reroute after a section of trail has been withdrawn can be a time consuming and costly effort, which the state largely pays for with grant-in-aid funding. While we have been told that many clubs go to efforts to keep their landowners happy, we found cases where not enough was done.

In addition, some DNR staff told us that changes in landownership can go unreported. If a property is sold, the permission that the club has to use this property is null and void. We have been told that landowners can forget to tell the club about the sale or the new landowner about the trail. These new landowners can be surprised and dismayed to find motorized vehicles on their property without their permission.

While we found that a 120-mile trail can have as many as 143 landowners, this requirement should not be too burdensome for the clubs if the annual communication is a letter sent to each landowner with the name and telephone number of a club contact. DNR's southeastern region required their clubs to make annual contact.

RECOMMENDATION

When a club proposes moving earth (e.g. filling or grading) on any motorized trail or creating a new OHV trail, DNR should require the club to have the alignment inspected for wetlands by a trained professional before the project proceeds.

Earlier in this chapter, we found that identifying a wetland and determining if a wetland permit is needed is not a simple task and usually requires a trained professional. However, DNR and local government trail sponsors often rely on untrained club members to make these determinations. For example, a DNR forester gave the following instructions to a trail administrator in a letter. "Do not push any fill into anything that resembles a wetland. If in doubt, ask first." We believe that a trained professional, not an untrained club member, should identify wetlands.

This recommendation would not require clubs to do a full "wetland delineation," which not only involves identifying wetlands but also measuring their size. As an initial step, clubs should hire a wetland professional to perform a "wetland determination," which involves identifying the existence of wetlands and determining if the club needs to pursue getting wetland permits. If permits are required, the clubs would need to contract for a full delineation.

The cost of the requirement would depend on the size and nature of the project. If a club is going to be moving earth on segments of an existing trail that are a few hundred yards in total, this consultation should not cost much more than \$100. We have been told that a typical hourly rate for a wetland delineator in rural Minnesota is about \$50 per hour. On the other hand, if a club is proposing a new 40-mile ATV trail, the consultation could cost thousands of dollars. Nevertheless, if DNR is going to be following its OHV environmental evaluation process that we discussed in Chapter 2, DNR may already require a wetland determination in many cases.

⁴¹ Mark Carlstrom, DNR Area Forest Supervisor, letter to Tim Eischens, Forest Riders club, May 9, 2002.

⁴² John Jaschke, Minnesota Board of Water and Soil Resources, interview by author, telephone conversation, St. Paul, Minnesota, November 13, 2002; and Dave Johnson, wetland delineator, interview by author, telephone conversation, St Paul, Minnesota, October 15, 2002.

Enforcement

SUMMARY

DNR's Enforcement Division has consistently devoted more enforcement time per vehicle to snowmobiles than to OHVs, despite the fact that OHVs have a longer operating season and generally have a greater impact on the environment. Furthermore, there are indications that OHV enforcement is more productive than snowmobile enforcement in catching violators of laws and rules pertaining to recreational vehicles. DNR field employees and county officials we surveyed think that DNR is doing a better job enforcing regulations pertaining to the operation of snowmobiles than OHVs. DNR should increase the level of OHV enforcement per vehicle to at least what it provides snowmobiles; and, if necessary, the Legislature should increase the enforcement funding that comes from the dedicated OHV accounts. The Legislature should also consider instituting mandatory ATV training requirements similar to those the state has for snowmobiles.

In addition to providing opportunities for citizens to use their recreational vehicles, the state regulates their use. Proper regulation and enforcement enhances the enjoyment of trail users who abide by the rules, minimizes adverse impacts on the environment and other citizens, and protects public safety.

In this chapter, we examine how DNR enforces the state's laws and rules pertaining to the operation of snowmobiles and off-highway vehicles (OHVs). We address the following questions:

- How well is DNR's Enforcement Division enforcing regulations pertaining to the operation of snowmobiles and OHVs?
- How much time does DNR devote to snowmobile and OHV enforcement, and how many enforcement actions does it take?
- How has DNR administered the snowmobile and OHV training programs?

To answer these questions, we used the results of our surveys of DNR field employees and counties and the interviews we conducted with regional managers and supervisors from the Trails and Waterways, Enforcement, and other DNR divisions during our visits to DNR's six regional offices. We also reviewed DNR documents and data on enforcement funding, hours devoted to different activities, citations and warnings issued, local snowmobile enforcement grants, and safety

training classes.¹ We did not, however, attempt to independently evaluate DNR's enforcement efforts on the trails. For example, we did not evaluate whether the autonomy granted to individual conservation officers is an effective way to manage their activities, an issue that has been a source of controversy within DNR.

ORGANIZATION

Conservation officers employed by DNR's Enforcement Division have primary responsibility for enforcing regulations that protect the state's natural resources and the public safety of citizens who use those resources. Conservation officers

are licensed peace officers with powers similar to other law enforcement officers. They may carry weapons, pursue lawbreakers, and make arrests. In addition to snowmobile and OHV enforcement, DNR conservation officers uphold state laws and rules related to a wide range of activities such as hunting, fishing, boating, and laws and rules pertaining to state



Conservation officers enforce OHV and snowmobile laws and rules.

parks, forests, trails, and recreational areas.² DNR is also responsible for enforcing laws and rules dealing with the alteration of lake beds, streams, and wetlands, which are often issues in trail development. County sheriffs and local police may also enforce snowmobile and OHV laws, and DNR provides special training to selected resource employees, such as foresters, to serve as natural resource officers with limited enforcement powers.

Conservation officers staff 150 field stations around the state.

DNR organizes its conservation officers into 18 districts that are further divided into 150 stations. Conservation officers are normally assigned to a station and work out of their homes. DNR management often assigns conservation officers to other stations to fill in for officers on vacation, sick leave, or training. Sometimes, managers temporarily move officers to fill seasonal needs, such as to the northern parts of the state during the winter snow season. For the most part, conservation

¹ In this chapter, the term "activity" refers to how conservation officers spend their time as measured by the number of hours devoted to snowmobile and OHV enforcement. The term "action" refers to citations and written warnings that conservation officers issue to violators.

² The Legislature created the position of "conservation officer" in 1967 to replace the position of game warden. It allowed the Commissioner of Natural Resources to assign conservation officers to "public relations, conservation instructional activities, and the enforcement of laws related to resource management which the commissioner shall direct." *Minn. Stat.* (2002), §84.028, subd. 3.

officers do not specialize in enforcing specific activities.³ Rather, they divide their time among all the activities for which DNR is responsible.

DNR has a growing number of vacant conservation officer positions. As of October 2002, DNR's Enforcement Division reported that it had 25 conservation officer vacancies, about one-eighth of its normal complement of 203 (including regional captains and district lieutenants). It has been unable to fill these positions because of budget cutbacks and a state hiring freeze. The division expects to have from 8 to 22 additional vacancies, mostly due to retirements, during fiscal years 2003 and 2004. The 2002 Legislature appropriated an additional \$315,000 for three new conservation officers to specialize in enforcing OHV regulations and exempted the positions from the hiring freeze. However, because of budget cutbacks and the general hiring freeze, DNR cancelled its training academy for conservation officers. As a result, the division could not fill the positions with new hires, but it filled two of the positions in November 2002 with lateral transfers.

OPINIONS ON THE EFFECTIVENESS OF DNR'S ENFORCEMENT EFFORTS

Our surveys of DNR field employees and counties included questions about the effectiveness of DNR's efforts in enforcing motorized vehicle regulations. As shown in Figures 4.1 and 4.2, DNR field employees and county officials think that DNR has done a better job enforcing state regulations on the operation of snowmobiles than it has done for OHV regulations.

Figure 4.1 shows that two-thirds of DNR field employees rated the department's performance in enforcing state regulations pertaining to snowmobiles as "very good" or "good." In contrast, only 26 percent of the employees rated DNR's performance in enforcing OHV regulations as "very good" or "good," and almost half rated DNR's performance as "poor" or "very poor." County respondents expressed similar opinions. As shown in Figure 4.2, two-thirds of the county officials rated DNR's performance enforcing snowmobile regulations as "very good" or "good." In contrast, only one-third of the counties rated DNR's performance in enforcing OHV regulations as "very good" or "good," and 38 percent rated DNR's OHV performance as "poor" or "very poor."

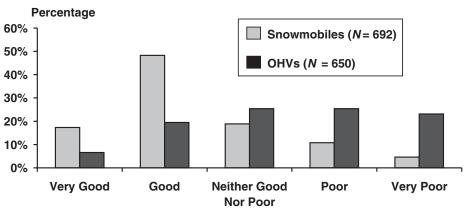
During our site visits to DNR's six regional offices, we asked regional managers and supervisors from the Trails and Waterways Division and other DNR divisions about DNR's enforcement efforts relating to snowmobiles and OHVs. Most of the managers and supervisors felt that DNR was doing an adequate job enforcing snowmobile and OHV regulations with the resources it had, but that the Enforcement Division needed more resources. One regional official thought that conservation officers spend too much time waiting at crossroads and not enough time on interior trails. Another commented that most of the environmental

³ The metro region has a recreational specialist assigned to all metro trails (motorized and non-motorized).

⁴ William Bernhjelm, DNR Enforcement Division Director, memorandum to David Chein, Office of the Legislative Auditor, October 4, 2002.

⁵ Laws of Minnesota (2002), ch. 355, sec. 6.

Figure 4.1: Ratings by DNR Field Employees of the Department's Enforcement of Motorized Recreational Vehicle Regulations

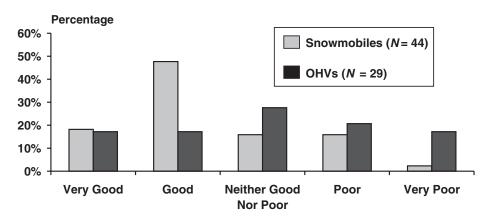


NOTE: We excluded respondents who (1) indicated that they were not at least somewhat familiar with DNR's management of motorized recreation, (2) did not answer the question, or (3) indicated that they did not know how well DNR was enforcing motorized recreation.

SOURCE: Office of the Legislative Auditor, Survey of DNR Staff, June-July 2002.

DNR employees and county officials believe DNR is doing a poorer job enforcing regulations for OHVs than for snowmobiles.

Figure 4.2: Ratings by Counties of DNR's Enforcement of Motorized Recreational Vehicle Regulations



NOTE: We excluded respondents who (1) indicated that they were not at least somewhat familiar with DNR's management of motorized recreation, (2) did not answer the question, or (3) indicated that they did not know how well DNR was enforcing motorized recreation.

SOURCE: Office of the Legislative Auditor, Survey of County Officials, June-July 2002.

damage occurs when ATVs go off the trails. Several regional officials noted that conservation officers have paid more attention to OHV issues over the last year.

ENFORCEMENT ACTIVITIES

DNR's management develops work plans for conservation officers and budgets time for various enforcement activities.

Work plans are flexible to meet unforeseen needs.

The Enforcement Division allocates hours among the different activities, such as game and fish, water recreation, snowmobiles, and OHVs, based on the division's funding sources. Thus, as a starting point, snowmobiles should get about the same percentage of enforcement hours as the percentage of the Enforcement Division's budget that comes from the snowmobile account. Allocations are then assigned to regions based primarily on the number of conservation officers in each region. DNR managers may adjust these allocations based on ratings of each region's ability to meet its enforcement needs. Regional captains divide the hours among enforcement districts, and district lieutenants further divide them among individual conservation officers. As a result, each conservation officer gets an individualized annual work plan that lists the number of enforcement hours that should be devoted to each activity. For example, in the southwest region, each officer was budgeted 73 hours in fiscal year 2003 to enforce snowmobile regulations.

Captains and lieutenants we interviewed emphasized that the work plans are flexible and that the actual distribution of hours may deviate from the work plan to meet unforeseen needs. For example, fiscal year 2002 was a low-snow year. That meant there was less snowmobile activity but more OHV activity, and conservation officers redirected some of their snowmobile hours to OHVs. The north central region developed a special weekend work plan to respond to claims of improper OHV activity in the Spider Lake area. The Enforcement Division can also use overtime hours (each officer may work up to 400 overtime hours per year) to meet special enforcement needs.

Snowmobile enforcement is highly dependent on snow conditions. Snowfall varies around the state, so we obtained data on snow conditions at 30 weather stations representing all six DNR regions. Figure 4.3 shows the number of hours DNR devoted to snowmobile enforcement activities between 1991 and 2002 and the average number of days with 12 or more inches of snow on the ground for the 30 stations during this period. A review of Figure 4.3 shows that those years with the most days with 12 or more inches of snow on the ground, 1996, 1997, and 2001, also had more enforcement hours devoted to snowmobiles than the other years. Those years with the fewest days with 12 or more inches of snow depth, such as 1991, 1998, 2000, and 2002, tended to have fewer hours of snowmobile enforcement.

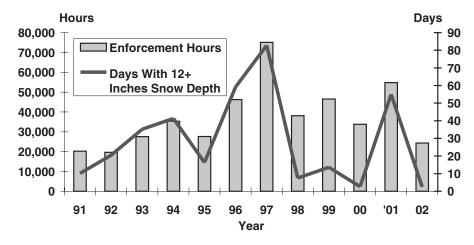
⁶ DNR Enforcement Division, Review of Regional Workloads (St. Paul, June 2001).

⁷ Enforcement hours include conservation officers' enforcement time in the field and time spent overseeing snowmobile safety classes. In addition, Enforcement Division administrative personnel hours are allocated proportionately to activities.

⁸ For the 12 years, the correlation between enforcement hours and days with 12 or more inches of snow depth was r = 0.77.

Figure 4.3: Snow Depth and DNR Enforcement Hours Devoted to Snowmobiles, FY 1991-2002

The amount of snowmobile enforcement is highly dependent on snow conditions.



NOTE: Snow depth data are annual averages for a sample of 30 weather stations representative of all six DNR regions.

SOURCE: Office of the Legislative Auditor analysis of data provided by DNR's Enforcement Division and DNR's State Climatology Office.

In contrast to snowmobiles, the number of enforcement hours devoted to OHVs has increased substantially, from 3,573 hours in 1991 to 20,820 hours in 2002, over a five-fold increase. As shown in Figure 4.4, over half of that increase occurred during the last three years.

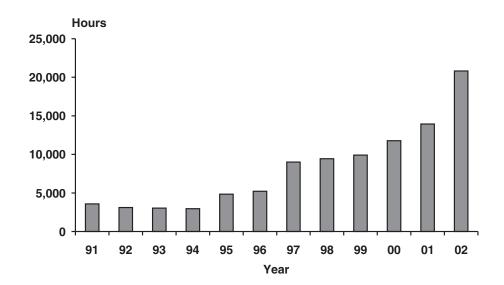
When we examined the level of enforcement provided snowmobiles and OHVs, we found that:

 The Enforcement Division has consistently devoted relatively more enforcement time to snowmobiles than to OHVs, despite the fact that OHVs have a longer operating season and generally have a greater impact on the environment.

With the exception of 2002, which was a very low-snow year, Figure 4.5 shows that the Enforcement Division has devoted more minutes per registered vehicle to snowmobiles than to OHVs in every year since 1991. From 1991 through 2002, the division spent an average of 8.9 minutes per vehicle on snowmobile enforcement and only 5.2 minutes per vehicle on OHV enforcement. Yet, OHVs can be operated all year, not just in the winter, and they probably have a greater impact on the environment than do snowmobiles, as we discussed in Chapter 2.

