REPORT # 02-02

OFFICE OF THE LEGISLATIVE AUDITOR
STATE OF MINNESOTA

PROGRAM EVALUATION REPORT

Minnesota Pollution Control Agency Funding

JANUARY 2002

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OLA

OFFICE OF THE LEGISLATIVE AUDITOR
STATE OF MINNESOTA • James Nobles, Legislative Auditor

January 24, 2002

Members
Legislative Audit Commission

In May 2001, the Legislative Audit Commission directed the Office of the Legislative Auditor (OLA) to study how the Minnesota Pollution Control Agency (MPCA) is funded and to assess possible funding alternatives. The commission asked for the study because some MPCA programs have faced shortfalls in recent years and finding acceptable solutions to the agency's financial problems has been difficult.

Our report discusses the merits of a variety of possible MPCA funding sources, but we are aware that the ultimate decision involves value judgments that legislators should make. If pollution-based fees continue to be used, we recommend that legislators more explicitly specify the types of MPCA services fees should cover. This will help legislators determine whether existing fee levels are appropriate and how much revenue MPCA needs from non-fee sources.

This report was researched and written by Joel Alter (project manager), John Yunker, and Todd Wilkinson. We received the full cooperation of the Minnesota Pollution Control Agency in our preparation of this report.

Sincerely,

/s/ James Nobles

James Nobles
Legislative Auditor

/s/ Roger Brooks

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Funding MPCA involves finding the appropriate mix of general and "polluter pays" revenue sources.

Major Findings:

- During the past 20 years, the main source of funding for the Minnesota Pollution Control Agency (MPCA) has shifted from the state General Fund to pollution-related fees and taxes (p. 13).
- MPCA's staff-related costs per employee have recently increased faster than the agency's operating costs and inflation, although its situation is not unique among state agencies (p. 18).
- Determining the proper method of funding MPCA will require legislators to make decisions regarding (1) the use of general versus "polluter pays" revenue sources, and (2) whether funding sources should be closely linked to the purposes for which they will be used (p. 53).
- Minnesota's water quality fee revenues do not cover the cost of MPCA's water-related regulatory activities (p. 30).
- Federal regulations will likely require MPCA to more comprehensively monitor water quality and address "nonpoint" water pollution, although MPCA is still determining specific strategies and their cost implications (pp. 40-44).

Key Recommendations:

- The Legislature should clarify state laws that define which categories of MPCA activities should be funded with fees. It should then consider any adjustments in fee levels necessary to comply with these laws (pp. 31-32).
- To comply with current law, MPCA and the Legislature should address the imbalance between hazardous waste fee revenues and appropriations (p. 28).
- MPCA should report to the 2003 Legislature on (1) plans for implementing and financing "total maximum daily load" requirements, and (2) what, if any, additional state-level strategies would cost-effectively help the state to avoid violations of federal standards for ozone and particulate matter (pp. 44, 49).

Report Summary

The Minnesota Pollution Control Agency (MPCA) is the state's main environmental protection agency. It monitors and regulates air, water, and land pollution, works with citizens and businesses to prevent pollution, and helps to clean up polluted sites.

Cost increases, staffing cuts, and declines in some fee revenues have challenged MPCA in recent years.

MPCA Has Faced Funding Challenges in Recent Years

When it was established in 1967, MPCA was funded solely with the state General Fund and federal funds. Since that time, pollution-based fees and taxes have comprised an increasing share of the agency's funding. For instance, facilities that emit air pollution, discharge wastewater, and treat or store hazardous waste are required to obtain permits from MPCA and pay annual fees. Since 1983, the percentage of MPCA's budget funded by the General Fund has declined from 50 percent to 13 percent.

During the past decade, MPCA has experienced a variety of funding challenges. The agency's water and hazardous waste fee revenues have not kept pace with inflation, and legislators have had to transfer money into these fee accounts on many occasions to address potential deficits. Water quality fees have not increased since 1992, and several MPCA proposals for fee increases have not been enacted by the Legislature.

Meanwhile, cost increases have strained MPCA's staffing resources. MPCA's average salary and fringe benefit cost per full-time-equivalent (FTE) employee increased 33 percent between fiscal years 1996 and 2001. This increase was higher than increases in MPCA's operating expenditures (20 percent), staffing costs in Minnesota state government (25 percent), state and local staffing costs nationwide (21 percent), and consumer prices (13 percent).

The increased staffing costs are one reason that MPCA's staff size is projected to decline by mid-2003 to its lowest level in a decade. The agency projects a fiscal year 2003 staffing level of 719 FTE, down from a peak of 805 FTE in 1997. To help keep staff focused on higher priority activities, MPCA proposed and the 2001 Legislature authorized reallocations of staff among the agency's programs.

Decisions About MPCA's Funding Mix Will Depend on Key Policy Choices

In 2001, MPCA proposed "environmental tax reform" to address the agency's funding problems. For instance, the proposal would have placed revenues from solid waste management taxes and various other pollution-based charges into a fund that could be directed to high priority areas. Legislators did not pass MPCA's proposal but expressed an interest in continued discussion of funding options.

Determining the "right" mix of funding sources for MPCA will require legislative judgments about some fundamental issues. For instance, policy makers should consider the extent to which they prefer to fund MPCA with general or broad-based revenue sources, as compared to "polluter-based" sources. Pollution is often a reflection of society's general consumer preferences, and pollution control often results in broad-based public benefits—which may justify using the General Fund or other broad-based revenue sources to pay for

some of MPCA's activities. Also, it may be necessary to use broad-based revenues to pay the cost of regulating types of pollution that are hard to trace to an individual source.

On the other hand, it may be fairer to impose the governmental costs of pollution regulation directly on the polluters, where possible, through fees or other charges.[1] In this way, the prices of polluters' products might more directly reflect pollution's costs, and polluters might have some incentive to reduce pollution.

The Legislature needs to clarify which costs at MPCA should be covered by fee revenues.

In addition, policy makers should consider whether it is important to have clear links between revenue sources and the purposes for which they will be used. The 2001 Legislature used revenues from the statewide solid waste tax to fill MPCA's funding gaps in a variety of program areas. This raised concerns among business and local government officials who had supported the tax's use for more limited purposes.[2] Likewise, MPCA proposed in 2001 to put various environmental fees and taxes (including the solid waste tax) into a fund that could be available for a variety of uses, not just uses directly related to the activities from which the revenues were raised. A flexible funding structure could allow the Legislature and MPCA to direct pollution-based revenues to priority areas, but it might also make it more difficult to relate fee and tax levels to the program costs they were originally designed to support.

Water and Hazardous Waste Fees Need Legislative and MPCA Attention

State law says that fees should be set at levels that do not significantly over-recover or under-recover the costs of providing services. However, water quality fee revenues cover less than 60 percent of MPCA's staff costs for water-related permitting, compliance monitoring, and enforcement—and this does not include administrative overhead costs or the costs of essential activities such as ambient water monitoring, permit-related rule development, environmental review, and technical assistance. In fact, the Legislature should clarify in law the types of costs that should be covered by MPCA fees, thus making it easier to determine the exact extent of compliance with the law.

Once the Legislature clarifies which costs should be covered by fees, it should consider changes in fee levels necessary to comply with these laws. Nationally, water quality fees vary widely, according to a survey of 13 states. For instance, Minnesota collected $0.56 per capita in water quality fee revenues in fiscal year 2001, while two states (Washington and Wisconsin) collected more than $1.50 per capita, and two states (Michigan and Kentucky) collected less than $0.10 per capita.

MPCA has authority to raise hazardous waste fees administratively, unlike its authority regarding water and air quality fees. In fact, MPCA is required

1 Some economists have suggested setting pollution taxes at levels that reflect pollution's "social" costs (such as health and environmental impacts), not just its governmental costs. But social costs are hard to measure, and they have not been the basis for most pollution taxes.

2 On the other hand, half of solid waste tax revenues are deposited in the state General Fund, where they can be used for a variety of purposes.

by law to set hazardous waste fees at a level that fully recovers the legislative appropriation for hazardous waste fee expenditures. In recent years, however, MPCA has not increased hazardous waste fees to cover the full appropriation—mainly, it says, because of legislator and industry concerns about fee levels. Thus, the Legislature has had to make up the shortfalls with funding from other sources. MPCA and the Legislature should consider fee increases or statutory changes to ensure compliance with the hazardous waste fee law.

MPCA Should Clarify Strategies for Addressing "Emerging" Pollution Issues

It is unclear whether MPCA needs new funding to address emerging issues.

Some emerging pollution control issues might require new funding (or new funding sources), but it is too early to tell. For instance, federal regulations will probably require MPCA to do a more comprehensive job of identifying and addressing polluted waters, partly through greater emphasis on "nonpoint" pollution. But federal and state rules are still being developed, so MPCA's resource needs for these tasks are unclear. MPCA should provide the 2003 Legislature with more specific plans for implementing these requirements (known as "total daily maximum load" requirements).

In addition, mobile sources of air pollution might need more of MPCA's attention so that the state can avoid potentially expensive violations of federal standards for ozone and particulate matter. MPCA should report to the 2003 Legislature on state-level strategies that could cost-effectively address such risks.

INTRODUCTION

Since its creation in 1967, the Minnesota Pollution Control Agency (MPCA) has been Minnesota's main environmental protection agency. It monitors and regulates air, water, and land pollution, works with citizens and businesses to prevent pollution from occurring, and helps to clean up polluted sites.

In recent years, MPCA officials have expressed concern about the agency's funding. They believe that some programs are underfunded, and they think that the present funding structure sometimes does not allow the agency to respond adequately to the state's environmental priorities. Meanwhile, legislators have expressed concerns about the need to regularly address deficits in some MPCA funds, and some have questioned whether MPCA makes the most effective use of the funding it receives.

In May 2001, the Legislative Audit Commission authorized our office to study MPCA. We asked:

- **What funding sources and staff resources does MPCA use to accomplish its responsibilities? Have increases in the MPCA's budget kept up with increases in staff costs?**

- **What role do fees and the state General Fund play in MPCA funding? What factors have contributed to shortfalls in MPCA's fee accounts?**

- **Does MPCA needs additional funds to address issues such as nonpoint water pollution and mobile sources of air pollution?**

- **What are the advantages and disadvantages of alternative methods of funding MPCA activities?**

Our evaluation relied on information from several sources. We analyzed financial and staffing information from statewide and MPCA information systems. We reviewed documents such as the reports resulting from a 1995 Blue Ribbon Task Force on Water Quality Funding, internal MPCA reports, and research literature on funding options for environmental protection services. Also, we surveyed selected states regarding their water quality fee revenues. In addition, we interviewed staff from MPCA and other state agencies, federal officials, and representatives of environmental groups, businesses, and local governments. In many interviews, we solicited opinions about MPCA funding options, and Appendix C discusses the merits of selected ideas we heard.

We did not evaluate all aspects of MPCA's funding. Our report discusses state policy regarding pollution-related fees, but we did not evaluate whether the present fee structures equitably treat various categories of feepayers. In addition, we did not evaluate state programs to help finance capital projects, such as loan

programs for wastewater treatment facilities. Also, we did not assess the long-term viability of the funding mechanisms used for MPCA's pollution clean-up and landfill maintenance programs.

In response to additional questions posed by the Legislative Audit Commission in May 2001, we issued a second report on MPCA in January 2002, titled *Water Quality: Permitting and Compliance Monitoring*. That report examines the adequacy of MPCA's permitting and compliance activities, and it may also help inform legislative considerations of MPCA funding issues.

Chapter 1 of this report provides an overview of MPCA's organization, staffing, and funding. Chapter 2 discusses the role that air, water, and hazardous waste fees play in MPCA finances. Chapter 3 examines emerging pollution control issues that MPCA thinks might require additional resources, and Chapter 4 discusses agency-wide funding options.

1 Organization, Staffing, and Funding

SUMMARY

The Minnesota Pollution Control Agency's (MPCA) costs per employee grew faster than its overall operating costs in recent years. Partly because of this, the agency proposed staffing reductions that will soon bring MPCA's total staffing level to its lowest point in a decade. Meanwhile, MPCA is trying to correct problems that resulted from a major reorganization in 1998, and the agency received legislative authorization in 2001 to internally reallocate staff resources toward programs of greater priority. MPCA relies less on the state General Fund to pay for its staff than do most state agencies, reflecting increased reliance on pollution-based fees and taxes. Compared with other agencies, MPCA's management and supervisory staffing levels appear to be reasonable.

In 1967, the Legislature created the Minnesota Pollution Control Agency (MPCA) "to meet the variety and complexity of problems relating to water, air and land pollution in the areas of the state affected thereby, and to achieve a reasonable degree of purity of water, air, and land resources of the state."[1] The agency's budget and staff size have grown considerably since its creation, as have its responsibilities.

In this chapter, we address the following questions:

- **How is MPCA organized? What were the main elements of MPCA's 1998 reorganization? What necessitated MPCA's organizational "course correction" in 2001?**
- **How are MPCA's programs staffed and funded? What changes occurred as a result of the 2001 legislative session?**
- **Have MPCA's budget increases kept up with rising staff costs?**
- **Does MPCA have an appropriate number of managers and supervisors?**

GOVERNANCE

State law defines the MPCA as a nine-member board, but it is also an organization of more than 700 employees. The board consists of a commissioner—who is the administrative head of the agency—and eight members appointed by the

1 *Minn. Stat.* (2000), §116.01.

MPCA has a nine-member citizen's board and more than 700 employees.

Governor. By law, the commissioner serves as chair of the board. The law includes some restrictions regarding board appointments. For example, one member must be a representative of organized labor, and another must be knowledgable about agriculture. No board members other than the commissioner may be state or federal government employees, and up to two members may be local government officials. The law requires the board to be "broadly representative of the skills and experience necessary" to carry out the agency's statutory responsibilities.[2] Appendix A lists the present members of the MPCA Board.

The MPCA Board has authority to adopt agency rules and act on requests for variances from certain rules.[3] Also, if requested by at least one of its members, the board is required by law to make final decisions on (1) the need for environmental assessment worksheets and environmental impact statements,[4] (2) issuance, reissuance, modification, or revocation of pollution-related permits, and (3) variances from MPCA rules. In addition, any person can ask the commissioner to have the board make a final decision on these or other matters, and the commissioner may grant or deny the petition.[5] The board also determines the scope and adequacy of environmental impact statements. Usually, the board addresses issues by acting on specific cases. It has played a more limited role in developing agency-wide policies and budgets and in reviewing agency performance.[6]

For decisions that do not require action of the entire board, state law authorizes the commissioner to act on the board's behalf. The law requires the commissioner to "organize the agency" and hire staff needed to fulfill the agency's duties.[7]

KEY ORGANIZATIONAL CHANGES

For many years, MPCA staff were organized into divisions related to specific areas of regulatory authority—water quality, air quality, solid waste, and hazardous waste. But, in the mid-1990s, MPCA began emphasizing a "multi-media" approach. This approach recognized that pollution from one medium (such as emissions of mercury into the air) may significantly contribute

2 *Minn. Stat.* (2000), §116.02, subd. 1 and 3.