Part of the discrepancy in enforcement level can be explained by the fact that the Enforcement Division tries to devote time to different activities in roughly the same proportion as its funding sources. Between 1994 and 2002, snowmobile funding provided between 4 and 5 percent of the Enforcement Division's budget, while OHV funding accounted for between 1 and 2 percent of the division's

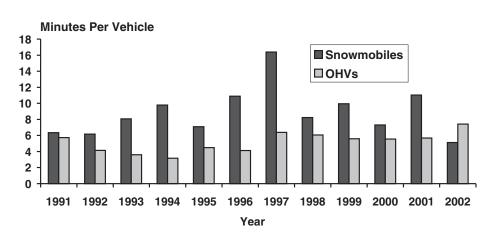
Figure 4.4: Enforcement Division Hours Devoted to OHVs, FY 1991-2002



SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

Figure 4.5: Enforcement Minutes Devoted to Snowmobiles and OHVs per Registered Vehicle, FY 1991-2002

Except for 2002, DNR has devoted more enforcement time on a per vehicle basis to snowmobiles than to OHVs.



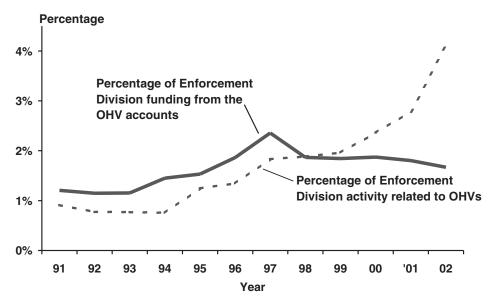
NOTE: The OHV figure for 2002 is based on an estimate of 168,413 registered OHVs derived by mutiplying 2001 registrations by the average rate of increase in registrations for the last five years.

SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

budget. However, as we discussed earlier, the Enforcement Division has some flexibility to reallocate these resources.

To keep up with the growing number of OHVs, DNR has shifted more of its enforcement resources to OHVs. In the last few years, the Enforcement Division has shifted resources to OHV issues. Figure 4.6 compares the percentage of the Enforcement Division's Budget obtained from the three OHV accounts with the percentage of enforcement activity devoted to OHVs. It shows that since 1999, the Enforcement Division has spent a greater proportion of its enforcement hours on OHV issues than the percentage of its budget derived from the dedicated OHV accounts. From 1991 to 1998, about 1 or 2 percent of the Enforcement Division's budget came from the three OHV accounts, and a fractionally lower percentage of enforcement activity was related to OHVs. Since then, the division continues to derive about 2 percent of its budget from the OHV accounts but the percentage of enforcement hours devoted to OHVs jumped to 3 percent in 2001 and 4 percent in 2002.

Figure 4.6: Percentage of Enforcement Division Funding and Activity Related to OHVs, FY 1991-2002

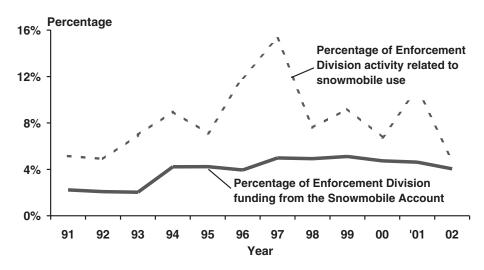


SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

Figure 4.7 shows that the Enforcement Division has consistently spent a greater proportion of its enforcement hours on snowmobile issues than the percentage of its budget derived from the snowmobile account. Since 1994, between 4 and 5 percent of the Enforcement Division's budget has come from the dedicated snowmobile account. Except for the low-snow year of 2002, between 7 and 15 percent of the agency's enforcement activity has been devoted to snowmobiles.

⁹ We discuss this account and the dedicated OHV accounts in Chapter 5.

Figure 4.7: Percentage of Enforcement Division Funding and Activity Related to Snowmobiles, FY 1991-2002



SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

RECOMMENDATION

In general, DNR should devote at least as much enforcement time per vehicle to OHVs as it provides to snowmobiles. If necessary, the Legislature should increase the enforcement funding that comes from the dedicated OHV accounts to allow the Enforcement Division to fulfill this recommendation.

The 2002 Legislature made additional funding available for OHV enforcement. This recommendation is supported by a few facts: (1) OHVs have a longer season than snowmobiles, (2) OHVs likely have a greater impact on the environment than snowmobiles, and (3) both DNR field employees and county officials believe that DNR is doing a poorer job enforcing laws and rules for OHVs than for snowmobiles, as discussed earlier. In fact, the 2002 Legislature appropriated an additional \$315,000 from the OHV accounts for enforcement in fiscal year 2003, and this may fulfill our recommendation. If additional resources are needed, the Legislature should increase the Enforcement Division's funding that comes from the dedicated OHV accounts.

¹⁰ Laws of Minnesota (2002), ch. 355, sec. 6. According to our analysis, the Enforcement Division's \$1 million appropriation from the snowmobile account in 2002 was equivalent to \$3.50 per registered snowmobile, whereas its \$413,000 appropriation from the OHV accounts was approximately \$2.45 per registered OHV. Based on our estimate of 168,413 registered OHVs in 2002, the additional \$315,000 is equivalent to \$1.87 per vehicle for a total appropriation of \$4.32 per vehicle. If the number of OHVs increases in 2003 at the rate is has been increasing, the 2003 appropriation would be equivalent to \$3.87 per vehicle.

We also examined how the Enforcement Division has allocated its resources around the state. We found that:

• DNR has done a reasonably good job of allocating its enforcement resources to the different regions of the state.

Table 4.1 shows the distribution of hours directly devoted to snowmobile enforcement among the six DNR regions in 2002. It shows that enforcement activity is greater in the northern regions, which have more miles of trail than the southern regions. The three northern regions contain 65 percent of the state's snowmobile trail mileage and receive 70 percent of the snowmobile enforcement hours. In addition, the northern regions have a longer snow season than the southern regions.

Table 4.1: Percentage of Enforcement Hours Devoted to Snowmobiles by Region, FY 2002

Snowmobile and OHV enforcement is greater in the northern regions of the state.

Region	Percentage of Hours Devoted to <u>Snowmobile Enforcement</u>	Percentage of Miles of <u>Snowmobile Trails</u>
Northwest	17%	25%
Northeast	29	17
North Central	23	23
Southwest	16	18
Southeast	5	13
Metro	_ 9	<u> </u>
Total	100%	100%

NOTE: Excludes central office and administrative hours. Snowmobile trail miles include 2,900 miles added to the grant-in-aid program during calendar year 2002 that were previously maintained by snowmobile clubs without state assistance. This table is based on the Enforcement Division's regional boundaries. They differ slightly from the Trails and Waterways Division's regional boundaries, which are the basis for Table 1.5.

SOURCE: Office of the Legislative Auditor analysis of DNR Labor Distribution by Activity Report for fiscal year 2002 (received August, 2002).

It is difficult to conduct a similar analysis with OHVs because much of the enforcement relates to improper riding off of the designated trails. Nevertheless, Table 4.2 shows that 81 percent of the OHV enforcement activity in 2002 took place in the three northern regions where almost all of the designated OHV trails are located.

¹¹ In Chapter 1, we stated that 63 percent of the snowmobile trail mileage is in the three northern regions. The difference is because the Enforcement Division and the Trails and Waterways Division use slightly different regional boundaries. DNR was unable to provide us with trail usage data, which would be a better indicator of enforcement needs than trail miles.

¹² From 1991 to 2002, the northeast region had an average of 62 days per winter with 12 or more inches of snow on the ground. The north central region averaged 36 days and the northwest region averaged 33 days. In contrast, the southwest region averaged 17 days, the southeast averaged 15 days, and the metro region averaged 13 days with snow depth of 12 or more inches.

Table 4.2: Percentage of Enforcement Hours Devoted to OHVs by Region, FY 2002

Region	Percentage of Hours Devoted to OHV Enforcement	Percentage of Miles of OHV Trails
Northwest	21%	25%
Northeast	37%	32
North Central	23%	39
Southwest	7%	0
Southeast	6%	3
Metro	<u>6</u> %	0
Total	100%	100%

NOTE: Excludes central office and administrative hours. This table is based on the Enforcement Division's regional boundaries. They differ slightly from the Trails and Waterways Division's regional boundaries, which are the basis for Table 1.6.

SOURCE: Office of the Legislative Auditor analysis of DNR Labor Distribution by Activity Report for fiscal year 2002 (received August, 2002).

ENFORCEMENT ACTIONS

Conservation officers have one primary enforcement tool at their disposal, the ability to issue citations or summonses that carry criminal penalties, usually a fine. Short of a summons, an officer can issue a written warning. Written warnings carry no penalty but an official record is made of the violation. Conservation officers may also arrest someone who commits a serious offense or refuses to cooperate, but this is rarely necessary in snowmobile or OHV enforcement. We looked at the pattern of DNR enforcement actions since 1992. In general:

 Over the last decade, the number of snowmobile enforcement actions (citations and warnings) has been closely related to the number of hours spent enforcing snowmobile activities.

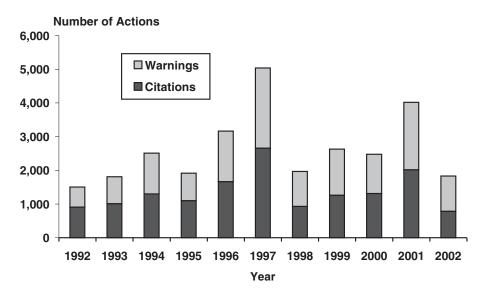
Figure 4.8 shows the number of snowmobile enforcement actions taken from fiscal years 1992 to 2002. It shows that enforcement actions parallel the number of hours devoted to snowmobile enforcement (Figure 4.3). For example, the most enforcement actions occurred in 1996, 1997, and 2001, three of the four years with the most enforcement hours and the three years with the greatest snow depth. Lactuding the unusually busy enforcement year of 1997, there were an

DNR has issued more warnings and citations for snowmobile violations in high-snow years than low-snow years.

¹³ Most snowmobile and OHV offenses are misdemeanors. In most cases, violators are issued a summons, which is similar to most traffic tickets, and they may either submit payment without a court appearance or they may request a trial. For some offenses, such as trespassing and using studs on a paved trail, officers may issue a civil citation. Civil citations differ from summonses in that they require a lower burden of proof and the fines collected are retained by the local agency issuing the fine. Fines resulting from summonses are divided equally between the local jurisdiction and DNR. In this chapter, we use the term "citation" to include both summonses and civil citations.

¹⁴ For the 11-year period, 1992 to 2002, the correlation between snowmobile enforcement hours and the number of snowmobile enforcement actions was r = .96.

Figure 4.8: DNR Enforcement Actions Relating to Snowmobiles, FY 1992-2002



SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

average of 2,585 enforcement actions per year during the five-year period, 1998-2002, 19 percent more than the average of 2,180 actions per year during 1992-1996.

Figure 4.9 shows that:

The number of OHV enforcement actions has also been closely related to the number of hours spent enforcing OHV activities over the last decade.

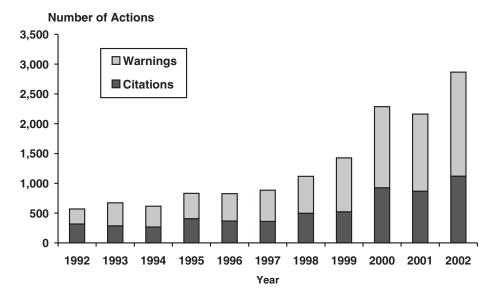
In 2002, ATVs accounted for 89 percent of OHV violations.

There was a five-fold increase in the number of OHV enforcement actions between 1992 and 2002, which mirrors the increase in OHV enforcement hours shown in Figure 4.4. Most of the increase in OHV enforcement actions has occurred since 1997, the same time that DNR increased OHV enforcement hours. ATVs are the subject of most of the enforcement actions against OHVs. In 2002, ATVs were responsible for 89 percent of the OHV violations, dirt bikes for 8 percent, and 4X4 trucks for 3 percent.

 $^{15\,\}mathrm{For}$ the 11-year period, 1992 to 2002, the correlation between OHV enforcement hours and the number of OHV enforcement actions was r=.94. Enforcement actions for OHVs are likely understated. Many citations and warnings were issued for a "vehicle" in a closed area, designated trail, wildlife management area, or other place where vehicles are not permitted. While some of these vehicles may have been automobiles, we suspect that many were OHVs. Nevertheless, we only counted the enforcement action where the vehicle was identified as an ATV, truck, or motorcycle.

Figure 4.9: DNR Enforcement Actions Relating to OHVs, FY 1992-2002

Citations and warnings for OHV violations increased five-fold from 1992 to 2002.



SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

However, we found that:

 There are indications that OHV enforcement has been more productive than snowmobile enforcement in catching violators of laws and rules pertaining to recreational vehicles.

Over the last five years, DNR issued 15.0 OHV enforcement actions for every 100 hours of OHV enforcement time. In contrast, the department issued only 6.5 snowmobile enforcement actions per 100 hours of snowmobile enforcement time. Some of this difference may be an artifact of how conservation officers record their time. Conservation officers sometimes encounter OHVs engaged in illegal actions while the officers are working on other issues. In such instances, they may take action against OHV riders without always recording the time to OHV enforcement. Nevertheless, the finding provides further support for our recommendation to increase the amount of OHV enforcement.

Tables 4.3 (snowmobiles) and 4.4 (OHVs) show the types of offenses that resulted in citations and written warnings in 2001 and 2002. We combined 2001 and 2002 data because 2002 was an unusually dry winter with little accumulated snow. The tables show that:

• For both snowmobiles and OHVs, the most common violation was failure to register or to properly display the registration decal.

¹⁶ For example, an officer may come upon a hunter illegally shooting at a deer from an ATV. The officer may issue a citation for the illegal ATV use but record the enforcement time as hunting.

Failing to register a vehicle or display a registration decal accounts for the largest share of snowmobile and OHV violations. Table 4.3 shows that 43 percent of the snowmobile violations in 2001 and 2002 were for failing to register the snowmobile or failing to display the registration decal. Nineteen percent of the violations were for speeding, and 12 percent were for failure to stop before crossing a road. No other offense accounted for more than 5 percent of the violations. Officers issued warnings rather than citations in 52 percent of the cases. Officers were more likely to issue warnings than citations to snowmobile riders who traveled in restricted areas (such as wildlife management areas) or on non-motorized trails. On the other hand, all of the stops for driving while intoxicated resulted in the issuance of a citation.

Table 4.4 shows that, like snowmobiles, 43 percent of the OHV violations were for failing to register the vehicle or failing to display the registration decal. Operating an OHV on a roadway accounted for 20 percent of the violations, followed by permitting youth to operate a vehicle (9 percent) and operating a vehicle in a closed or restricted area (7 percent). Overall, officers issued warnings in 60 percent of the cases.