3 The board must act on requests for variances from agency rules (1) that would change an air, soil, or water quality standard, or (2) when the commissioner has determined that granting the variance would have a "significant environmental impact" (*ibid*., subd. 6.). The board must also act on permit applications with requests for variances or contested case hearings.

4 An environmental assessment worksheet sets forth facts necessary to determine whether an environmental impact statement is required for a proposed action. An environmental impact statement discusses the impact of a proposed action that has the potential for significant environmental effects.

5 *Minn. Stat.* (2000), §116.02, subd. 8. The board can make final decisions on "any other action not specifically within the authority of the commissioner." If the commissioner denies a petition for a board decision, the commissioner must advise the board and petitioner of the reasons for denial.

6 Office of the Legislative Auditor, *Pollution Control Agency* (St. Paul, January 1991) recommended that the board focus more on overall policy and evaluation of agency effectiveness. Although the board sometimes develops overall policy (such as the agency's policy on phosphorus control), it still addresses most issues on a case-by-case basis.

7 *Minn. Stat.* (2000), §116.03, subd. 2.

Air pollution can contribute to water and land pollution. Such "multi-media" impacts are one reason that MPCA changed its organizational structure in 1998.

to pollution in another medium (such as mercury in lakes and rivers). Also, many facilities have permits in more than one medium, and MPCA thought that a more integrated approach to permitting, compliance monitoring, assistance, and enforcement would make the agency more efficient and effective.

In the 1990s, MPCA shifted some staff to regional offices and implemented a major reorganization.

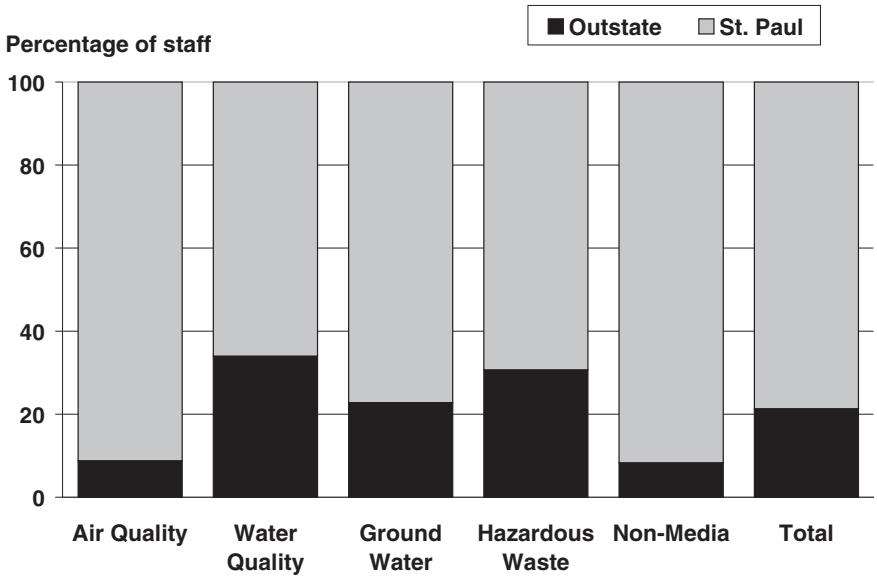
In addition, beginning in the early 1990s, MPCA moved some staff from its central office in St. Paul to its regional offices. In 1990, fewer than 10 percent of the agency's staff were based in locations other than St. Paul, and staff often had to travel considerable distances to inspect facilities or provide on-site assistance. In January 2001, 21 percent of MPCA staff were located in regional offices outside of St. Paul. As shown in Figure 1.1, the percentage of outstate staff ranged from 8 percent for "non-media" staff (that is, staff whose work does not specialize in one medium) to 34 percent for water quality staff.

In 1996, MPCA began a strategic planning process that culminated in "GOAL 21"—a set of four strategies to guide the agency into the 21st century. Specifically, MPCA wanted to (1) identify common goals of the agency and its "customers," (2) measure environmental outcomes (and spend resources to achieve the best results), (3) form alliances with a broad range of interested parties, and (4) become a "learning organization" that would embrace new ideas and changes.

In 1998, MPCA implemented a new organizational structure that eliminated the agency's media-based divisions. Three of the new divisions (Metro District, North District, and South District) grouped regulatory and cleanup staff by their locations, and three divisions (Policy and Planning, Environmental Outcomes, and Fiscal Services) provided services to staff throughout the agency, such as ambient environmental monitoring, information systems, rule development, budgeting, and accounting. According to MPCA officials, the 1998 changes were also intended

Currently, one-fifth of MPCA's staff are based outside the Twin Cities area.

Figure 1.1: Location of MPCA Staff, By Media, January 2001



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

to make the agency more "customer-focused," help it make more decisions based on overall environmental risks, and give more attention to "nonpoint" pollution sources (such as agricultural runoff and vehicle emissions).

While the 1998 changes may prove beneficial in the long term,

- **The reorganization strained staff resources, left staff unclear about agency priorities and individual responsibilities, and became a focus of concern among the agency's external constituents.**

For example:

- A March 2001 MPCA staff report on the agency's regulation of "major" facilities concluded: "As an organization in whole, we do not have a shared understanding of how the agency was designed to work under the reorganization. …We lack risk-taking and trust. …We need a better defined set of priorities based on environmental risk. …Our management and leadership need to be more effective in planning and making decisions. ...We don't have an overall compliance strategy for [major facilities]. …Our geographic and multi-media approaches are not always working." The report said that there is "unclear direction to staff on work efforts and an inability to focus scarce resources on the most important work."[8]

8 MPCA Majors Design Team, *Majors Design Team Final Report* (St. Paul, March 1, 2001), 7, 13-15.

The 1998 reoganization did not adequately clarify agency priorities and lines of accountability.

- A February 2001 MPCA staff report on ways to redesign program delivery concluded: "The Agency has not had a well-defined process to determine what environmental work will be worked on given the finite resources available. …[MPCA] water programs operate as a loose affiliation of activities rather than an integrated and interactive set of actions focused on a well-defined common goal. …The Agency lacks clear, overarching priorities and a sustained focus on environmental outcomes using risk-based approaches. …The Agency has failed to consistently identify what is 'off the plate' and focus limited resources on the most important problems/issues impacting the environment. …The Agency has not had or clearly communicated a clear vision and this lack of vision has created confusion for Agency staff. …There is a lack of a common and shared understanding by leadership and staff of what GOAL 21 really was about and how it was supposed to be implemented."[9]

- In 2000, MPCA management initiated a "climate study" that used interviews and focus groups to identify the perceptions of more than 10 percent of MPCA's staff. Themes that emerged from this study included the following: "The agency lacks a shared sense of direction from its leaders, even with all the visioning and planning that continue to consume resources. There's a lack of shared values, commitments and priorities around how to protect the environment. …Decisions don't get made in a timely manner (or at all) due to unclear lines of authority, analysis paralysis, and uncertainty about how the agency design is supposed to work." Staff also expressed concerns about low morale, staff turnover, and internal communication.[10]

- During 2001, MPCA management summarized key concerns expressed by employees and agency "stakeholders," including the following: "We haven't been clear about priorities, so we try to do everything. …Core programs are not adequately covered and our lack of a media focus is causing program delivery to suffer. The complexity of the organization has resulted in lack of or long, drawn out processes for decision making… [and] unclear roles and responsibilities for various teams."[11]

- Numerous people outside MPCA—including federal officials and representatives of environmental groups, business groups, and local governments—told us during 2001 that it was difficult to identify which MPCA staff were accountable for decisions on particular issues.

In addition, the strategic planning and reorganization process was time-consuming for the agency. MPCA determined that GOAL 21 cost the agency about $1.5 million during fiscal years 1996-98, but this did not include time spent by the

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9 MPCA Program Delivery Design Team, *Phase 1 Final Report* (St. Paul, February 26, 2001), 10-12.

10 MPCA, *Employee Climate Study and Management Response* (St. Paul, March 2001), 2-4. Of the staff who participated in the climate study, 50 percent said they felt positive about working at MPCA, 20 percent said they felt negative, and 30 percent described their feelings as "neutral."

11 MPCA, *Course Correction Update* (St. Paul, undated), 3.

agency's "executive team."[12] One participant told us that many of MPCA's top managers spent several days a week on reorganization activities over a period of months and even years, which significantly reduced the time they had for their other management responsibilities. Some agency officials told us that these activities were very time-consuming because MPCA had never before reviewed its structure and strategic direction in a comprehensive way.

After soliciting input from employees and others, MPCA management acknowledged the need for organizational changes. In March 2001, management proposed a "course correction," citing a need for a shared vision, clearer priorities, greater operating efficiency and effectiveness, better decision making, improved internal communication, and more focus on employee concerns.[13] The proposed changes were to take place over an 18-month period. In October 2001, MPCA identified a set of environmental goals and objectives for the next five to ten years, which was part of the agency's effort to establish a "shared vision."[14]

MPCA implemented a new organizational structure in 2001.

In November 2001, MPCA implemented a new organizational structure, shown in Figure 1.2.[15] Agency officials told us that placing all of the regional offices under the direction of the Regional Environmental Management Division will contribute to greater consistency and clearer lines of accountability. Also, MPCA officials believe that having separate divisions for small, dispersed sources of pollution (in the Regional Environmental Management Division) and large facilities (in the Major Facilities and Remediation Division) will promote innovative approaches to addressing each.

MPCA officials told us that they undertook the 1998 reorganization with the expectation that some of its components would need review and revision later. They said that MPCA faces challenges similar to those of environmental agencies in other states, and they believe that the direction of the 1998 reorganization and 2001 course correction are consistent with innovative environmental practices that have been highlighted elsewhere.[16] We did not evaluate whether MPCA's organizational changes were the right ones for the long-term health of the agency. Whatever the long-term value of these changes, however, the reorganization resulted in considerable short-term disruption and confusion. Furthermore, as we

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12 These were the cumulative costs as of February 1998. Since fiscal year 1998, staff have not tracked time or expenditures devoted to GOAL 21 or agency reorganization.

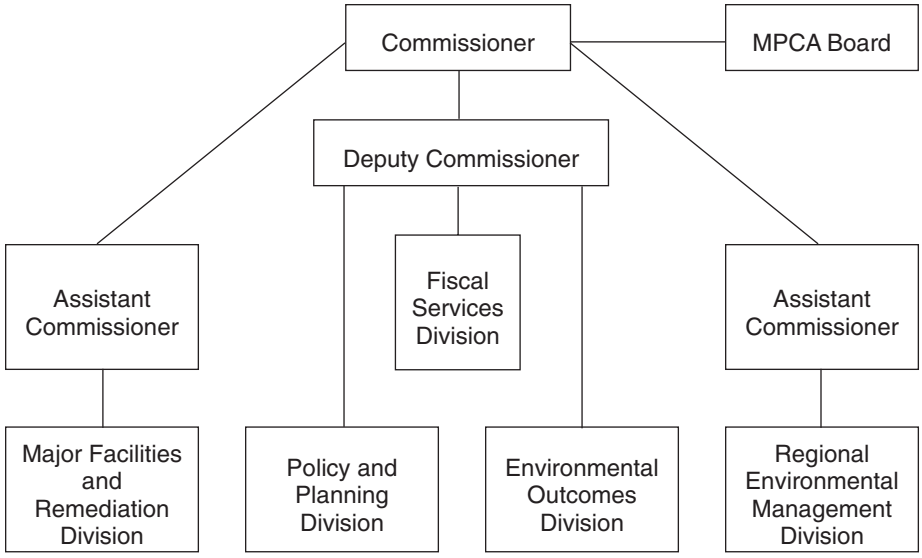
13 MPCA, *Course Correction Update*.

14 MPCA, *Establishing a Shared Vision: MPCA's Environmental Goals and Objectives* (St. Paul, October 2001).

15 The Major Facilities and Remediation Division oversees larger, more complex facilities and various pollution cleanup programs. The Regional Environmental Management Division works on issues related to smaller, more dispersed pollution sources (including point, nonpoint, and mobile sources). The Policy and Planning Division develops strategies and programs to address various environmental problems, and it is smaller than it was in the previous organization. The Environmental Outcomes Division monitors environmental conditions, helps to establish environmental standards and goals, and measures progress toward those goals.

16 For instance, MPCA officials think that their changes are consistent with those recommended by the National Academy of Public Administration in two recent reports: *Resolving the Paradox of Environmental Protection: An Agenda for Congress, EPA, and the States* (Washington, D.C., September 1997) and *Environment.gov: Transforming Environmental Protection for the 21st Century* (Washington, D.C., November 2000).

Figure 1.2: MPCA Organization, Effective November 2001



SOURCE: MPCA.

discuss in a separate report, the reorganization has sometimes impeded the agency's progress toward important objectives, such as reduction of the water quality permit backlog.[17]

STAFFING AND FUNDING

MPCA's staff size has grown as the agency has received additional responsibilities. For instance, a significant portion of MPCA's staff in recent years have worked on federal and state pollution "remediation" programs that did not exist when the agency was created—such as clean-up of Superfund sites and leaking storage tanks. MPCA's total staff size grew from 35 employees at its inception in 1967 to about 800 in the mid-1990s.

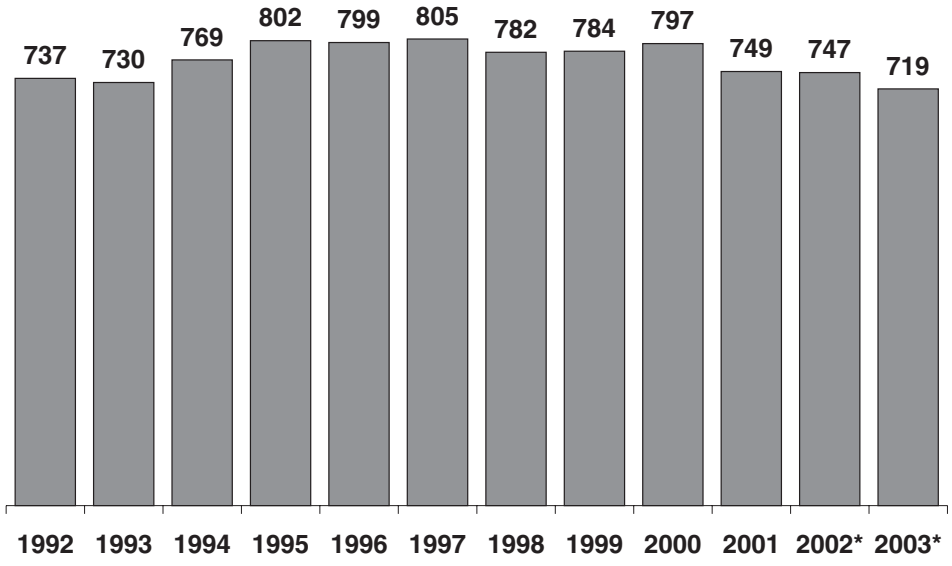
Between fiscal years 1995 and 2000, however, staffing levels changed little (see Figure 1.3). Staffing declined in fiscal year 2001 as the agency stopped filling vacancies in anticipation of a staff reduction during the 2002-03 biennium. As a result of budget decisions for fiscal years 2002-03,

- **MPCA projects that its staffing level in 2003 will be at a 10-year low.**

17 Office of the Legislative Auditor, *Water Quality: Permitting and Compliance Monitoring* (St. Paul, January 2002).

MPCA reached its peak staffing level in 1997.