Table 4.3: Types of Snowmobile Violations, FY 2001-2002

	Total			
	Number of	Number of	Enforcement	
Type of Violation	Citations	Warnings	Actions	<u>Percentage</u>
Failing to register a vehicle or display a registration decal	1,293	1,215	2,508	43%
Speeding	643	485	1,128	19
Failing to stop before crossing a road	288	415	703	12
Operating a vehicle on a roadway	87	205	292	5
Operating a vehicle at night against traffic	62	210	272	5
Operating a vehicle without a safety certificate	96	140	236	4
Trespassing	79	41	120	2
Using studs on an asphalt surface	61	40	101	2
Permitting youth to operate a vehicle	26	46	72	1
Operating a vehicle carelessly or recklessly	35	31	66	1
Operating a vehicle in a closed or restricted area	6	59	65	1
Failing to transfer ownership of a vehicle	21	38	59	1
Unlawfully crossing a divided road	21	35	56	1
Operating a vehicle while intoxicated	51	0	51	1
Operating a vehicle with illegal equipment (e.g., lights, muffler)	3	34	37	1
Operating a vehicle on a nonmotorized trail	9	25	34	1
Operating a vehicle by a youth without a helmet	2	16	18	0
Other	<u>21</u>	10	<u>31</u>	<u> </u>
Total	2,804	3,045	5,849	100%

SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

Table 4.4: Types of OHV Violations, FY 2001-2002

			Total	
	Number of		Enforcement	
Type of Violation	<u>Citations</u>	<u>Warnings</u>	<u>Actions</u>	<u>Percentage</u>
Failing to register vehicle or display registration decal	1,055	1,126	2,181	43%
Operating a vehicle on a roadway	333	657	990	20
Permitting youth to operate a vehicle	157	319	476	9
Operating a vehicle in a closed or restricted area	132	197	329	7
Operating a vehicle by a youth without a helmet	13	198	211	4
Exceeding the vehicle's legal capacity	17	173	190	4
Trespassing	120	23	143	3
Operating a vehicle carelessly or recklessly	25	78	103	2
Operating a vehicle on a nonmotorized trail	26	44	70	1
Operating a vehicle without a driver's license	15	54	69	1
Operating a vehicle by a youth without a safety certificate	5	64	69	1
Failing to stop at a road crossing	22	35	57	1
Operating a vehicle with illegal equipment (e.g., lights, muffler)	6	28	34	1
Failing to transfer ownership of a vehicle	9	10	19	0
Operating a vehicle while intoxicated	11	0	11	0
Other	<u>41</u>	<u>35</u>	<u>76</u>	2
Total	1,987	3,041	5,028	100%

SOURCE: Office of the Legislative Auditor analysis of DNR Enforcement Division data.

ADEQUACY OF PENALTIES

Most fines for snowmobile and OHV violations are between \$20 and \$50.

Although judges may impose a fine up to \$1,000 for a misdemeanor, most fines for snowmobile and OHV violations are between \$20 and \$50. For example, the standard fine for operating a snowmobile in a state park or a wildlife management area is \$40. There is a \$50 fine for failing to register a snowmobile or OHV and a \$20 fine for failing to display a registration decal.¹⁷

When we conducted our site visits to DNR's six regions, some of the conservation officers and regional managers and supervisors from the Enforcement Division and other divisions suggested that the fines for snowmobile and OHV violations are too lenient. They believe that stiffer penalties would serve as a deterrent to OHV riders inclined to go off the trail and cause environmental damage. Other officers suggested stiffer penalties for individuals who commit a subsequent offense, including revocation of riding privileges.¹⁸

¹⁷ DNR, 2001 State Payables List: Natural Resource Violations (St. Paul, 2001). In addition, there is a mandatory \$35 surcharge imposed on all persons convicted of a felony, gross misdemeanor, misdemeanor, or petty misdemeanor other than parking. Minn. Stat. (2002), §357.021, subd, 6.

¹⁸ DNR, Enforcement Division, OHV Task Force Briefing Paper: Educational Options Related to the Operation of OHVs in Minnesota (St. Paul: August 2002).

While strengthening penalties may reduce snowmobile and OHV violations, several regional managers and supervisors we interviewed suggested that DNR needs to do a better job educating the public about snowmobile and OHV regulations, including where it is permissible to ride and which areas are off limits. One survey of OHV riders found that 58 percent of the ATV riders, 59 percent of the dirt bike riders, and 46 percent of the 4X4 riders agreed or strongly agreed with the statement, "The rules for OHV riding on public land are very confusing." As we discussed in Chapter 1, the state forest classification system as to where OHVs can and cannot ride is complex. Furthermore, 70 percent of the ATV riders, 92 percent of the dirt bike riders, and 87 percent of the 4X4 riders agreed or strongly agreed with the statement, "Riders will obey the rules if they know what they are." ¹⁹

EDUCATION AND TRAINING

The 1969 Legislature required DNR to develop a snowmobile safety and training program. Training was voluntary until 1997, when the Legislature required snowmobile operators born after 1979 who wish to operate a snowmobile in Minnesota to possess a valid snowmobile safety certificate indicating successful completion of the snowmobile safety course. The 1997 law stated that beginning October 2002, the mandatory training requirement applies to everyone born after 1976.²¹

Participation in snowmobile safety courses is a lot higher than participation in OHV courses. Since it was first offered in 1969, over 350,000 students have completed the snowmobile safety training program and received safety certificates. In fiscal year 2002, 13,355 students received snowmobile safety certificates. Courses cost \$5 and are taught by volunteers trained by DNR. Among the topics covered are snowmobile registration requirements, rules of the road, trail signs, driving skills, alcohol and drug use, environmental responsibilities, maintenance and repairs, and emergency survival skills. Classes must have at least eight hours of instruction plus a mandatory field day.

The Legislature required DNR to develop a training program for ATVs when it regulated those vehicles in 1984. The training is voluntary for persons 16 years old and older. The state permits youth aged 12 to 15 who complete the training and obtain a safety certificate to operate an ATV of up to 90 cc engine capacity on public lands or to cross a road right-of-way. The 2001 Legislature waived the 90 cc limit for youth who complete a training course that includes a riding component using an ATV with over 90 cc engine capacity and provided that the youth is able to reach and control the handle bars and foot pegs. ²⁴

¹⁹ John P. Genereux and Michele Genereux, An OHV Recreation Planning Tool Based on a Survey of Resource Managers and a Survey of Off-Highway Vehicle Riders in Minnesota (St. Paul: DNR, July 2001), 93.

²⁰ Laws of Minnesota (1969), ch. 695, sec. 6.

²¹ Laws of Minnesota (1997), ch. 216, sec. 64; Minn. Stat. (2002), §84.862.

²² DNR, Minnesota Snowmobile Safety and You (Seattle, WA: Outdoor Empire Publishing, 2001).

²³ Laws of Minnesota (1984), ch. 647, sec 4.

²⁴ Laws of Minnesota (Sp2001), ch. 2, sec. 81.

ATV safety training is voluntary for adults. Because it is a voluntary program, far fewer individuals take and complete the ATV safety class than the snowmobile class. About 10,000 individuals have completed the course since it was first offered in 1985. In fiscal year 2002, 997 students received their ATV safety certificate. The class is an independent study class. Topics include identification of vehicle parts, basic riding skills, advanced riding skills on different terrains, riding regulations, emergencies, the effects of alcohol and drugs, and the relationship of ATVs to the environment. The 2001 Legislature required DNR to add a riding component to the ATV class by June 30, 2003. The 2003 component to the ATV class by June 30, 2003.

As required by statute, DNR also administers a safety class for dirt bikes.²⁷ The course is voluntary and an independent study class structured similar to the existing ATV class. In 2001, 256 dirt-bike riders obtained safety certificates.

Some enforcement supervisors we interviewed during our field visits said that safety training should be mandatory for ATVs, as it is for snowmobiles. Some suggested licensing ATV drivers in the same manner that automobile drivers are licensed. As we discussed in Chapter 2, the general consensus is that ATVs and other OHVs pose a greater threat to the environment than snowmobiles. In addition to teaching individuals how to operate vehicles safely, training also provides a forum for DNR to explain ATV regulations, such as where it is and is not permissible to ride, and appropriate riding behavior.

RECOMMENDATION

The Legislature should require people wishing to ride an ATV on public land or a publicly-funded trail to first complete an ATV safety training class that includes both a written exam and a riding component.

The Legislature could temper this requirement and grandfather in existing ATV riders. For example, it could mirror the snowmobile statute and require the training only of those born after 1976.

SNOWMOBILE SAFETY ENFORCEMENT GRANTS

The 1997 Legislature established a program and appropriated \$400,000 per year for grants to local governments for enforcement of snowmobile laws. The 2001 Legislature reduced the appropriation to \$315,000 per year for the 2002-2003 biennium. DNR provided us with summaries of the annual reports submitted by grantees that included expenditures and enforcement activities of the counties and cities receiving grants. In 2002, 68 counties applied for grants. Each received a

²⁵ DNR, Student Safety Manual (Seattle, WA: Outdoor Empire Publishing, 2001).

²⁶ Laws of Minnesota (Sp2001), ch. 2, sec. 80.

²⁷ Minn. Stat. (2002), §84.791.

²⁸ Laws of Minnesota (1997), ch. 216, sec. 5, subd. 8.

²⁹ Laws of Minnesota (Sp2001), ch. 2, sec. 5, subd. 10.

In 2002, 68 counties and 25 cities received snowmobile enforcement grants from DNR.

base amount of \$2,164 plus additional funding based on the county's population, the number of snowmobile trail miles in the county, and the number of registered snowmobiles in the county. Grants ranged from \$2,820 to \$13,829. The average grant was \$5,566. DNR also distributed grants of \$1,000 to 25 cities.

As of October 2002, DNR had received final reports from 57 counties and 24 cities. Of those reporting, 16 percent of the county grants and 17 percent of the city grants were used for officer salaries; and 84 percent of the county grants and 83 percent of the city grants went for equipment and supplies. Snowmobile rentals or purchases made up two-thirds of the equipment and supplies expenditures. An assortment of other items made up the rest of the expenditures such as trailers, communications equipment, lighting, fencing, and office supplies.

Counties that filed end-of-year reports said they spent an average of 310 hours on snowmobile enforcement in 2002. They collectively issued 353 snowmobile related citations and 985 oral and written warnings. Cities reported working an average of ten hours on snowmobile matters and issuing a total of 11 snowmobile-related citations and 182 warnings.

Most of the conservation officers we spoke with during our site visits to regional offices said that they usually received good cooperation from county sheriffs. In some cases, they conducted joint patrols and shared equipment. (One county reportedly arranged to use DNR snowmobiles to patrol trails over the weekend.)

NATURAL RESOURCE OFFICERS

Natural Resource Officers (NROs) are DNR resource employees, such as foresters, who have undergone special training to perform a limited enforcement role as they carry out their regular duties. (They replaced "Level-II Officers" that had existed in DNR for many years.) In contrast to conservation officers, NROs are not licensed peace officers and they do not carry firearms. However, they can issue citations for specified violations and make courtesy stops, but they cannot pursue vehicles or make arrests. They can only conduct a search with the individual's consent. DNR sees NROs as supplementing the work of conservation officers by providing an enforcement presence and handling some of the minor violations, thereby allowing conservation officers to concentrate on more serious violations.³⁰

Prior to 2002, there were 220 NRO positions in DNR's Forestry Division, 120 in the Parks and Recreation Division, and 16 in the Wildlife Division. In February 2002, DNR authorized the use of NROs for the Trails and Waterways Division. The authority allows these NROs to enforce vehicle registration, equipment, and operation regulations in state forests, OHV recreation areas, and wildlife management areas. Seventeen Trails and Waterways Division staff recently completed training and the division plans to train 15 additional staff in 2003.

• It is too early to assess the effectiveness of natural resource officers in enforcing snowmobile and OHV regulations.

DNR has trained some of its resource employees to assist in enforcement duties. Most of the Enforcement Division supervisors we interviewed on our regional field visits said that conservation officers have historically worked well with Level-II officers (now NROs) in other divisions. Although the conservation officers' union opposes the use of non-peace officers in an enforcement role, we were told that this friction does not extend to day-to-day operations. NROs usually call conservation officers when they need assistance, and conservation officers respond when they are called.

NROs are new to the Trails and Waterways Division, and most regional supervisors were unsure how they would be used. Some supervisors saw their potential to play an educational role. For example, they could inform OHV riders that certain areas were off-limit. Others thought that their presence might deter OHV riders from going off the trail or committing other violations. The general consensus among the DNR staff we interviewed was that the NRO program has potential, but it is too soon to draw any conclusions about its effectiveness.

Finances

SUMMARY

Snowmobile and off-highway vehicle (OHV) trails are funded primarily from vehicle registration fees and gasoline taxes. Funding for snowmobiles and OHVs has increased (after adjusting for inflation) since 1991, due largely to an increase in the number of registered vehicles. The Department of Natural Resources (DNR) has used the snowmobile account to (1) fund grants-in-aid to snowmobile clubs to develop, maintain, and groom snowmobile trails, (2) develop and maintain its own trails, and (3) administer the entire snowmobile program. The OHV accounts have not funded many grant-in-aid trails but have, in recent years, been used to develop an OHV riding park in northeast Minnesota. The fund balances of the snowmobile and OHV accounts have been increasing, making it possible for the Legislature to appropriate more money for programs, if needed. The current percentages of gasoline taxes allocated to the four recreational vehicle accounts probably do not reflect the actual percentage of gasoline taxes paid by users of these vehicles for off-road use. The Legislature should reexamine the studies used to determine gas tax allocations to the snowmobile and OHV accounts.

Pour dedicated accounts in the Natural Resources Fund are used to finance expenditures on snowmobile and OHV trails. These accounts fund the planning, development, maintenance, administration, and enforcement of DNR-managed and grant-in-aid trails. In this chapter, we review the financing of snowmobile and OHV trails and address the following questions:

- How does Minnesota finance the development, maintenance, and management of its motorized recreational vehicle trails, and how are the funds spent?
- Do the four dedicated accounts for motorized recreation have sufficient balances to finance additional spending?
- Has the percentage of gasoline tax revenues paid to the snowmobile and OHV dedicated accounts reflected the actual percentage of gas taxes paid by snowmobile and OHV riders?

To answer these questions, we reviewed fund statements for the four dedicated accounts and other financial data, and we interviewed DNR officials in the Trails and Waterways Division and other divisions. We also reviewed the gasoline tax

studies that were used to determine the percentage of gas tax revenue allocated to the snowmobile and OHV accounts.

BACKGROUND

Registration fees and gas taxes have been the main sources of snowmobile funding since the 1970s. The Legislature first regulated snowmobiles in 1967. It required registration of snowmobiles with a registration fee of \$8 for three years deposited in the General Fund to be used to fund the snowmobile program. The registration fee has been raised several times over the years and is now \$45 every three years. There is also a \$2 filing fee and a \$1.50 fee to cover costs associated with electronic licensing.

Snowmobiles, ATVs, dirt bikes, and 4X4 trucks each have their own dedicated account. In 1973, the Legislature established 0.375 percent as the proportion of the gas tax generated by snowmobile use, and it authorized those taxes to be credited to the General Fund to be used for the snowmobile program.⁴ It increased the percentage to 0.75 percent in 1976 and to 1 percent in 1997. (In 2001, the allocation briefly reverted back to 0.75 percent, but it has since returned to 1 percent.)⁵

The 1982 Legislature created the "snowmobile trails and enforcement account" in the Natural Resources Fund. The account is funded primarily with registration fees and gas tax collections and is used for (1) grants-in-aid to counties and municipalities for construction and maintenance of snowmobile trails, (2) acquisition, development, and maintenance of state snowmobile trails, (3) snowmobile safety programs, and (4) administration and enforcement of snowmobile laws.⁶

In 1984, the Legislature regulated all-terrain vehicles (ATVs) in a manner similar to snowmobile regulation, required ATVs to be registered, and set the fee at \$18 for three years where it has remained to this day. The Legislature required registration proceeds to be deposited in the "all-terrain vehicle account" (originally called the "three-wheel off-road vehicles account") in the Natural Resources Fund. It also provided that funds from the account could be used

¹ Laws of Minnesota (1967), ch. 876, sec 4.

² Minn. Stat. (2002), §84.82, subd. 3.

³ Minn. Stat. (2002), §84.82, subd. 2 (d) and Minn. Stat. (2002), §84.027, subd. 15.

⁴ Laws of Minnesota (1973), ch. 648, sec. 1.

⁵ Laws of Minnesota (1976), ch. 319, sec. 1 and Laws of Minnesota (1997), ch. 159, art. 2, sec. 39. The 1997 law was effective only for fiscal years 1998 and 1999. The 1999 Legislature extended the 1 percent rate one more year. Laws of Minnesota (1999), ch. 238, art. 2, sec. 68. The percentage reverted back to 0.75 percent for fiscal year 2001. The 2001 Legislature restored the 1 percent rate for fiscal year 2002 and subsequent years. Laws of Minnesota (Sp 2001), ch. 8, art. 2, sec. 62.