Figure 1.3: MPCA Full-Time-Equivalent Staff, FY 1992-2003



*Projected FTE.

SOURCE: MPCA.

By the end of fiscal year 2003, MPCA estimates that it will have 11 percent fewer staff than it had in its peak year (1997), and 2 percent fewer staff than it had in fiscal year 1993.

Table 1.1 shows that MPCA's total expenditures increased from 1992 to 2001, but not always in a steady manner. A key reason for fluctuation in MPCA's overall spending level is variability in spending for (1) clean-up activities, and (2) "pass-through" grants that MPCA makes to local governments and others. For instance, clean-up at a single Twin Cities area site accounted for $11 million of budgeted expenditures in fiscal year 2001. Because of the uneven spending patterns for activities related to clean-ups and grants, we focused more of our analysis on MPCA's staffing (and staff-related expenditures).

Figure 1.4 shows MPCA staff assignments, as of January 2001.[18] It indicates that:

- **Three-fourths of MPCA staff were assigned to one of four media areas: water quality, air quality, ground water, and hazardous waste.**

About 28 percent of agency staff worked on issues related to water quality, making it the largest of the media areas. (The term "water quality," as used in this report and by MPCA, refers to surface water rather than ground water.) MPCA's

18 Much of our analysis of staff-related assignments and funding sources was based on data from MPCA's most recent "work survey"—a survey of the agency's managers and supervisors regarding the activities of their staff. The estimates from this survey provide more detail regarding MPCA work activities than the agency's time reporting system. MPCA did its first work survey in 2000, so it is not possible to reliably compare recent staffing patterns with earlier periods. MPCA implemented a new time reporting system in January 2002.

Adjusted for inflation, MPCA's spending grew during the past decade.

Table 1.1: MPCA Total Expenditures, FY 1992-2001

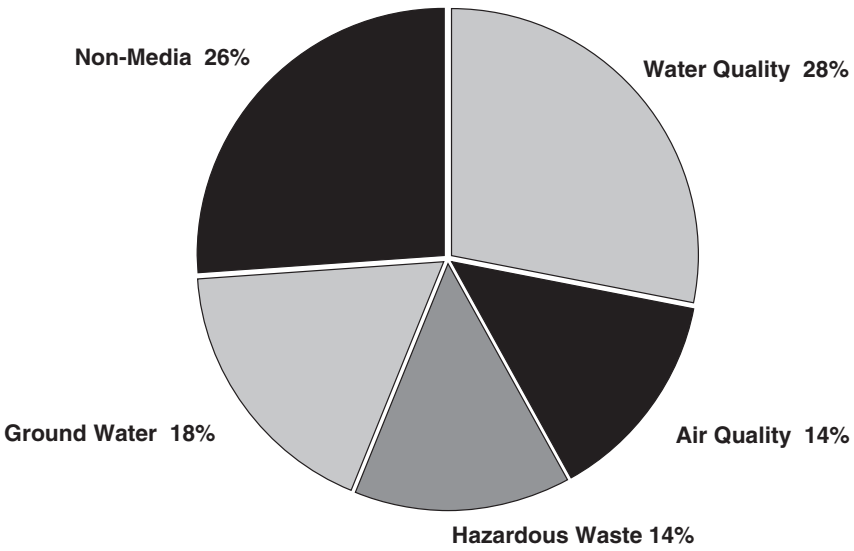
Fiscal Year	Expenditures (in millions)	
	Actual	Inflation-Adjusted
1992	$66.4	$ 84.1
1993	68.7	84.4
1994	69.0	82.6
1995	71.4	83.1
1996	76.0	86.1
1997	78.5	86.5
1998	84.0	91.0
1999	86.9	92.5
2000	88.9	91.9
2001	95.8[a]	95.8[a]

NOTE: The inflation-adjusted column shows expenditures in 2001 dollars, adjusted using the CPI-U indices of the U.S. Bureau of Labor Statistics.

[a]Includes actual expenditures and certified encumbrances.

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

Figure 1.4: Percentage of MPCA Staff Assigned to Various Media, January 2001



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

non-media staff accounted for 26 percent of all staff, and they included the agency's administrative, clerical, fiscal, human resources, information systems, public information, and planning staff who were not assigned to a particular media area. Table 1.2 provides further detail regarding staff assignments, showing the number of MPCA full-time-equivalent staff assigned to various work programs as of early 2001. These staff assignments do not reflect changes that resulted from the 2001 legislative session.

MPCA operates a variety of programs to address air, water, and land pollution.

Table 1.2: MPCA Staff FTE by Media and Work Program, January 2001

MPCA Work Program	Air Quality	Ground Water	Hazardous Waste	Water Quality	Non-Media	Totals
Ambient Air Quality	19.4					19.4
Mobile/Non-Point Source	11.1					11.1
Point/Area Source	71.6					71.6
Ambient Ground Water		9.0				9.0
Closed Landfills		20.9				20.9
Listed Metals		0.7				0.7
Salvage Yards		3.2				3.2
Solid Waste		32.1				32.1
Superfund		38.2				38.2
Waste Tires		0.5				0.5
Solid Waste Certification/Training		1.5				1.5
Voluntary Investigation and Cleanup		21.2				21.2
Wellhead Protection		1.1				1.1
Above-ground Storage Tanks			13.3			13.3
Emergency Response			11.0	0.4		11.4
Household Waste			3.2			3.2
Leaking Underground Storage Tanks			28.5			28.5
Pollution Prevention—Development			0.9		0.8	1.7
Resource Conservation and Recovery Act			34.7			34.7
Special Waste			1.7			1.7
Toxic Substances Control Act/PCBs			1.0			1.0
Used Oil			0.2			0.2
Underground Storage Tanks			9.8			9.8
Voluntary Petroleum Investigation and Cleanup			3.2			3.2
Biocriteria Development				6.8		6.8
Clean Water Partnership				11.9	0.2	12.1
Feedlots				24.8		24.8
Malformed Frogs				0.2		0.2
Individual Sewer Treatment Systems				7.4		7.4
Lake Assessment				7.2	0.2	7.3
Minnesota River				3.1		3.1
Nonpoint Source Pollution—Other				16.2		16.2
Point Source				65.9		65.9
Sludge/Biosolids				4.2		4.2
Source Water Protection				0.2		0.2
State Revolving Fund (construction loans)				2.2		2.2
Stormwater				10.1	0.3	10.4
Total Maximum Daily Loads				6.9	0.1	6.9
Watershed/Basin				25.4	0.7	26.1
Wetland				2.2		2.2
Wastewater Treatment Operators				4.9		4.9
Environmental Review	2.7	1.6	0.3	4.3	1.0	9.9
Leadership	1.3	0.3	0.3	1.3	52.8	55.8
Support	2.6	4.1	2.9	5.1	144.4	159.1
TOTALS	108.6	134.1	110.8	210.5	200.2	764.1

SOURCE: Office of the Legislative Auditor analysis of data from MPCA's work survey.

Another way to view MPCA's staffing is to look at the broad categories of activities on which MPCA employees spend time. Table 1.3 shows the proportion of MPCA staff assigned to various "core activities," as defined by MPCA. For instance, as of early 2001, almost 5 percent of MPCA staff were assigned to enforcement-related activities.