⁶ Laws of Minnesota (1982), ch. 580, sec. 1 and Minn. Stat. (2002), \$84.83, subd. 3. The grant-in-aid program was actually first established by the 1971 Legislature with a \$100,000 appropriation from the General Fund. Laws of Minnesota (Sp 1971), ch. 3, sec. 36, subd. 1 (c).

⁷ The 1989 Legislature established a lower \$6 three-year registration fee for ATVs used exclusively for private or agricultural use or exclusively on private property. There is also a \$2 filing fee and a \$1.50 fee for electronic licensing. *Laws of Minnesota* (1989), ch. 331, sec. 11 and *Minn. Stat.* (2002), §84.922.

FINANCES 85



Gasoline taxes attributed to snowmobiles and OHVs are allocated to dedicated accounts for these vehicles.

for (1) education and training, (2) administration of the ATV program, (3) acquisition, maintenance, and development of vehicle trails and use areas, and (4) grants-in-aid to counties and municipalities to construct and maintain ATV trails and use areas. Finally, it authorized DNR, the Department of Transportation (MnDOT), and the Department of Revenue to jointly determine the appropriate percentage of gas tax revenue attributable to ATV use and authorized the transfer of those revenues to the ATV account. That percentage was subsequently set at 0.15 percent and has not changed.

In 1993, the Legislature enacted similar statutes for dirt bikes and 4X4 trucks. It established dedicated accounts in the Natural Resources Fund and provided that the accounts should be used for (1) administration and enforcement, (2) acquisition, development, and maintenance of trails and use areas, (3) grants-in-aid to local government, and (4) safety programs. It set registration fees of \$30 for three years and required DNR, MnDOT, and the Department of Revenue to jointly determine the appropriate percentage of gas tax revenues attributable to dirt-bike and 4X4-truck use. ¹⁰ Those percentages were subsequently set at 0.046 percent for the dirt bikes and 0.164 percent for 4X4 trucks. ¹¹

In total, DNR encumbered about \$9 million on snowmobile trails and \$2.4 million on OHV trails and recreation areas in 2002. (An encumbrance is a commitment to

Registration fees and gas taxes are the main sources of funding for snowmobile and OHV trails.

⁸ Laws of Minnesota (1984), ch. 647, sec. 6 and Minn. Stat. (2002), §84.927.

⁹ Laws of Minnesota (1986), ch. 452, sec. 21.

¹⁰ Laws of Minnesota (1993), ch. 311, art. 1, sec. 2 and 8 and art. 2, sec. 2 and 7. There is also a \$2 filing fee and a \$1.50 fee for electronic licensing.

¹¹ Laws of Minnesota (1994), ch. 587, art. 12, sec. 10.

spend funds for a specific activity. Some encumbrances will be spent in the year they are made, while others will be spent in later years as bills are paid.) The Trails and Waterways Division also develops and maintains non-motorized trails. Non-motorized trails receive the bulk of their funding from the General Fund, but also receive funds from lottery proceeds and the Legislative Commission on Minnesota Resources. Excluding bonding, the division encumbered about \$6.6 million on non-motorized trails in 2002, including about \$2.1 million for the Trails and Waterways Division, \$1.8 million for grants to local governments to develop and maintain trails, \$2.4 million for specific projects, and \$0.3 million for cross-country ski trails.

RECEIPTS

We reviewed annual year-end fund statements for the four dedicated accounts to determine how they are funded and how their receipts have changed over the last decade.

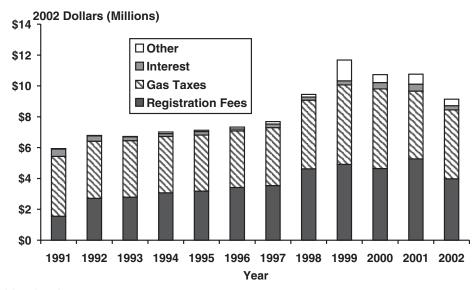
Snowmobile Receipts

As shown in Figure 5.1:

 The snowmobile account receives most of its funding from vehicle registration fees and gasoline taxes.

While snowmobile account receipts increased from 1991 through 1999, they have started to decline.

Figure 5.1: Snowmobile Account Receipts, FY 1991-2002



SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

87 **FINANCES**

> In 2002, gasoline taxes were the source of 49 percent of snowmobile account receipts, and registration fees provided 44 percent. 12 Metal track sticker fees and investment income each provided 3 percent, and 1 percent came from safety training fees. Total snowmobile account receipts were \$9.1 million. Figure 5.1 also shows that:

After adjusting for inflation, snowmobile account receipts have increased by 54 percent since 1991, due primarily to increased registration fees.

Snowmobile registration receipts increased by 155 percent, from \$1.6 million in

1991 to almost \$4 million in 2002, due to increases in the number of registered snowmobiles plus a 1997 hike in the registration fee, from \$34 to \$45 for three years. 13 (Unless noted otherwise, all receipts, encumbrances, and account balances cited in this chapter were adjusted for inflation and are stated in 2002 dollars.)¹⁴ Registration receipts in 2002 were down 25 percent from 2001, perhaps because 2002 had relatively little snow. Gasoline tax receipts were comparatively stable, increasing by 15 percent between 1991 and 2002. Gas tax receipts in 2001 and 2002 were about \$700,000 less than in 1999 and 2000. This was the result of a reduction for calendar year 2001 (half of fiscal year 2001 and half of fiscal year 2002) in the percentage of gas taxes attributable to snowmobiles from 1 percent to 0.75 percent. As noted earlier, the 1 percent rate has since been restored. Thus, beginning in 2003, gas tax receipts should revert to 2000 levels (about \$5.2 million per year). In addition, there have been several proposals to increase the gasoline tax rate by five or more cents per gallon. If a five-cent increase were enacted, the snowmobile account would receive approximately \$1.25 million more each year. 15

Off-Highway Vehicle Receipts

Figure 5.2 shows receipts for the ATV account. Like snowmobiles:

The ATV account has received nearly all of its funding from vehicle registration fees and gasoline taxes.

In 2002, the ATV account received 63 percent of its funding from registration fees and 37 percent from gasoline taxes. Total 2002 receipts were \$2.1 million. After adjusting for inflation, this represents a 66 percent increase over 1991 receipts. The increase is entirely the result of increases in the number of ATV registrations, as both the registration fee and the percentage of gas tax going to the ATV account have not changed.¹⁶

The snowmobile gas tax allocation has varied over the last several years.

¹² Registration fees include filing fees and permit fees for out-of-state snowmobiles.

¹³ Laws of Minnesota (1997), ch. 216, sec. 61.

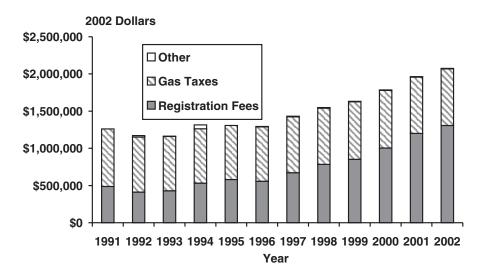
¹⁴ Inflation adjustments are based on the Bureau of Economic Analysis, Price Deflator for State and Local Government (Washington, 2002); http://www.besa.gov/bea/dn/nipaweb/ TableViewFixed.asp? SelectedTable=144&FirstYear=2001& LastYear=2002&Freq=Qtr; accessed June 3, 2002.

¹⁵ Based on 2.5 billion gallons of taxable petroleum sold in 2001 times five cents per gallon (proposed increase) times 1 percent (snowmobile account's share).

¹⁶ Actual gas tax revenues increased at about the same rate as inflation.

After adjusting for inflation, ATV account receipts increased by 66 percent between 1991 and 2002.

Figure 5.2: ATV Account Receipts, FY 1991-2002



NOTE: The figure excludes transfers in 1999 of \$737,843 from the 4X4 truck account and \$147,569 from the dirt bike account.

SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

The dedicated account for dirt bikes (the "off-highway motorcycle account") received \$0.3 million in 2002. It received 74 percent of its 2002 receipts from gasoline taxes and 26 percent from vehicle registrations. After adjusting for inflation, receipts in 2002 were 32 percent more than in 1996, the first full year gas taxes were paid to the account. The increase is due entirely to an increase in the number of registered vehicles. The dedicated account for 4X4 trucks (the "off-road vehicle account") had receipts of \$0.9 million in 2002. Because there are so few registered 4X4 trucks (1,416 as of 2001), 96 percent of the account's receipts in 2002 were from gas taxes and only 4 percent from registration fees. Receipts for this account have been stable over the last five years.

ENCUMBRANCES

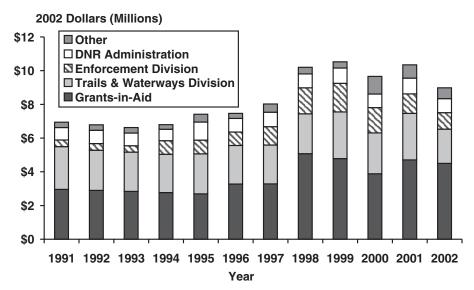
We also examined encumbrances from each of the four dedicated accounts. (As mentioned earlier, an encumbrance is a commitment to spend funds for a specified purpose, either immediately or in the future.)

Snowmobile Encumbrances

Figure 5.3 shows inflation-adjusted encumbrances from the snowmobile account from fiscal years 1991 to 2002. It indicates that:

 DNR has used the snowmobile account to develop, maintain, and groom snowmobile trails, to enforce snowmobile regulations, and to administer the snowmobile program.

Figure 5.3: Snowmobile Account Encumbrances, FY 1991-2002



SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

The primary spending category in the snowmobile account is grants-in-aid.

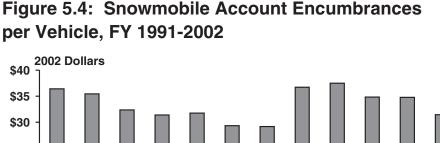
In 2002, for example, the state encumbered \$4.5 million (50 percent of the \$9 million total) on grants-in-aid to snowmobile clubs to develop, maintain, and groom snowmobile trails. An additional \$2 million (23 percent) went to the Trails and Waterways Division to oversee the overall snowmobile program and to develop and maintain its own trails. Eleven percent of encumbrances were for enforcement and 9 percent went to DNR's central office for administrative expenses such as licensing, data systems, and personnel. Finally, 4 percent of encumbrances were for local enforcement grants, and 2 percent went to the Minnesota Conservation Corps for summer and after school work programs for youth to help maintain trails.

Figure 5.3 also shows that annual encumbrances have increased by 29 percent between 1991 and 2002. The largest increases were for enforcement (150 percent) and grants-in-aid (52 percent). However, as shown in Figure 5.4:

 Overall snowmobile encumbrances per vehicle have remained fairly constant since 1991.

Between 1991 and 2002, encumbrances per registered snowmobile have ranged from a low of \$29.19 in 1997 to a high of \$37.50 in 1999 as the result of

¹⁷ See Chapter 1 for a description of the state's trail system.



\$25 \$20 \$15 \$10 \$5 \$0 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 Year

SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

supplemental appropriations for grant-in-aid trails and enforcement. Encumbrances per vehicle have since declined to \$31.45 in 2002.

The amount of grooming and maintenance that snowmobile trails receive is highly dependent on snow conditions. Abundant snow means the trails will have to be groomed more frequently and for a longer season. Accordingly, we examined how grant-in-aid expenditures varied in high- and low-snow years. Under the grant-in-aid program, DNR and the trail sponsors enter into a two-year grant agreement, and clubs have two years to spend their funds. Table 5.1 shows that:

In high-snow years, clubs spent a higher percentage of their grant-in-aid allotment during the first year of a two-year agreement than low-snow years.

The years with the most days with 12 or more inches of snow on the ground, 1996 and 1997, were also the years where the highest percentage of grant-in-aid allotments was spent during the first year of the grant agreement. ¹⁸ In the years with less snow, clubs spent a smaller portion of their grant-in-aid allotments during the first year of the agreement.

We also looked at how DNR allocates grants-in-aid to regions. According to DNR officials, the agency does not have a formula to determine how much to allocate to each region. Rather, DNR allots funds based on historical allotments

The amount of grooming and maintenance that snowmobile trails receive is highly dependent on snow conditions.

¹⁸ Allotments are funds budgeted, usually on an annual basis, for a specific activity.

FINANCES 91

Table 5.1: Snowmobile Grant-in-Aid Expenditure
Patterns and Snow Conditions, FY 1996-2002

Budget Year	Amount Allotted	Amount Spent During First Year of Two-Year Grant	Percentage Spent	Days With 12+ Inches of Snow
1996	\$2,820,296	\$2,087,085	74%	59
1997	2,298,925	2,116,043	92	83
1998	4,649,000	2,040,023	44	7
1999	4,378,392	1,480,199	34	14
2000	3,688,953	1,207,646	33	3
2001	4,649,000	3,055,544	66	55
2002	4,497,000	2,652,296	59	2

NOTE: Snow depth is based on an average of 30 reporting stations located in all regions of the state. Dollar figures are not adjusted for inflation.

SOURCE: Office of the Legislative Auditor analysis of MAPS data and data provided by the State Climatologist.

with adjustments made for known changes, such as the addition of new trails. Figure 5.5 shows that:

• DNR has appropriately allotted more grant-in-aid funds to the northern regions than the southern regions.

For both 2001 and 2002, snowmobile clubs in the northern regions received more funding than southern region clubs. In our view, this is reasonable because the northern regions have more miles of snowmobile trails and normally receive more snow than the southern regions. Combining 2001 (a high snow year) and 2002 (a low snow year), we found that DNR annually allotted \$307 per mile of grant-in-aid trail to snowmobile clubs in the northern three regions and only \$260 per mile of trail in the three southern regions.

Off-Highway Vehicle Encumbrances

As noted above, three accounts fund OHV trails. Figure 5.6 shows inflation-adjusted encumbrances from one of those accounts, the ATV account, for fiscal years 1991 through 2002. It shows that:

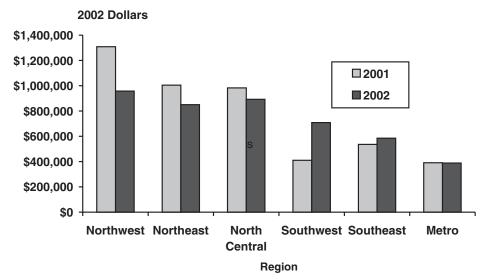
• The ATV account has not funded many grant-in-aid trails but, in recent years, has been used to develop the Iron Range OHV Park in northeast Minnesota.

Minnesota's northern regions have more trails and snow, and they receive more snowmobile grant-in-aid money than the southern regions.

¹⁹ Excluding the 2,900 miles of trails added to the grant-in-aid program during calendar year 2002, 64 percent of the snowmobile grant-in-aid trails were in the three northern regions. Between 1991 and 2002, the northern regions averaged 40 days with 12 or more inches of snow on the ground, while the southern regions averaged 15 such days.

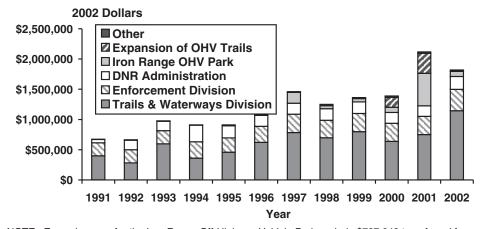
²⁰ Our calculation excluded the additional miles and allotments added to the grant-in-aid system in calendar year 2002.

Figure 5.5: Snowmobile Grant-in-Aid Allotments by Region, FY 2001-2002



SOURCE: Office of the Legislative Auditor analysis of DNR Appropriation-Allotment Summary Balance Reports, fiscal years 2001-2002.