Table 1.3: MPCA Staff by Core Activity, January 2001

Core Activity	Number of FTE	Percentage of FTE
Assistance	111.4	14.6%
Compliance Determination	58.9	7.7
Enforcement	36.2	4.7
Monitoring/Evaluation	72.6	9.5
Permitting	85.9	11.2
Policies and Rules	51.3	6.7
Program-Specific Activities	34.6	4.5
Remediation	87.1	11.4
Administration/Other	226.0	29.6
TOTALS	764.1	100.0%

SOURCE: Office of the Legislative Auditor analysis of data from MPCA's work survey.

The proportions of MPCA's budget paid for by federal funds and the state's General Fund have declined significantly.

MPCA's largest sources of funding are the state Environmental Fund and Solid Waste Fund (which consist of revenues from various environment-related fees and taxes), federal funds, and the state General Fund.[19] The proportions of MPCA's total budget paid for by federal funds and the General Fund have declined significantly. For example, federal funds and the General Fund each paid for 50 percent of MPCA's budget in 1983. In the past three fiscal years, however, the federal portion of MPCA's budget has ranged from 14 to 30 percent. In fiscal year 2001, the General Fund paid for 13 percent of the budget.

In addition, the General Fund paid for about 19 percent of MPCA's *salary* costs in fiscal year 2001. Table 1.4 shows the percentage of fiscal year 2001 salary expenditures for various agencies that were paid from the General Fund, and it indicates that:

- **The percentage of MPCA's staffing costs paid by the General Fund was lower than the percentage in most major state agencies.**

The only major agencies with percentages less than MPCA were the departments of Transportation (1 percent), Economic Security (4 percent), Labor and Industry (13 percent), and Health (18 percent). There are several reasons that agencies have varying levels of General Fund support. For example, a large portion of the Minnesota Department of Transportation's revenue comes from sources dedicated to highway purposes—specifically, gasoline excise taxes and vehicle registration fees. The Department of Economic Security administers numerous federal

19 These four funding sources accounted for about 85 percent of MPCA's budgeted revenues in fiscal year 2001. Other revenues came from the Petroleum Tank Release Clean-up Fund, the Special Revenue Fund, and miscellaneous funds (such as the Legislative Commission on Minnesota Resources).

Table 1.4: Percentage of Agency Salaries Paid for by the General Fund, FY 2001

Agency	Percentage
Finance	100.0%
Human Rights	100.0
Public Service	100.0
Veterans Affairs	100.0
Revenue	93.5
Corrections	92.9
Commerce	89.5
Human Services	65.1
Children, Families, and Learning	54.5
Employee Relations	54.0
Natural Resources	51.7
Agriculture	47.0
Military Affairs	33.3
Public Safety	24.0
Administration	20.0
POLLUTION CONTROL	19.2
Health	18.2
Labor and Industry	12.6
Economic Security	4.0
Transportation	0.7

SOURCE: Office of the Legislative Auditor analysis of data from the Minnesota Accounting and Procurement System.

Policy makers have increasingly funded MPCA with pollution-based fees and taxes.

programs and receives most of its funds from the federal government. In MPCA's case, policy makers have increasingly funded the agency with pollution-based fees and taxes, thus shifting responsibility for more agency costs to the polluters whose actions make state regulation necessary. Agencies that pay for staff largely or solely from the state General Fund usually have little or no revenue from dedicated funds, federal funds, or fees related to the services they provide.

MPCA funding sources vary considerably by media, as shown in Table 1.5. As of January 2001, the state Environmental Fund paid for more than 70 percent of the staff positions related to MPCA's air quality activities. Most of MPCA's air quality staff were funded with annual emission fees charged to facilities with air quality permits. Federal funds paid for a larger share of the staff in hazardous waste (38 percent) than in any other media. The General Fund paid for 43 percent of water quality staff positions, compared with 9 percent of hazardous waste staff and 1 percent of the air quality and ground water staff.

Table 1.6 shows what types of staff were funded from MPCA's major sources of revenues. The water quality program accounted for 66 percent of MPCA's staff who were paid for from the General Fund and 31 percent of MPCA's federally funded positions. About 36 percent of MPCA's Environmental Fund revenues paid for air quality activities, while water quality, ground water, and hazardous waste activities each received 12 to 21 percent of the revenues from this fund.

In the Governor's budget proposal for the 2002-03 biennium, MPCA proposed a series of staff reallocations, reductions, and eliminations. These proposed

Table 1.5: Source of Funding for Staff Positions, by Media Area, January 2001

Fund	Water Quality	Air Quality	Ground Water	Hazardous Waste	Non-Media
Environmental	22.3%	73.1%	28.3%	23.0%	15.7%
Federal	28.0	24.1	18.3	37.5	20.8
General	43.1	1.2	1.1	9.3	16.5
Miscellaneous Special	1.5	1.2	3.5	2.0	36.7
Petrofund	0.1	0.1	0.1	28.0	0.5
Public Facilities Authority	4.4	0.1	0.1	0.0	0.0
Solid Waste	0.2	0.1	48.5	0.2	9.6
State Government Miscellaneous	0.4	0.0	0.0	0.0	0.0
TOTALS	100.0%	100.0%	100.0%	100.0%	100.0%

NOTE: The percentages indicate the percentage of staff FTE in each media area that were paid for by the funds shown.

SOURCE: Office of the Legislative Auditor analysis of data from MPCA 's work survey.

Most of MPCA's General Fund revenues are spent on water quality activities.

Table 1.6: Percentage of MPCA Staff Financed by Selected Funds, by Media, January 2001

Media	Environmental Fund	Federal Funds	State General Fund
Water Quality	21.2%	30.6%	66.2%
Air Quality	35.8	13.6	1.0
Ground Water	17.1	12.7	1.1
Hazardous Waste	11.5	21.5	7.6
Non-Media	14.2	21.6	24.2
TOTAL	100.0%	100.0%	100.0%

NOTE: The percentages indicate the percentage of staff FTE for a given funding source that were in each media area.

SOURCE: Office of the Legislative Auditor analysis of data from MPCA's work survey.

changes were designed to reduce the agency's staff by about 66 full-time-equivalent (FTE) and redirect resources from areas of lower priority to those of higher priority. The activities in which MPCA proposed reductions or eliminations were those that were "winding down, have succeeded in achieving substantial results already, or deal with problems that pose a lesser health or environmental threat to Minnesota communities than higher-priority problems."[20] Table 1.7 summarizes the changes proposed by the agency.

MPCA's staffing proposal was generally well received by the Legislature. The Legislature adopted most of the proposal, disagreeing with MPCA on its recommendation to use 1.5 FTE to continue collecting field data on malformed frogs and its recommendation to add 3.0 FTE in the air quality program to address mobile air pollution sources and air toxics. Also, the Legislature provided

20 MPCA, *MPCA Staff and Environmental Work Reductions* (St. Paul, March 6, 2001), 1.

Table 1.7: MPCA Reallocations for 2002-03 Biennium, As Proposed by the Agency and Adopted by the Legislature

Appropriation Area	Net Change in FTE Proposed by MPCA	Net Change in FTE Adopted by Legislature	Programs in Which MPCA Proposed Reductions	Programs in Which MPCA Proposed Increases
Air	-0.5	-3.5	Indirect source regulation, air point source regulation	Mobile sources/air toxics
Water[a]	2.5	2.5	Individual sewage treatment systems, sludge/biosolids, wetlands/dredging, sanitary district formation	Water quality point source, stormwater, watershed/ basin planning
Land	-23.8	-23.8	Listed metals program, salvage yards/chlorofluoro-carbons, toxic substances control act/PCBs, waste tires, wellhead protection, regulation of solid waste/tanks/hazard ous waste, source water protection	
Integrated Environmental	-20.5	-22.0	Air quality monitoring, biocriteria development, ground water monitoring, remediation, emergency response	Malformed frogs data collection
Administration	-24.0	-24.0	Reduction in managers, supervisors and support staff	
TOTAL	-66.3	-70.8		

[a]Does not include the 9.0 FTE requested and approved for additional feedlot regulatory staff.

SOURCE: MPCA, *MPCA Staff and Environmental Work Reductions* (St. Paul, March 6, 2001).

In 2001, MPCA proposed, and the Legislature approved, large reductions in the agency's staff.

additional funding for animal feedlot regulation using different sources of funding than those recommended by MPCA. Consequently, the Legislature did not reduce spending on Clean Water Partnership Grants by the amount proposed by MPCA ($1.2 million).

MPCA's proposed the elimination of 11 small programs and reductions in 11 other programs. For instance, the agency proposed (and the Legislature accepted) the following:

- Reductions in MPCA land regulatory programs (from 94 FTE to 77). Land regulatory programs include those related to solid waste, above ground and underground storage tanks, and hazardous waste management. MPCA said that it would eliminate routine inspections at small facilities, reduce inspections at large facilities, respond only to high-risk complaints, curtail technical assistance, and rely more on counties.

- Reductions in MPCA remediation programs (from 89 FTE to 73). MPCA said that the reductions would reduce assessments at brownfields and other sites, delay reimbursement for underground storage tank cleanups, and reduce technical assistance for cleanup activities.

- Elimination of the salvage yards program (3 FTE), which provided technical assistance and training to help ensure that the state's 500 salvage yards complied with environmental requirements.

Many legislators, legislative staff, and representatives of interest groups told us that MPCA did a commendable job of identifying budget reduction options that would minimize environmental harm. On the other hand, interest groups expressed concern about some of the specific budget reduction proposals. For instance, some local government officials worried that reductions in MPCA's solid waste regulatory programs might increase workloads for their own staff.

INCREASES IN STAFF COSTS

As noted in the previous section, MPCA management proposed significant reductions in the agency's overall staffing level for the 2002-03 biennium. According to MPCA, "About half of this projected reduction is due to diminishing federal grants and declining fee revenues, and the other half is due to inflationary increases."[21] MPCA said that operating expenses provided by the agency's largest federal grants had remained constant, while the salaries and benefits of federally-funded staff had grown. For state-funded staff, MPCA said that increases in its costs per employee were partially offset by legislative "salary supplements" intended to address certain cost-of-living salary increases.

We examined available information to see whether MPCA's claims about the impact of staffing costs could be confirmed. Our analysis focused on the agency's "operating" costs.[22] Specifically, we excluded from our analysis items such as "pass-through" grants (that is, grants administered by MPCA but given to local governments or others) and the costs of cleaning up contaminated sites. These grant and remediation costs fluctuate considerably, potentially obscuring trends in the costs of day-to-day operations. Our analysis showed that:

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21 MPCA, *MPCA Budget Overview: Legislative Fact Sheet* (St. Paul, January 22, 2001), 1.

22 MPCA staff were unable to provide us with data showing resources that MPCA received for operating purposes in recent years, so we focused our analysis on changes in the agency's operating expenditures.

- **MPCA's staff-related costs per employee have increased above the general inflation rate and the agency's operating expenditure increases. However, MPCA's situation is not unique among state agencies.**

According to data from the state's personnel information system, MPCA's average salary and fringe benefit costs per full-time-equivalent (FTE) employee grew from $46,626 in fiscal year 1996 to $62,041 in 2001—a 33 percent increase.[23] Meanwhile, MPCA's total operating expenditures (including personnel and non-personnel costs) increased by 20 percent between fiscal years 1996 and 2001. Because MPCA's salary and benefit expenditures per FTE rose faster than overall operating expenditures, the agency needed to reduce staff or economize in other ways. As shown in Table 1.8, the size of MPCA's staff declined by about 50 FTE, or 6 percent, between fiscal years 1996 and 2001.[24]

Costs per employee rose faster in MPCA than in most other state agencies.

MPCA's salary and benefit costs per FTE grew faster than the rate of inflation from 1996 to 2001, and this was also true of other Minnesota state agencies, on average. We determined that total salary and benefit costs per FTE among all Minnesota state agencies rose 25 percent between 1996 and 2001 (which was below MPCA's 33 percent increase). By comparison, average salary and benefit costs for state and local governments across the nation rose 21 percent from June 1996 to June 2001, and average compensation costs for private industry grew 25 percent.[25] The national Consumer Price Index, which measures the prices paid by consumers for goods and services, rose 13 percent between fiscal years 1996 and 2001.

ERRATUM:

The figures cited in the text for national salary and benefit increases from June 1996 to June 2001 are incorrect. The increase for state and local governments was 16 percent (not 21 percent), and the increase for private industry was 20 percent (not 25 percent).

Table 1.8: Percentage Change in MPCA Expenditures, Employee Costs, and Staff, FY 1996-2001

	Percentage Change
Operating Expenditures	
Salary and Benefits	27%
Other Operating Expenditures	9
Total Operating Expenditures	20%
Salary and Benefit Expenditures per Employee	
Salaries per Employee	30%
Fringe Benefits per Employee	48
Total Salary and Benefits per Employee	33%
Staffing	
Total Full-Time-Equivalent Staff	-6%

SOURCE: Office of the Legislative Auditor analysis of data from Minnesota Accounting and Procurement System and statewide personnel database.

23 Fringe benefit costs increased faster than salary costs (48 percent compared with 30 percent), but salary growth accounted for three-fourths of the overall increase in cost per FTE. MPCA's insurance costs per employee rose 73 percent but accounted for only 16 percent of the overall increase.

24 The ability of any individual agency to absorb such cost increases would depend partly on trends in its various sources of revenues. For instance, agencies with growing revenue sources may be able to handle large increases in costs per FTE more readily than those with declining revenue sources.

25 U.S. Bureau of Labor Statistics, *Employment Cost Index Historical Listing*, ftp://ftp.bls.gov/pub/suppl/ECI.ECHISTRY.TXT; accessed 12/12/01.

A variety of factors contributed to MPCA's large increase in costs per employee.

Changes in salary and benefit costs can reflect a variety of factors, such as employee retirement and turnover rates, discretionary salary increases, and use of health care services by employees' family members. Part of MPCA's large increase in average costs per employee probably resulted from the agency's recent workforce reduction. During the past two years, for instance, MPCA has held many positions vacant and hired relatively few new staff. Meanwhile, MPCA's turnover rate was lower than the agency projected for fiscal year 2001. These factors contributed to an increase in the average years of state government employment among MPCA's staff.[26]

In 2001, MPCA distributed information to legislators indicating that "the cost of a federally funded FTE has doubled since 1996."[27] This information was incorrect. MPCA data show that staffing costs per FTE for federal employees grew by 36 percent between fiscal years 1996 and 2001, and these costs are projected to increase another 10 percent between 2001 and 2003. Although these increases do not indicate that FTE costs "doubled," the percentage increase in costs per FTE was still well above the agency's 20 percent increase in overall operating expenditures.

MANAGEMENT AND SUPERVISORY STAFF

During the 2001 legislative session, some legislators questioned whether MPCA had too many managers and supervisors. Their concern resulted partly from MPCA's own classification of 30 percent of its staff into an "administrative" category, which we referenced earlier in this chapter.

We found that MPCA's administrative workforce is not primarily comprised of managers and supervisors. Rather, MPCA has categorized as administrative a wide range of support staff and other staff whose activities do not fit neatly into the agency's standard activity categories, such as permitting and enforcement. The largest portion of the administrative staff were employees who performed clerical and general support activities, as shown in Table 1.9. In addition, the administrative category included the agency's information systems, finance, personnel, and public information staff, as well as a variety of professional-level staff who worked on grants or special assignments.