Figure 5.6: ATV Account Encumbrances, FY 1991-2002



NOTE: Encumbrances for the Iron Range Off-Highway Vehicle Park exclude \$737,843 transferred from the off-road vehicle account (4X4 trucks) and \$147,569 transferred from the off-highway motorcycle account (dirt bikes). See *Laws of Minnesota* (1996), ch. 407, sec. 3. Trails & Waterways Division expenditures include grants-in-aid to local clubs to maintain trails.

SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

FINANCES 93

In 2002, grants-in-aid accounted for a smaller portion of funding for OHVs than for snowmobiles.

As we discussed in Chapter 1, DNR funds far fewer grant-in-aid trails for ATVs than snowmobiles. In fact, we estimate that in 2002 roughly 18 percent of the ATV funds were encumbered for grant-in-aid trails, while for snowmobiles, grant-in-aid accounted for 50 percent of encumbrances. Although the ATV fund statements do not separate encumbrances for grant-in-aid trails from other Trails and Waterways Division encumbrances, we did examine the division's ATV funding allotment for 2002. (This is the ATV funding budgeted for various ATV activities, rather than the amount encumbered or spent.) In 2002, the state allotted 30 percent of the ATV funding for the Trails and Waterways Division to grant-in-aid trails. Therefore, we assumed that 30 percent of the encumbrances for the Trails and Waterways Division were for grant-in-aid trails. Figure 5.6 shows the breakdown of encumbrances from the ATV account by program activity. In 2002, grant-in-aid trails accounted for about 30 percent of the bottom "Trails and Waterways Division" segment of the bar. Figure 5.6 also shows that the Iron Range OHV Park, particularly in 2001, accounted for a significant portion of the encumbrances (25 percent in 2001 but only 5 percent in 2002).²¹ Enforcement and DNR administration were the other significant encumbrance categories, accounting for 20 percent and 12 percent of ATV account encumbrances in 2002.

Encumbrances from the account for 4X4 trucks totaled \$1.1 million in 2002. Most of the money (85 percent) went to the Trails and Waterways Division. Five percent was encumbered for enforcement and 2 percent for administration. The state encumbered about \$0.4 million from the account for dirt bikes in 2002. The majority (65 percent) went to the Trails and Waterways Division, 18 percent was encumbered for enforcement, and 11 percent was encumbered for administration. ²²

As indicated by Figure 5.6, ATV encumbrances increased by 170 percent between 1991 and 2002 after adjusting for inflation. However, we found that:

 Spending on ATV trails and use areas has not kept pace with the increase in ATV registrations.

As shown by Figure 5.7, after adjusting for inflation, ATV account encumbrances per vehicle declined by 37 percent, from \$18 in 1991 to \$11 in 2002. ²³ With the exception of 2001, when the ATV account helped fund the construction of the Iron Range OHV Park, encumbrances per registered ATV since 1998 have been lower than they were in the early 1990s. This differs from snowmobile encumbrances per vehicle which, as we noted earlier, have remained mostly stable since 1991.

²¹ Encumbrances for the Iron Range OHV Park exclude \$737,843 (in 2002 dollars) transferred from the off-road vehicle account (4X4 trucks) and \$147,569 from the off-highway motorcycle account (dirt bikes). See *Laws of Minnesota* (1996), ch. 407, sec. 3.

²² The remaining 5 percent of encumbrances from the dirt-bike account and 7 percent from the 4X4 truck account represent the funds used to build the Iron Range OHV Park.

²³ ATV registrations for 2002 were not available at the time we did our analysis. We estimated the number of registered ATVs to be 160,578, based on the average rate of increase in the number of registered ATVs since 1997. We did not calculate encumbrances per vehicle for the dirt bikes and 4X4 trucks because of the low number of registered vehicles in those categories.

2002 Dollars \$20 \$18 \$16 \$14 \$12 \$10 \$8 \$6 \$4 \$2 \$0 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 Year

Figure 5.7: ATV Account Encumbrances per Vehicle, FY 1991-2002

NOTE: The 2002 figure is based on an estimate of 160,578 registered vehicles. Amounts exclude \$737,843 transferred from the off-road vehicle account (4X4 trucks) and \$147,569 transferred from the off-highway motorcycle account (dirt bikes) to fund the Iron Range Off-Highway Vehicle Park.

SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements and DNR vehicle registration data, 1991-2002.

FUND BALANCES

We reviewed the fund balances in the four recreational vehicle accounts to see if the accounts have sufficient funds to meet current and projected needs for snowmobile and OHV spending. While there is no precise definition of what constitutes an appropriate fund balance, we found that:

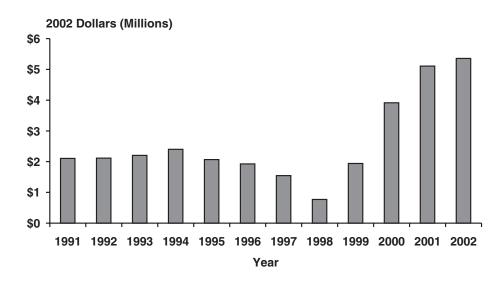
 The fund balances in the four recreational vehicle accounts are adequate to meet current spending levels and could be drawn down to support funding for additional needs.

In recent years, the snowmobile account has received more money than it has spent, resulting in increases in the fund balance. As shown in Figure 5.8, after hovering at around \$2 million in the early 1990s, the fund balance fell to a low of \$773,000 in 1998. Since then, the fund balance has risen dramatically to \$5.4 million at the end of fiscal year 2002. Even after incorporating additional trails into its grant-in-aid system in 2002 and encumbering funds to maintain the added trails, the fund balance increased in 2002. At the end of 2002, the fund balance represented 60 percent of encumbrances from the snowmobile account that year.

Figure 5.9 shows fund balances for the ATV account. ATV fund balances have consistently been above \$4 million in the 1990s and, after rising steadily, have leveled off at around \$6 million. At the end of 2002, the fund balance represented three times what it needed to meet its financial commitments that year.

The fund balance in the snowmobile account has grown substantially since 1998. FINANCES 95

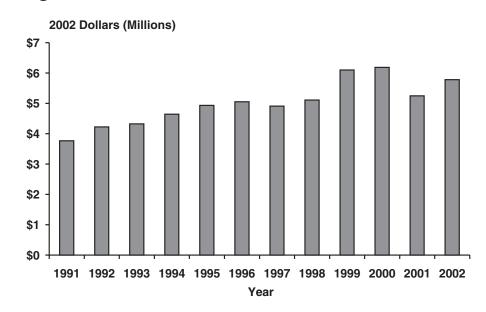
Figure 5.8: Snowmobile Account Fund Balance, FY 1991-2002



SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

Figure 5.9: ATV Account Fund Balance, FY 1991-2002

After rising during the 1990s, the fund balance in the ATV account has leveled off at about \$6 million.

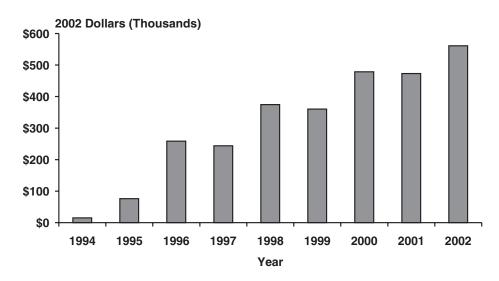


SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1991-2002.

The fund balances in the dirt-bike and 4X4 truck accounts have grown since their inception.

The fund balances of the accounts for dirt bikes and 4X4 trucks have also increased since the creation of those accounts in 1994, as shown in Figures 5.10 (dirt bikes) and 5.11 (4X4 trucks). The fund balance of the account for dirt bikes rose from \$258,000 in 1996, the first year that the account received a full year of gas tax receipts, to \$561,000 at the end of fiscal year 2002. The fund balance of the account for 4X4 trucks has risen from \$407,000 in 1996 to \$2.2 million at the end of 2002, despite the fact that it gets very little money from vehicle registrations. With relatively few miles of developed trails, the three OHV accounts have accumulated more money than they can spend.

Figure 5.10: Fund Balance of Account for Dirt Bikes, FY 1994-2002



SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1994-2002.

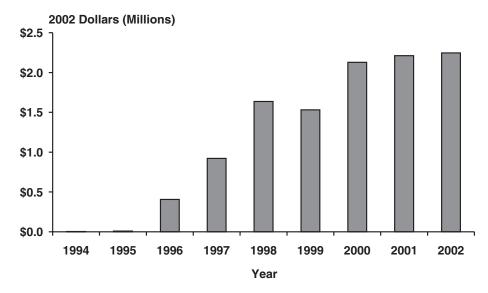
The four motorized recreational vehicle accounts together ended fiscal year 2002 with fund balances totaling \$13.9 million. In our view, some of this money could be used to meet some of the needs identified in this report. These include, for example, the planning and environmental review improvements discussed in Chapter 2, the increase in oversight discussed in Chapter 3, and increased enforcement and mandatory safety classes for OHVs discussed in Chapter 4.

RECOMMENDATION

If the Legislature identifies the need to spend more money on planning, environmental review, trail development and maintenance, grant oversight, and enforcement for motorized recreation, the Legislature should appropriate additional funds from the dedicated recreational vehicle accounts to meet these needs.

FINANCES 97

Figure 5.11: Fund Balance of Account for 4X4 Trucks, FY 1994-2002



SOURCE: Office of the Legislative Auditor analysis of Natural Resources Fund closing statements, fiscal years 1994-2002.

The rate of growth in the number of registered snowmobiles has leveled off in recent years and some DNR officials believe that snowmobile registrations may decline. In addition, DNR projects that fund balances for the four accounts will collectively decline by \$4.6 million in 2003.²⁴ While this is possible, we note that DNR's 2001 Closing Fund Statement projected a \$439,000 decline in the combined fund balances for the four accounts by the end of 2002. Instead, the fund balances increased by a combined \$906,000.

Unlike snowmobile fees, registration fees for OHVs have not increased since they were first set. Finally, if fund balances do decline, the Legislature has the option to raise revenue by increasing OHV registration fees. While the snowmobile registration fee has increased several times over the last 30 years, as shown in Table 5.2, the ATV registration fees have not increased since ATV registration began in 1984, and the dirt bike and 4X4 trucks have not had an increase in registration fees since they were first regulated in 1993. As a result, OHV registration fees are much lower than snowmobile fees. Registration fees are \$45 every three years for snowmobiles, \$30 (two-thirds of the snowmobile fee) for dirt bikes and 4X4 trucks, and \$18 (40 percent of what snowmobiles pay) for ATVs. Thus, there is an argument for raising registration fees for OHVs. Furthermore, as we discussed in Chapter 2, OHVs can be used much of the year and require a greater level of management than snowmobiles.

²⁴ The projected end-of-year fund balances for 2003 are \$3.3 million (snowmobile account), \$4.2 million (ATV account), \$1.5 million (4X4 trucks), and \$0.3 million (dirt bikes), for a total of \$9.4 million, or \$4.6 million less than 2002. DNR, *Natural Resources Fund FY 2002 Closing Fund Statement* (St. Paul, October 2002).

²⁵ As noted earlier, all vehicles are also charged a \$2 filing fee and \$1.50 fee to cover costs associated with electronic licensing.

Table 5.2: Motorized Vehicle Registration Fees

Type of Vehicle	Current Three-Year Registration Fee	Last Time Fee Was Increased
Snowmobile	\$45	1997
ATV	18	1984
Dirt Bike	30	1993
4X4 Truck	30	1993

NOTE: For all vehicles, there is also a \$2 filing fee and a \$1.50 fee to cover costs associated with electronic licensing. The fee for ATVs used exclusively for private or agricultural use or exclusively on private property is \$6 and is valid until ownership of the vehicle is transferred.

SOURCE: Minn. Stat. (2002), §§84.788, 84.798, 84.82, and 84.922.

GASOLINE TAX STUDIES

Researchers have surveyed recreational vehicle users to estimate the amount of gas they use.

As noted earlier in this chapter, the dedicated snowmobile and OHV accounts receive a significant portion of their funds from gasoline taxes. The Legislature has determined that since recreational vehicle users pay some of these taxes, the taxes attributable to snowmobile and OHV use should go to support snowmobile and OHV trails. Unfortunately, nobody keeps records on how many gallons of gas are purchased by snowmobile and OHV users. As a result, the Legislature has relied on studies that have estimated the percentage of gas tax attributable to each of the four types of motorized recreational vehicles.

We reviewed these studies and found that:

 The current percentages of gasoline taxes allocated to the four recreational vehicle accounts probably do not reflect the actual percentage of gasoline taxes paid by users of these vehicles for off-road use.

All of the studies used to estimate the percentage of gasoline used by snowmobiles or OHVs have relied on surveys of vehicle owners. In our view, these studies are either outdated, have methodological flaws, or simply do not support the percentage adopted by the Legislature.

Snowmobile Gas Tax Studies

The first estimate of snowmobile gas use was conducted in 1983 but was based largely on a telephone survey of snowmobile owners conducted in the winter of 1977-78, a year with average snowfall.²⁶ The study used (1) survey data on the average distance a snowmobile annually travels, (2) estimates of the number of snowmobiles in Minnesota, and (3) gas mileage data from manufacturers to estimate total annual gas consumption by snowmobiles. The authors then divided the gallons of gasoline attributable to snowmobiles by the total gallons purchased

²⁶ DNR Trails and Waterways Division, *Gasoline Use in Motorboats and Snowmobiles in the State of Minnesota* (St. Paul, January 1983).

FINANCES 99

in the state to determine the percentage of gasoline consumption (and, therefore, gasoline taxes) attributable to snowmobiles.

Surveys of this type were used in all subsequent studies of gas consumption by snowmobiles and OHVs. The methodology is not perfect because it relies on people's memories of how many times they ride, how far they go, and in some studies, how much gas they use. Subsequent snowmobile gas consumption studies were conducted in 1992 and 1998, both employing the same basic methodology. None of the studies asked snowmobile or OHV owners to keep a log of their travels.

The snowmobile account's current gas tax allocation is based on the 1998 study. After evaluating the information in this study, we believe that:

 The 1 percent gas tax allocation for snowmobiles is too high because it is based on gas consumption in a winter with an unusually long snowmobile season.

Taking into account the caveats discussed above, the 1998 study seems methodologically sound for the most part. In fact, the authors used two methods to estimate gasoline consumption by snowmobiles in fiscal year 1997. The first method was the standard one discussed above. Using this method, snowmobiles consumed between 0.81 and 1.05 percent of taxable gas sales. The second method was a statistical model that estimated annual gas consumption based on the snow depth in Grand Marais, Minnesota on January 25, 1997. This method produced an estimate of 0.76 to 0.99 percent of taxable gasoline sales attributable to snowmobiles. Based on the high-end estimate for both methods, a 1 percent allocation seems appropriate.

In an average snow year, snowmobiles probably account for less than 1 percent of total gasoline consumption. However, these estimates were based on the winter of fiscal year 1997 that, as shown in Figure 4.3 in Chapter 4, had the most days with 12 or more inches of snow depth of any winter in the last decade. To get a more reasonable estimate, we used 2002 snowmobile registration data and the 30-year average snow depth on January 25 in the "Grand Marais" model and estimated that snowmobiles account for 0.59 to 0.76 percent of total taxable gas consumption in 2002. ²⁹ This analysis suggests that, for an average winter, the 1 percent allocation of gas taxes to the snowmobile account is probably too high. In its transmittal letter accompanying the gas tax study, DNR reached the same conclusion. It stated that,

²⁷ Jonathan C. Vlaming, Dorothy H. Anderson, and Gregg Flekke, *Gasoline Consumption by Snowmobiles Within Minnesota* (St. Paul: University of Minnesota Department of Forest Resources, February 1992), and Michael S. Lewis and Dorothy H. Anderson, *Gasoline Consumption by Snowmobiles Within Minnesota: Updating the 1992 Gasoline Consumption Model*, (St. Paul: University of Minnesota Department of Forest Resources, February 1998).

²⁸ The authors concluded that, depending on the estimate of the number of unregistered vehicles, snowmobiles consumed from 18.7 to 24.1 million gallons of gasoline in 1997. Dividing those numbers by total gas sales of 2.3 billion gallons results in an estimate of the percentage of gas taxes attributable to snowmobiles in the range of 0.81 to 1.05 percent.

²⁹ The high end of the estimate is based on an estimate of unregistered snowmobiles equal to 35 percent of registered snowmobiles. This would mean there were almost 100,000 unregistered snowmobiles in 2002 (35 percent of 285,675). Our analysis of citations and warnings, however, found that an average of 287 snowmobile riders received a citation or warning for not registering their vehicle in 2001 and 2002. This would mean that over 99.7 percent of the non-registered snowmobiles make it through a season undetected.

"the percentage of fuel used by snowmobiles in an average year properly falls in the .75 of one percent range. The Departments of Administration, Transportation, Natural Resources, and Revenue are basically in agreement with this conclusion." ³⁰

RECOMMENDATION

The Legislature should reexamine the 1 percent allocation of gas tax collections to the snowmobile account.

If the Legislature were to reduce the snowmobile account's allocation to 0.75 percent, the account's annual revenues would decline by about \$1.25 million. Adoption of this recommendation would reduce the snowmobile account's future fund balance and the amount that the Legislature could appropriate from the fund. For example, had the 0.75 percent rate been in effect for all of fiscal year 2002, 2002 snowmobile account receipts would have been reduced by about \$625,000. Instead of increasing by about \$250,000, the fund balance would have declined by about \$375,000 from its 2001 level. The fund balance at the end of 2002 would have been about \$4.7 million or about 52 percent of 2002 expenditures.

All-Terrain Vehicle Gas Tax Study

There has only been one study of gasoline tax use by ATVs in Minnesota, and it was conducted in 1984 when ATVs were first regulated.³¹ We found that:

 The ATV gasoline consumption study is out-of-date and likely understates the percentage of gasoline consumption attributable to ATV use.

Like the snowmobile studies, the ATV study used surveys to identify the number of ATVs (defined as three-wheeled vehicles with less than 800 cc engine capacity and under 600 lbs) in use and the number of miles they were driven each year. The authors estimated that there were 75,624 ATVs used for recreation, each consuming between 32 and 37 gallons per year, resulting in an estimate of 2.3 to 2.8 million gallons.³² The authors reported that industry data indicated that ATV sales were increasing, so they selected the upper end of the range. This was about 0.15 percent of total gasoline consumption.

The ATV study has never been updated. Since 1984, the number of ATVs has increased significantly. There were almost 150,000 registered ATVs in Minnesota in 2001, or about twice the number estimated in the study. If the study's estimate of 37 gallons per vehicle were applied to the 148,000 registered ATVs in 2001,

The number of ATVs has increased substantially since ATV gas consumption was estimated in 1984.

³⁰ Julie Smith Zuidema, DNR Deputy Commissioner, letter accompanying snowmobile gas tax study, March 23, 1998.

³¹ Environmental Resources Management, *Three-Wheeled Off-Road Vehicle Consumption in Minnesota* (St. Paul: DNR, January 1985).

³² The range resulted because the responses to a survey question about miles driven per year differed from the sum obtained by adding up the responses to questions about seasonal use.

FINANCES 101

the result would be a total of 5.5 million gallons of gasoline used by ATVs, or 0.22 percent of total gasoline consumption. This is probably still too low because it does not include unregistered vehicles, which according to a recent study, may number as much as 50 percent of registered vehicles.³³

RECOMMENDATION

The Legislature should require DNR to conduct an updated gasoline usage study for ATVs.

The updated study would probably increase receipts for the ATV account. The additional revenue could be used to implement the other recommendations in this report.

Gas Tax Study for Other Off-Highway Vehicles

The percentages of gasoline taxes attributable to dirt bikes and 4X4 trucks were determined by research conducted in 1994.³⁴ In our view:

Like the snowmobile and ATV studies, this study also relied on surveys to estimate the number of vehicles and the amount of gasoline that they use. The

 The study estimates a suspiciously high number of dirt bikes and 4X4 trucks used for recreational purposes, which calls into question the validity of the study.

authors sent a postcard to 20,000 randomly selected Minnesota households. The postcard listed four types of vehicles: motorcycle, ATV, 4X4, and bicycle. It asked, "How many of each vehicle do you own?" and, "How many of each vehicle do you ride on trails or in non-road areas for recreation?" Based on the survey, the authors estimated that there were 123,000 4X4 trucks and 88,000 dirt bikes, which are substantially higher than the current registration of 1,416 4X4s and 6,274 dirt bikes in 2001. Part of the discrepancy may be explained by the fact that DNR only requires 4X4 trucks and dirt bikes to register if they operate on designated trails. People can use a 4X4 truck or dirt bike on the state's 6,000 miles of undesignated trails without registering it. Nevertheless, we wonder whether some respondents may have misinterpreted the survey question. Perhaps they included all 4X4s, not just those driven off-road. The fact that there are so few enforcement actions related to those vehicles also raises doubt about the

actions taken against ATVs.

While the 1994 gas tax study estimated there were 123,000 4X4 trucks used for off-road purposes, only 1,416 trucks were registered in 2001.

legitimacy of the estimates. In 2002, there were a total of 80 enforcement actions taken against 4X4 trucks and 241 against dirt bikes. In contrast, there were 2,545

³³ John P. Genereux and Michele Genereux, An OHV Recreation Planning Tool Based on A Survey of Resource Managers and A Survey of Off-Highway Vehicle Riders in Minnesota (St. Paul: DNR, July 2001), 3.

³⁴ Jerrilyn L. Thompson and Dorothy H. Anderson, *Off-Highway Motorcycle and Off-Road Vehicle Use and Gasoline Consumption in Minnesota*, (Maplewood, MN: Thompson-Anderson Forestry Consultants, February 1994).

³⁵ The response rate was only 45 percent so the authors telephoned a random sample of non-respondents. They obtained responses from 503 of them. They then weighted the telephone responses to represent the 55 percent who did not respond to the postcard survey.

After calculating estimates for the number of dirt bikes and 4X4s, the authors used another mailed questionnaire and follow-up telephone survey that asked respondents how many times the vehicle was used off-road in the past year and the average number of gallons of gas consumed each trip. The authors then multiplied the average gallons consumed per vehicle per year by their estimate of the number of vehicles to estimate total gasoline consumption attributable to dirt bikes and 4X4 trucks. ³⁶

RECOMMENDATION

The Legislature should require DNR to conduct new studies of gasoline usage by dirt bikes and 4X4 trucks.

It is uncertain how implementation of this recommendation would impact the amount of gasoline taxes being transferred to the dirt bike and 4X4 accounts.

³⁶ The authors concluded that dirt bikes used 1.2 million gallons of gas per year and 4X4 trucks used about 4.2 million gallons. Dividing this by 2 billion gallons of taxable gas sold in 1993, the authors concluded that dirt bikes paid 0.057 percent of the gasoline taxes and 4X4s paid 0.205 percent.

Summary of Recommendations

INFORMATION MANAGEMENT

• DNR should revise the process that it uses to update information in its trail database in order to increase the accuracy and timeliness of this information (p. 15).

PLANNING

- If DNR plans to develop a statewide system of OHV trails, it should develop a better understanding how many miles of trails the department's OHV budget will support (p. 26).
- DNR should fully implement its new concept for OHVs of "managed use on managed trails." (p. 29)
- The Legislature should require that Environmental Assessment Worksheets be prepared for many types of OHV projects (p. 30).

GRANT-IN-AID OVERSIGHT

OHV Oversight

• DNR should increase the level of oversight that it provides OHV grant-in-aid trails and not rely on indirect and ad hoc oversight (p. 56).

Snowmobile and OHV Oversight

- If DNR is to rely on complaints as a monitoring and management tool, the
 department needs to develop a system for recording, tracking, and
 addressing complaints and program violations (p. 57).
- DNR should require local government trail sponsors to share information
 with DNR about any complaints or program violations that they hear about.
 In turn, DNR should share its information about complaints and problems
 with the local sponsor (p. 57).
- DNR field offices should annually collect from the clubs and keep on file an up-to-date list of landowners for each trail and a map that shows trail alignment changes and trail segments that will receive significant maintenance work in the upcoming year (p. 57).

- DNR should set up a schedule of reductions in future grants for violations of program requirements, including not following federal, state, and local regulations (p. 58).
- DNR should develop explicit criteria for determining the type of grant-in-aid projects that will be reviewed by all DNR divisions and procedures for addressing and settling concerns raised during these reviews (p. 59).
- If DNR expects the local government trail sponsors to be the primary overseer of the clubs, the department needs to provide more guidance in the program manuals regarding the steps that the sponsors need to take to appropriately oversee the clubs (p. 59).
- DNR should prohibit the local government sponsor from assigning responsibility for overseeing the trail grants to a local government official who is also an officer or the bookkeeper of the club receiving the grant (p. 60).
- DNR should require club officials to participate in periodic training concerning grant processes and federal, state, and local regulations that affect the development and maintenance of trails (p. 60).
- DNR should require clubs to provide landowners with a written project description before any substantial work is done on their land and provide landowners the opportunity to walk the project area with a club official and the contractor(s), so the landowner, club, and contractor(s) are all in agreement about the nature of the work (p. 61).
- DNR should require clubs to annually contact each of the landowners that have granted them permission to use their land to verify that nothing has changed in ownership and to provide the landowner an opportunity to ask questions or raise concerns (p. 61).
- When a club proposes moving earth (e.g. filling or grading) on any motorized trail or creating a new OHV trail, DNR should require the club to have the alignment inspected for wetlands by a trained professional before the project proceeds (p. 62).

ENFORCEMENT

- In general, DNR should devote at least as much enforcement time per vehicle to OHVs as it provides to snowmobiles. If necessary, the Legislature should increase the enforcement funding that comes from the dedicated OHV accounts to allow the Enforcement Division to fulfill this recommendation (p. 71).
- The Legislature should require people wishing to ride an ATV on public land or a publicly-funded trail to first complete an ATV safety training class that includes both a written exam and a riding component (p. 79).

FINANCES

- If the Legislature identifies the need to spend more money on planning, environmental review, trail development and maintenance, grant oversight, and enforcement for motorized recreation, the Legislature should appropriate additional funds from the dedicated recreational vehicle accounts to meet these needs (p. 96).
- The Legislature should reexamine the 1 percent allocation of gas tax collections to the snowmobile account (p. 100).
- The Legislature should require DNR to conduct an updated gasoline usage study for ATVs (p. 101).
- The Legislature should require DNR to conduct new studies of gasoline usage by dirt bikes and 4X4 trucks (p. 102).

Events in Off-Highway Vehicle Planning in Minnesota

APPENDIX A

1971-1974

The U.S. Department of the Interior published *ORRV Off Road Recreation Vehicles* warning of management problems and raising concerns about environmental impacts.

Presidential Executive Order 11644 (amended in 1977 by Executive Order 11989) required federal agencies to designate areas open and closed to off-highway vehicle (OHV) use based on minimizing environmental damage, wildlife harassment, and user conflicts.

DNR's *Minnesota State Comprehensive Outdoor Recreation Plan* recognized that the use of OHVs was increasing rapidly but there were virtually no public facilities available for that use. The plan noted that research should be conducted to determine the number of participants and kinds of facilities needed before determining if public facilities will be provided.

1976

DNR contributed to a report titled the *Upper Great Lakes Regional Commission Model Legislation, Off-Road Recreational Vehicles*. The report addressed general registration requirements, procedures for distributing funds from a grant-in-aid account, and trail design specifications.

DNR proposed to develop an OHV park near Moose Lake; the proposal died due to heavy local opposition.

1979

The Council on Environmental Quality published *Off-Road Vehicles on Public Land* that raised concerns about environmental impacts.

DNR's *State Comprehensive Outdoor Recreation Plan* recognized the potential for conflicts among people participating in motorized and nonmotorized recreation and ranked developing facilities for four-wheeling and trail biking in its list of top metropolitan and statewide needs.

1980-82

DNR issued a report titled *Minnesota Trails Policy Plan*, which omitted discussion of OHV facilities.

DNR's survey of Minnesota 4X4 truck owners gathered data on desired facilities.

1983

Minnesota Laws Chapter 301, Section 56 requested a report addressing OHV use and effects on the environment.

DNR released a report titled *The Use of Three-Wheeled ATVs on Snowmobile Trails in Minnesota*, which found that many landowners did not support the use of ATVs on snowmobile trails.

1984

DNR released a report requested by the Legislature titled *Off-Road Vehicle Use in Minnesota*, which reviewed OHV management and environmental issues. The report found that OHVs cause some social and environmental impact that varies depending on location, amount, type, and season of use. It also found that use could be managed via site design and development, signing, enforcement, and user education.

Minnesota Laws (1984) Chapter 647 (Minnesota Statutes §§84.92-84.929) required DNR to register three-wheeled off-road vehicles. It also required DNR to establish a vehicle safety and training program and provided that funds from a dedicated account could be used for the education and training program, administration, and development of vehicle use areas. It set numerous standards and requirements for operation.

DNR's report titled *The Minnesota DNR Trail Plan* . . . *a discovery process* included an extensive section on OHVs and found a need for aggressive OHV management.

1985

DNR's 1984-89 State Comprehensive Outdoor Recreation Plan noted that there are few miles of trails for OHVs. It ranked OHV facility needs high and emphasized private development. It also noted that government should direct intensive recreation uses to less sensitive areas where feasible.

1986-88

Minnesota Laws (1986) Chapter 452 changed all references from "three-wheeled" to "all-terrain" vehicles and required DNR to adopt or modify rules for ATV registration, use on certain public land or waters, specifications, signs, and their effect on game and fish resources. The law also directed MnDOT to adopt rules relating to ATV use on streets and highways. It provided new restrictions on the use of ATVs on streets or highways and on ATV use by youth. It set 0.15 percent as the portion of gas tax revenue derived from ATV use and payable to the dedicated ATV account.

Following a Consumer Product Safety Commission report, the U.S. Department of Justice filed a lawsuit against manufacturers of three-wheeled ATVs that alleged violations of the Consumer Product Safety Act. A concurrent consent decree halted future sales.

APPENDIX A 109

1989

DNR issued a report titled *Trail and Water Recreation: Assessing the Needs*, *Proposing Solutions* and recommended implementing an ATV program via grants-in-aid but cautioned that "unresolved questions need to be addressed, including the identification of areas that ATVs can use without negatively impacting natural resources"

Minnesota Laws (1989) Chapter 331 reduced three-year registration fees for ATVs operated only for private use to \$6. It provided numerous other requirements and restrictions and legalized ditch riding on the outside slope or bank of most public roads.

DNR's 1990-94 State Comprehensive Outdoor Recreation Plan called for a statewide task force to assess how to accommodate OHV use and methods to separate competing and/or conflicting recreational activities.

1990

DNR issued a report titled *Report and Recommendation to the Minnesota Legislature Concerning the Use of All Terrain Vehicles by Person Under 12 Years of Age.* The report included concerns about noise and long-lasting damage to public resources from uncontrolled ATV use.

1991

Minnesota Laws Chapter 254 directed DNR, working with the Minnesota Four-Wheel Drive Association, to study the feasibility of an OHV recreation area.

1992

DNR issued a report titled *Minnesota's State Trails: Improvements for the Future*, which summarized stakeholder meetings for trail users, including ATVs, dirt bikes, and 4X4 trucks. The discussions listed environmental impact as the top obstacle to developing more trails and cited the need for more knowledge about trail maintenance and damage to the environment.

DNR issued the legislatively mandated report titled *Feasibility Of An Off-Highway Vehicle Recreation Site Near The Twin Cities*, which discussed criteria for siting an OHV park, including possible locations.

1993

Minnesota Laws Chapter 311 (Minnesota Statutes §§84.787-84.796 and §§84.797-84.805) required DNR to register dirt bikes and 4X4 trucks and created dedicated accounts to be used for managing those vehicles and developing trails. It set numerous requirements and restrictions for dirt bikes and 4X4 trucks. It also mandated a comprehensive plan for managing OHVs and a report on OHV use.

Minnesota Laws Chapter 203 forbade the commissioner to use state lands for an OHV sports area without legislative approval.

1994

DNR Commissioner Sando sent a letter that directed staff to find ways to accommodate OHVs and to use the dedicated accounts for planning, enforcement, and operations.

DNR's 1995-99 State Comprehensive Outdoor Recreation Plan addressed the need for sustainable outdoor recreation, greater recreational research, and capital investments that develop intensive recreational uses in areas suited to those uses and that separate conflicting uses.

<u>1995</u>

DNR issued a mandated report titled *Comprehensive Recreational Use Plan: Off-Highway Motorized Recreation in Minnesota* which proposed classifying state lands to facilitate OHV use and recommended (1) an OHV program coordinator within the Trails and Waterways Division, (2) a trail monitoring and evaluation system, and (3) a resource protection program designed by DNR's Ecological Services Division.

DNR established the OHV management program and a coordinator position within the Trails & Waterways Division.

DNR's northwest region issued its *Land Management Plan*, which recognized a shift in department planning philosophy concerning multiple uses of forest resources. With respect to OHV issues, the plan addressed conflicts among users and the goal of providing recreational opportunities for both motorized and non-motorized users. The report recommended that recreational facilities should consider resource protection and special recreation zones, that trails should be sited to avoid sensitive sites, and that impacts of OHV use, such as erosion, should be controlled.

1996

Minnesota Laws (1996) Chapter 407 appropriated \$1,350,000 in FY 1996 from the ATV account and \$750,000 from the Taconite Environmental Protection Fund to plan, acquire, develop, and operate the Iron Range Off-Highway Vehicle Recreation Area. It created a local advisory committee to work with DNR to develop a comprehensive management plan for the project. It also required DNR to explore additional sites and possible connections between sites.

DNR approved the *Environmental Review Study Committee Report* recommending early coordination as part of a broad process of environmental assessment within DNR.

DNR issued a report titled *Winter ATVers and Snowmobilers: The Potential for Greater Co-use of Minnesota's Trails*, which found that snowmobilers do not want shared trails.

DNR established the OHV Coordinating Committee and began internal discussions that would lead to the creation of administrative rules for managing OHVs on forest lands.

APPENDIX A 111

1997

DNR published a report titled *Developing a Resource Sensitive Trail Alignment*.

Minnesota Laws (1997) Chapter 216 appropriated \$100,000 for an inventory of recreational trails and information about trail users.

DNR (1) announced its intention to create rules to manage and regulate OHV uses on state forest lands, (2) formed an advisory group, and (3) solicited public comment at regional guideline meetings.

DNR broadened sections of *Minnesota Rules* Chapter 6102 to include dirt bikes and 4X4 trucks as well as ATVs.

DNR issued a report on the Gilbert OHV Park. The report noted that citizens resented the lack of widespread notification or of an opportunity to comment or vote on the proposal before it was written into law.

DNR's northeast and north central regions completed draft reports addressing how the regions intended to manage OHVs.

Assistant DNR Commissioner Hitchcock sent a memo to the Chair of the DNR Recreation Coordinating Committee that discussed DNR's (1) lack of understanding of its own OHV efforts, (2) inability to provide a legislator with information about DNR's OHV-related activities, and (3) need for a plan of action.

1998

DNR developed a draft of the *Statewide Off-Highway Vehicle Management Guidelines*, which addressed how the department intended to manage OHVs.

Emmett Mullin, DNR Office of Management and Budget, sent an e-mail providing guidance to regional teams for classifying state forests with respect to OHV use.

Minnesota Laws (1998) Chapter 401 further extended the availability of the 1996 appropriation for the Iron Range OHV Recreation Area through FY 2000.

Regional teams proposed initial forest classifications for individual state forests in March. The DNR Commissioner proposed nearly the same classifications in May. DNR held open houses in each region to discuss the proposed classifications before issuing the interim classifications in September. DNR published notification for the rules in October.

The OHV Coordinating Committee prepared a five-page document, *OHV System Planning Procedures*, which the Commissioner distributed to all regions. These procedures laid out responsibilities for OHV trail system planning, plan review and approval processes, plan content, and environmental considerations.

1998 (Continued)

The OHV Coordinating Committee prepared two pages of guidelines, *Off Highway Vehicle (OHV) System Planning Road Map*, which Assistant DNR Commissioner Hitchcock distributed to all regions. The document focused on organizing area planning teams and developing OHV trail system plans. The document omitted discussion of environmental criteria.

DNR issued a report titled *Profiles of Nine Trail User Populations—A Component of the Border to Border Trail Study*, which area planning teams incorporated into OHV system planning.

Emmett Mullin and Ron Potter distributed a memorandum to OHV workgroups summarizing the expectations of OHV riders and briefly discussing nonmotorized recreationists.

1999

Minnesota Forest Resources Council published a report titled *Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers, and Resource Managers.* The guidelines were tools balancing social, economic, and environmental objectives to help forest users and managers maintain forest sustainability, including the construction recreation areas such as trails.

Minnesota Laws Chapter 231 Section 204 ordered changes to the proposed forestry rules and deleted the proposed prohibitions on both off-trail travel by OHVs and the construction of unauthorized trails on state lands. However, the forest classification language was unchanged.

Several regions worked on OHV trail system plans.

DNR issued a report titled *Revised OHV System Plan Review and Approval Process* with an expanded internal and public review process that more clearly defined steps for reviewing the OHV trail system plans.

DNR adopted amended forestry rules.

2000

DNR finalized the interim state forest classifications with respect to OHV use on January 1, 2000.

The Legislature reinstated the off-trail travel ban in limited forests and forbade construction of unauthorized permanent trails. DNR adopted the rules for these changes later that year.

DNR issued the *Directions 2000* strategic plan continuing the themes of balancing community needs, environmental protection, and economic considerations when carrying out natural resources planning.

APPENDIX A 113

2000 (Continued)

The north central region completed the first OHV trail system plans in May. Citizen petitions filed in December called for an Environmental Assessment Worksheet (EAW) on the area plans and the projects in those plans.

2001

In February, DNR dismissed the citizen petition for an EAW on the north central region plans and deferred for one year decisions on the projects in those plans. Minnesotans for Responsible Recreation filed a lawsuit one month later.

Minnesota Laws Special Session (2001) Chapter 2 required DNR to add a riding component to the ATV safety and education program and set requirements for minors riding an ATV.

DNR issued a report titled *Briefing Paper—Public Notification/Disclosure of OHV Trail Project Proposals*, which further defined five steps in planning and reviewing OHV projects.

The northeast and northwest regions completed their OHV trail system plans in June and July. Citizen petitions filed in August called for EAWs of the plans and projects in them. In October, DNR (1) dismissed the citizen petitions for an EAW on the plans, (2) ordered an EAW for the Moose Walk/Moose Run project in Lake County, (3) determined some projects exempt from environmental review, and (4) decided to hold for one year the citizen's petition concerning most of the other projects in the plans. Minnesotans for Responsible Recreation served lawsuits later that year, but the lawsuits were not filed.

DNR began EAWs for some projects in northeast, north central, and northwest regions.

DNR began work on a manual titled *Site Level Design and Development Guidelines for Recreational Trails*.

DNR issued a report titled *An OHV Recreation Planning Tool Based on A Survey of Resource Managers and A Survey of Off-Highway Vehicle Riders in Minnesota*, which found that nearly half of ATV owners did not use forest trails in 2000. It also found that there appeared to be a need for trail development in the northwest, northeast, and north central regions.

DNR issued a report titled *Regional OHV System Plan Implementation and Modification Revised*, which addressed items for inclusion into each regional OHV system plan such as project priorities, proposal and review processes, environmental review, and public notice.

The southwest region completed its OHV trail system plan. The plan did not identify any OHV trail projects.

2002

A District Court decision in January required DNR to complete EAWs on the OHV trail system plans for the north central region. DNR appealed the decision in March.

The southeast region completed its OHV trail system plan. The plan did not identify any OHV trail projects.

In March, DNR issued its EAW on the Moose Walk/Moose Run project in the northeast region and declined to conduct an Environmental Impact Statement. Minnesotans for Responsible Recreation filed a lawsuit three months later.

DNR issued a report titled *Off-Highway Vehicle Program*, which described the status of OHV planning and management.

DNR issued a report titled *Direction for OHV Management* — 2002 Field Season, which stressed (1) preventing damage on DNR lands through closures and enforcement, (2) considering the needs of other forest users, and (3) eventually removing scramble areas from state land.

Minnesota Laws (2002) Chapter 351 set up a motorized trail task force consisting of representatives of OHV users, non-motorized interest groups, DNR, and other appropriate parties to provide recommendations on use and management of OHVs in state forests. The task force will make recommendations by January 15, 2003 on trail planning, project development, monitoring, maintenance, enforcement activities, natural resources protection, and other issues relating to OHV trails.

Minnesota Laws (2002) Chapter 355 required DNR to amend its rules to prohibit, with some exceptions, cross-country (off-trail) riding of OHVs in state forests.

DNR issued drafts of the *Site-Level Design and Development Guidelines for Recreational Trails*.

In October, the Appeals Court issued its decision on the lawsuit pertaining to the OHV plans in the north central region and directed DNR to conduct EAWs (with one exception) on all individual projects included in the lawsuit but not on the plans themselves.

Violations of Governmental Regulations

APPENDIX B

As described in Chapter 3, we selected 7 of 32 trails with alleged violations of federal, state, and local regulations to investigate further. This appendix provides a more detailed description of each of these cases. The descriptions are based primarily on telephone interviews that we had with DNR officials, land-use regulators, and club officials. In several cases, we received other documentation, such as correspondence, concerning the violations. Of the seven sites, we only visited the Moose Walk Trail.

We chose the cases that we thought would be good illustrative examples, rather than the most egregious. The cases represent trails from different parts of the state and with different types of violations. While all these trail clubs should have complied with federal, state, and local regulations, some of the violations appear to be honest mistakes.

Weaver Snowmobile Trail in Wabasha County

In 2000, the Wabasha Drift Skippers snowmobile club rerouted a section of the Weaver Snowmobile Trail through the R. J. Dorer Memorial Hardwood State Forest. A portion of the reroute runs on state forest land just off the right-of-way for Highway 61. According to DNR forestry employees, they never inspected this segment nor gave the club permission to develop it. As a condition of using state forest land, DNR foresters are supposed to walk proposed trail alignments with the clubs and impose restrictions on where and how trails are developed. According to DNR officials, the club violated this condition and cut the new trail into a steep bluff, which is now susceptible to erosion.

Plainview-Kellogg Trail in Wabasha County

In the fall of 2001, the Elba Snowbirds installed a permanent bridge over the East Indian Creek, which is a designated public water and a trout stream. The work violated a couple regulations. First, the owner of the land where the crossing occurred did not give the club permission to install the bridge. According to the club, it mistakenly received permission to install the bridge from a landowner in the area, who turned out to own another parcel of land nearby rather than the one where the crossing occurred. Second, the club did not receive a permit for the bridge from DNR's Waters Division. The club has had to redo the creek crossing to bring it back into compliance with public waters regulations and the landowner's wishes. This case is another example of a club demonstrating poor

¹ There is some disagreement between DNR forestry staff and club officials about the permission that the club received to develop this trail. While DNR clearly granted the club authorization to develop certain sections of the trail, there is disagreement about other sections. Part of the problem in this case may be poor communication by both the club and DNR.

communication with a landowner and DNR. DNR has inventoried and mapped all public waters regulated by its Waters Division, and a simple consultation would have easily identified the need for a permit. While this trail was not a grant-in-aid trail at the time of the work, it will become one once the creek crossing is fixed.

Hardwood Trail Blazers in Mahnomen County

Early in the spring of 2002, the Hardwood Trail Blazers snowmobile club in Mahnomen County widened a portion of a snowmobile trail going through private property to about 50 feet, when the permit from the landowner that granted the club the use of this land specified a 16-foot trail. In addition, the club carried out this trail work without first notifying the family that owns the land. (The landowner lives out of the country, but his father manages the land for him.) The father is a strong supporter of motorized recreation and only wished that the club had notified him before the work was done and had limited the trail widening. The family is currently managing this land for timber harvesting; and the club has agreed to go back next spring and plant some trees where the widening occurred.

In the end, the family was more frustrated with DNR than the club. Upon discovering the trail work, the father called DNR to complain. According to the father, the DNR staff person responsible for this trail gave the father a contact for a snowmobile club, which turned out not to be the club that carried out the trail work. After a series of phone calls over the course of several weeks, which included contacting our office, the father finally reached the appropriate people with the responsible club. The father had wished that DNR had taken ownership of the issue and taken steps to ensure that the issue was resolved, rather than just passing on a name and telephone number. The DNR staff person responsible for this trail contends that he did call the club telling it to contact the person making the complaint.

Two Inlets Trail in Becker County

In 2000, the Forest Riders snowmobile club deposited fill and widened an existing snowmobile trail in a wetland in violation of the Wetland Conservation Act. For this project, the club received an exemption from obtaining a Wetland Conservation Act permit under the conditions that it took measures to control erosion and did not widen the trail. According to DNR and Becker County officials, the club violated both of these conditions. In addition, in another location, the club installed a culvert in a public waters without a permit from the DNR. Furthermore, the club carried out both of these projects in the Two Inlets State Forest without first notifying DNR's Forestry Division, which is responsible for managing this land. In both of these cases, the club was required to go back and correct some of their violations and received the proper permitting retroactively.

APPENDIX B 117

Forest Riders ATV Club and Clover Township

The trail discussed in the previous case is now part of an ATV trail administered by the Forest Riders ATV club. While the Forest Riders snowmobile and ATV clubs have partially overlapping membership and the same name, they are technically different clubs. Hubbard County sponsors the snowmobile trails, while Clover Township (Hubbard County) sponsors the ATV trails.

While there was some controversy over the use of a privately-owned bridge that the club wanted to include as part of its ATV trail, the club has not put a trail on the ground in violation of federal, state, or local regulations as far as we know. Nevertheless, we are highlighting the questionable relationship between the township and club. The town clerk who signs off on the club's financial records as part of the grant process is also the ATV club's secretary/bookkeeper. She has been overseeing and signing off on her own work. However, generally accepted criteria for auditing a program's internal controls call for one person to prepare the books and another person to review and sign off on them.² In addition, we came across records showing that the Forest Riders ATV club was receiving compensation from the grant-in-aid program for the secretary/bookkeeper to attend Clover Township board meetings on behalf of the club while she was also being paid by the township to be at the same meetings as the township clerk. On top of all this, an official with the ATV club told us that three of the township's four other officers were at one time members of the ATV club but have since left the club because of conflict of interest complaints.

The club defends its relationship with the township by pointing out the township provides more oversight than just the township clerk. For example, the township board votes to accept the club's requests for reimbursement before passing these documents on to DNR. The club also points out that it has a difficult time getting people to volunteer their time and relies on a few members to do most of the work. The club contends that prohibiting anyone with official duties with the township from being an active member would be very limiting.

Moose Walk Snowmobile Trail in Lake County

In 1999, the Silver Trail Riders snowmobile club received \$25,000 from the Iron Range Rehabilitation and Recreation Board (IRRRB) and \$9,000 from DNR's grant-in-aid program to straighten and widen sections of the Moose Walk snowmobile trail. As part of this project, the club filled in wetlands without permits in several separate places and did not receive a land-use permit from the county. (In Chapter 3, we discussed Lake County's ordinance that requires projects that disturb more than 100 cubic yards of soil to receive a permit from county.) We visited the site that has been characterized as the worst of these violations. At this site, the fill created a dam and prevented proper water flow through a wetland. Culverts have since been added to alleviate the problem. Right now, the DNR and the Silver Trail Riders are proposing to allow ATVs on

² Committee of Sponsoring Organizations of the Treadway Commission, *Internal Control—Integrated Framework* (Jersey City, NJ: American Institute of Certified Public Accountants, September 1992), 45-47.

this snowmobile trail. If the proposal goes forward, any other mitigation required by the wetland violations will be integrated into the trail work needed to allow ATVs.³

According to the Silver Trail Riders club, these violations occurred out of ignorance of wetland laws. The club reports that it has been maintaining snowmobile trails for decades and never run into problems, but the club has had a tough time keeping up with all the recent changes in law.

Heartland State Trail in Cass County

In the spring of 2002, the DNR was creating a second unpaved trail for snowmobiles with metal studs parallel and adjacent to a paved trail. This trail work violated both state and federal wetland regulations. First, while the DNR completed the permitting process with the Army Corps of Engineers, the department did not follow through on all aspects of the permitting process under the state's own Wetland Conservation Act. According to the Cass County Wetland Conservation Act Administrator, "This is one of the most flagrant examples of wetland degradation I've seen in Cass County to date..." Some of the violations included filling wetlands without authorization and not pursuing appropriate erosion control measures.

When we asked the regional manager in charge of this trail about the violations, he commented that the policies and procedures of the Wetland Conservation Act are in a three-ring binder that is one and one-half inches thick, and it is difficult for DNR staff to stay on top of the requirements without proper training. DNR, however, has a checklist of steps that must be followed to comply with the Wetland Conservation Act, and it is unclear why the department did not follow the checklist in this case.

Despite having proper permits from the Army Corps of Engineers, DNR did violate some federal wetland regulations. In one section, the department filled in a longer segment of wetland than was allowed, but the DNR staff involved thought this was acceptable because there were other segments of wetland for which the department had permission to fill but did not. The DNR employees thought federal policy allowed them to make one-for-one substitutions.

While this case of inappropriate trail development does not involve a club, it shows that even DNR staff members, who deal with trails on a daily basis, can lack proper training to deal with the Wetland Conservation Act and can make mistakes.

³ Another allegation of trail work that violated state law involves work done "illegally" on the Moose Walk / Moose Run trail while a proposal to officially designate this snowmobile trail as an ATV trail was under environmental review. The person making the allegation contended that Minnesota law prohibits all trail work during the environmental review. We counted this allegation as a separate incident because it addressed ATVs rather than snowmobiles and occurred at a different time.

⁴ John Sumption, Wetland Act Administrator, Cass County Environmental Services, letter to Michelle Hanson, U.S. Army Corp of Engineers, May 17, 2002.

Further Reading

Cook, Angela. Comprehensive Recreational Use Plan: Off-Highway Motorized Recreation in Minnesota. St. Paul: January 1, 1995.

Environmental Resources Management. *Three-Wheeled Off-Road Vehicle Consumption in Minnesota*. St. Paul: Minnesota Department of Natural Resources (DNR), January 1985.

General Accounting Office. Forest Service Decision-Making: A Framework for Improving Performance GAO/RCED-97-71. Washington, D.C.: General Accounting Office, April 29, 1997.

Genereux, John and Michele Genereux. *An OHV Recreation Planning Tool Based on A Survey of Resource Managers and A Survey of Off-Highway Vehicle Riders in Minnesota*. St. Paul: DNR, July 2001.

Lewis, Michael S. and Dorothy H. Anderson. *Gasoline Consumption by Snowmobiles Within Minnesota: Updating the 1992 Gasoline Consumption Model.* St. Paul: University of Minnesota Department of Forest Resources, February 1998.

Meersman, Tom. "Tracks on the Land." *Minneapolis Star Tribune*, February 24, 2002, sec. A, p. 1, 12, 13, and 15. Available on-line at http://www.startribune.com/stories/531/1633242.html.

Minnesota Environmental Quality Board. *The Environmental Review Process*. St. Paul: July 2001. Available on-line at http://www.mnplan.state.mn.us/eqb/pdf/envreview.PDF.

Minnesota Department of Natural Resources. <i>Border-To-Border Trail Study.</i> SPaul: July 1999.	t.
————. <i>Directions 2000: The Strategic Plan.</i> St. Paul: September 20 Available on-line at	00
http://files.dnr.state.mn.us/aboutdnr/reports/directions2000.pdf.	
Enjoying and Protecting Our Land & Water, Minnesota's 2003-2008 State Comprehensive Outdoor Recreation Plan, Final Draft. St. Par October 1, 2002. Available on-line at	ul:

————. The Minnesota DNR Trail Plan . . . A Discovery Process. St. Paul: 1984.

http://files.dnr.state.mn.us/aboutdnr/reports/scorp_draft100102.pdf.

STATE-FUNDED TRAILS FOR MOTORIZED RECREATION

Program: Instruction Manual 2002-2003. St. Paul: April 30, 2002.
———. Minnesota Trail Assistance Program: All-Terrain Vehicle, Off-Highway Motorcycle, and Off-Road Vehicle Instruction Manual. St. Paul: March 2001.
Off Road Vehicle Use in Minnesota. St. Paul: 1984.
————. Snowmobile Trails Assistance Program: Performance Based Maintenance and Grooming Manual 2001-2002. St. Paul: April 16, 2001.
Minnesota Department of Trade and Economic Development. <i>Economic Activity and Economic Impact of the Snowmobile Industry in Minnesota</i> . St. Paul: October 1996.
Minnesota Snowmobile Advisory Committee. 1997 Statewide Snowmobile Trai System Plan. St. Paul: DNR, 1997.
———. 2001 Statewide Snowmobile Trail System Plan Update. St. Pau DNR, March 2001.
Minnesotans for Responsible Recreation. <i>Off-Highway Vehicles In Minnesota</i> . Duluth, MN: Minnesotans for Responsible Recreation, December 1999.
Thompson, Jerrilyn L. and Dorothy H. Anderson. <i>Off-Highway Motorcycle and Off-Road Vehicle Use and Gasoline Consumption in Minnesota</i> . Maplewood, MN: Thompson-Anderson Forestry Consultants, February 1994.
Wear, David N. and John G. Greis. <i>Southern Forest Resource Assessment, Chapter 11: Forest-Based Outdoor Recreation.</i> Southern Research Station, U.S Department of Agriculture Forest Service: modified October 6, 2002. Available on-line at http://www.srs.fs.fed.us/sustain/report/pdf/chapter_11e.pdf .
Regional and Area System Plans
The regional and area system plans and maps are available on the DNR Web site at http://www.dnr.state.mn.us/input/mgmtplans/rmv/index.html .
Minnesota Department of Natural Resources. <i>Off Highway Vehicle System Plan for Northwest Region [Public Review Draft]</i> . Bemidji: June 2001.
———. Off Highway Vehicle System Plan (Possible OHV Trails and Priorities) for Northeast Minnesota [Public Review Draft]. Grand Rapids: July 11, 2001.
Region V. Rochester: March 27, 2002. An earlier version is available on-line.
———. Off Highway Vehicle System Plan for Southwest Minnesota. Ne Ulm: December 4, 2001. An earlier version is available on-line.

FURTHER READING 121

There are four area plans for the north central region:

Minnesota Department of Natural Resources. Off Highway Vehicle System Plan for Aitkin County, Minnesota [Public Review Draft]. Brainerd: May 31, 2000.

—————. Off Highway Vehicle System Plan for Crow Wing, Southern Cass, and Wadena Counties [Public Review Draft]. Brainerd: May 31, 2000.

————. Off Highway Vehicle System Plan for Kanabec and Mille Lacs Counties [Public Review Draft]. Brainerd: May 31, 2000.

————. Off Highway Vehicle System Plan for Pine and Southern Carlton Counties [Public Review Draft]. Brainerd: May 31, 2000.



Minnesota Department of Natural Resources

OFFICE OF THE COMMISSIONER

500 Lafayette Road St. Paul, Minnesota 55155-4037

December 19, 2002

James R. Nobles, Legislative Auditor Office of the Legislative Auditor Centennial Office Building 140 658 Cedar Street St. Paul. MN 55155

Dear Mr. Nobles:

Thank you for the opportunity to review and provide comments concerning your report, "State Funded Trails for Motorized Recreation." We concur with the findings and recommendations in large part and offer the following regarding the key recommendations in your report:

- □ The recommendation that there be a requirement to prepare Environmental Assessment Worksheets for many types of OHV projects is a sound one. We believe amending the current EQB rules to provide mandatory categories and exemptions, where appropriate, is the right path to clarifying when and where Environmental Assessment Worksheets would be required for motor sports trails. As you know, our Environmental Review staff is currently drafting proposals for this process.
- □ We agree that a thorough inventory of trails currently utilized in the State Forests must be the basis for establishing what the state can ultimately afford for a motorized trails system. This will require a comprehensive, time and staff –consuming effort, but we agree the resources should be found to do it. The Department will request funding this session for an expedited inventory effort to identify all the recreational trails in the state forests.
- □ Enforcement efforts in general need stepping-up. As the report acknowledges, the 2002 Legislative session resulted in an additional \$315,000 from the OHV accounts for enforcement (3 FTE devoted to OHV's) that may fulfill the Auditor's recommendation for increased effort. In addition, next field season, we will deploy 16 additional Trails and Waterways Natural Resources Officers (NRO's) who will work with Division of Enforcement Conservation Officers to focus on OHV enforcement priorities. We feel this new configuration of our enforcement effort should be given a full season (2003) of experience so that evaluation can be made of any additional enforcement needs.
- □ We agree it makes sense to pursue a different model for OHV grant-in-aid oversight than has been the case for snowmobiling. This is true both because of the greater potential for OHV damage in the warm season (and the need for more stringent trail design standards) and because

Legislative Auditor December 19, 2002 Page 2

most local sponsors of club trails simply do not have the staff resources to provide additional oversight. To provide the kind of oversight you suggest in your recommendations will require additional Trails and Waterways staff to work much more closely with trail-sponsoring clubs and communities. This will be necessary because of the complexity of the regulatory environment for OHV's, the need for expertise in trail design, and the need for thorough environmental evaluation of trail proposals. In short, our staff needs to spend much more time with trail sponsoring clubs and local governments throughout the life of an OHV trail. The Department will request additional funding for field staff to perform this expanded oversight function. This represents a change from the intent of the grant-in-aid authorizing legislation, which envisioned clubs and volunteers, with county sponsorship, undertaking most trail development tasks.

One final note: our motivation, when planning began in earnest in the mid-90's system planning work, was to quickly identify good existing routes with benign environmental characteristics, designate and sign them, so that we might begin to channel OHV riding on these designated routes and away from areas damaged by careless or unlawful riding. In other words: managed use on managed trails. We don't believe we gave short shrift to overall environmental concerns in our planning process.

We have found your recommendations pertinent as we plan for the next field season and await the results of the Motorized Trails Task Force recommendations, many of which may echo the recommendations herein.

Thank you again for the opportunity to comment.

Sincerely,

/a/ Allen Garber

Allen Garber Commissioner

Recent Program Evaluations

Residential Facilities for Juvenile Offenders,		Counties' Use of Administrative Penalties	
February 1995	95-01	for Violations of Solid and Hazardous	
Health Care Administrative Costs,		Waste Ordinances, February 1999	99-06
February 1995	95-02	Fire Services: A Best Practices	
Guardians Ad Litem, February 1995	95-03	Review, April 1999	99-07
Early Retirement Incentives, March 1995	95-04	State Mandates on Local Governments,	
State Employee Training: A Best Practices		January 2000	00-01
Review, April 1995	95-05	State Park Management, January 2000	00-02
Snow and Ice Control: A Best Practices		Welfare Reform, January 2000	00-03
Review, May 1995	95-06	School District Finances, February 2000	00-04
Pollution Control Agency's Use of Administrative	ve	State Employee Compensation, February 2000	00-05
Penalty Orders, Update July 1995	95-07	Preventive Maintenance for Local Government	
Development and Use of the 1994 Agency		Buildings: A Best Practices Review,	
J 1 , J	PR95-22	April 2000	00-06
State Agency Use of Customer Satisfaction		The MnSCU Merger, August 2000	00-07
Surveys, October 1995	PR95-23	Early Childhood Education Programs,	
Funding for Probation Services, January 1996	96-01	January 2001	01-01
Department of Human Rights, January 1996	96-02	District Courts, January 2001	01-02
Trends in State and Local Government		Affordable Housing, January 2001	01-03
Spending, February 1996	96-03	Insurance for Behavioral Health Care,	
State Grant and Loan Programs for Businesses		February 2001	01-04
February 1996	96-04	Chronic Offenders, February 2001	01-05
Post-Secondary Enrollment Options Program,		State Archaeologist, April 2001	01-06
March 1996	96-05	Recycling and Waste Reduction, January 2002	02-01
Tax Increment Financing, March 1996	96-06	Minnesota Pollution Control Agency Funding,	
Property Assessments: Structure and Appeals,		January 2002	02-02
A Best Practices Review, May 1996	96-07	Water Quality: Permitting and Compliance	
Recidivism of Adult Felons, January 1997	97-01	Monitoring, January 2002	02-03
Nursing Home Rates in the Upper Midwest,		Financing Unemployment Insurance,	
January 1997	97-02	January 2002	02-04
Special Education, January 1997	97-03	Economic Status of Welfare Recipients,	
Ethanol Programs, February 1997	97-04	January 2002	02-05
Statewide Systems Project, February 1997	97-05	State Employee Health Insurance, February 2002	02-06
Highway Spending, March 1997	97-06	Teacher Recruitment and Retention: Summary	
Non-Felony Prosecution, A Best Practices		of Major Studies, March 2002	02-07
Review, April 1997	97-07	Local E-Government: A Best Practices Review,	
Social Service Mandates Reform, July 1997	97-08	April 2002	02-08
Child Protective Services, January 1998	98-01	Managing Local Government Computer Systems:	
Remedial Education, January 1998	98-02	A Best Practices Review, April 2002	02-09
Transit Services, February 1998	98-03	State-Funded Trails for Motorized Recreation,	
State Building Maintenance, February 1998	98-04	January 2003	03-01
School Trust Land, March 1998	98-05	Professional/Technical Contracting,	
9-1-1 Dispatching: A Best Practices Review,		January 2003	03-02
March 1998	98-06	MinnesotaCare, January 2003	03-03
Minnesota State High School League,		Metropolitan Airports Commission, January 2003	03-04
June 1998	98-07	Preserving Housing: A Best Practices Review,	
State Building Code, January 1999	99-01	April 2003	03-05
Juvenile Out-of-Home Placement, January 1999	99-02		
Metropolitan Mosquito Control District,			
January 1999	99-03		
Animal Feedlot Regulation, January 1999	99-04		
Occupational Regulation, February 1999	99-05		
Directory of Regulated Occupations in			
Minnesota, February 1999	99-05b		

Evaluation reports can be obtained free of charge from the Legislative Auditor's Office, Program Evaluation Division, Room 140, 658 Cedar Street, Saint Paul, Minnesota 55155, 651/296-4708. Full text versions of recent reports are also available at the OLA web site: http://www.auditor.leg.state.mn.us