Of the 226 staff categorized by MPCA as administrative in January 2001, about one-fourth were managers and supervisors. However, MPCA has other supervisors and managers besides those categorized by the agency as administrative. For instance, MPCA categorizes some enforcement supervisors as enforcement staff—not administrative staff—in the agency's internal analyses of staff assignments.

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26 MPCA's salary and benefit costs per FTE grew faster in fiscal year 2001 (about 10 percent) than in any of the other years in the 1996-2001 period. One reason may have been a change in the fiscal year 2000-2001 contract for professional employees. A majority of MPCA's employees are in the Minnesota Association of Professional Employees, and a change in this bargaining unit's salary range midpoints made more employees eligible for salary "step increases."

27 MPCA, *MPCA Budget Overview: Legislative Fact Sheet* (St. Paul, January 22, 2001), 2.

Table 1.9: Types of Staff Characterized as "Administrative" by MPCA, January 2001

Type of Staff	Number of FTE	Percentage of MPCA's "Administrative" FTE
Directors, managers, and supervisors	57.6	25%
Staff who are not managers or supervisors:		
Clerical and general support staff	64.9	29%
Information systems	34.6	15
Finance and accounting	11.0	5
Human resources	10.0	4
Public information, graphic arts	9.3	4
Management analysts	9.0	4
Grants specialist coordinators	8.8	4
Pollution control specialists, hydrologists	8.8	4
Planners	4.1	2
Library/information services	2.0	1
Customer services specialists	2.0	1
Other	4.0	2
TOTALS	226.0	100%

SOURCE: Office of the Legislative Auditor analysis of data from MPCA's work survey.

MPCA appears to have a reasonable proportion of managers and supervisors.

To better assess the full number of MPCA managers and supervisors, we reviewed information that the Minnesota Department of Employee Relations (DOER) periodically collects from all state agencies. As of September 2001, DOER reported that MPCA had a total of 96 managers and supervisors. According to DOER's data,

- **MPCA's percentage of staff who are managers or supervisors is roughly equal to the median of other large state agencies.**

Table 1.10 shows that 12.9 percent of MPCA's staff in September 2001 were managers and supervisors. By comparison, the median for 23 other state agencies with more than 100 employees was 13.2 percent. Two other large agencies in the environment and natural resources area—the departments of Agriculture and

Table 1.10: Manager and Supervisor Staffing Levels, Selected Agencies, September 2001

	Percentage of Total Staff for:			
Job Classification:	MPCA	Department of Agriculture	Department of Natural Resources	Median of 23 State Agencies With 100 or More Employees
Managers	4.8%	5.2%	3.5%	5.1%
Supervisors	8.0	8.9	10.6	8.0
TOTAL	12.9%	14.1%	14.1%	13.2%

NOTE: The percentages are based on head counts of employees, not FTEs, as of September 6, 2001.

SOURCE: Office of the Legislative Auditor analysis of data from the Department of Employee Relations.

Natural Resources—each had 14.1 percent of their staff in management or supervisory positions. Agencies such as the departments of Human Services, Transportation, and Corrections have lower percentages of managers and supervisors than MPCA and many other state agencies, perhaps because they have large numbers of staff who perform similar types of functions (such as human services technicians, highway maintenance workers, and prison guards). In contrast, some agencies likely require higher levels of supervision, including agencies such as MPCA whose staff exercise considerable professional discretion and have much variability in their daily job tasks.

We did not evaluate the duties and performance of all of MPCA's administrative staff, so we offer no judgment about whether the agency could further reduce these positions. As part of the agency's staffing reductions for the 2002-03 biennium, MPCA will eliminate 24 administrative positions, including 12 program managers and supervisors. Based on the comparative data cited above, however, we do not think that MPCA has an excessive number of supervisors and managers for an agency of its size and diverse responsibilities.

2 Pollution-Related Fees

SUMMARY

The Legislature should discuss the purpose and levels of the Minnesota Pollution Control Agency's (MPCA) major fees. The agency's water quality and hazardous waste fee accounts have faced deficits for several years. MPCA has not increased hazardous waste fees to cover the full legislative appropriation to the hazardous waste fee account, as required by law, because agency officials perceive that legislators would not favor such fee increases. In addition, water quality fees do not generate enough revenue to cover the agency's costs of issuing, monitoring, and enforcing permits, and they have not changed since 1992.

State law first authorized MPCA to collect fees in 1983.

When MPCA was created in 1967, it was funded entirely with the state General Fund and federal revenues. The Legislature first authorized MPCA to collect permit fees in 1983.[1] By 2000-01, the General Fund and federal revenues represented only 36 percent of MCPA's expenditures, and various pollution-related fees and taxes were an important source of the agency's other revenues.[2] The increased reliance on fees has reflected the Legislature's interest in a "polluter pays" approach to funding.

In recent years, however, some of MPCA's fee accounts have faced deficits. In addition, MPCA proposed in 2001 to eliminate two of the agency's major fees. In this chapter, we address the following questions:

- **How much revenue is generated by air, water, and hazardous waste fees? How have these revenues changed in recent years, and how have the revenues compared with legislatively-authorized expenditures? Why have some fee accounts faced deficits?**

- **What types of MPCA activities can fees pay for? To what extent do fee revenues cover the costs of the agency's fee-related activities?**

- **How do Minnesota's water quality fee levels and revenues compare with those of selected other states?**

- **How much does it cost to administer the air, water, and hazardous waste fees?**

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1 *Minnesota Laws* (1983), ch. 301, sec. 113.

2 Minnesota Department of Finance, *2002-03 Minnesota Biennial Budget* (St. Paul, January 2001), D-4.

FEE REVENUES AND ACCOUNT BALANCES

MPCA charges fees to facilities that obtain operating permits from the agency. These include permits to emit air pollution, discharge wastewater, and treat or store hazardous waste. In addition, companies that **generate** hazardous waste are not required to obtain permits from MPCA, but they must pay fees based on the amount of waste they generate. Also, MPCA charges fees for sanitary sewer extensions or changes, stormwater permits, animal feedlot permits, and some other types of permits.[3] Each of these fees goes into one of three accounts (the air quality, water quality, and hazardous waste fee accounts) that are among the largest revenue sources in the state's Environmental Fund.

MPCA collected $14 million in air, water, and hazardous waste fees in fiscal year 2001.

Air, water, and hazardous waste fees generated a total of about $14 million in revenues in fiscal year 2001. Estimated air quality fee revenues totaled $9.1 million in fiscal year 2001, compared with $2.9 million for water fees and $2.1 million for hazardous waste fees. The predominance of air quality fee revenues is a fairly recent phenomenon. MPCA increased air quality fees dramatically in the early 1990's, in response to requirements in the 1990 federal Clean Air Act Amendments.[4] In fiscal year 1990, for instance, MPCA collected a total of $566,000 in air quality fee revenues. This is $780,000 in fiscal year 2001 dollars, or less than 9 percent of the air fees collected by MPCA in 2001.

Figure 2.1 shows total revenues from air, water, and hazardous waste fees, adjusted for inflation. Inflation-adjusted revenues from air quality fees rose by 36 percent since 1993. In contrast, total revenues from water quality fees declined by 2 percent, and hazardous waste fees declined by 17 percent. In part, the differences in these trends reflect the fact that:

- **Pursuant to federal requirements, Minnesota law requires MPCA to make annual inflation adjustments in its air fees; there are no similar provisions for other MPCA fees in federal or state law.**

To recover the "reasonable costs" of operating the air quality program, state law requires MPCA to adjust its fees annually to reflect changes in the national Consumer Price Index.[5] Minnesota's inflation adjustment provision mirrors language in the federal Clean Air Act regulations and is consistent with the practices of many other states, although some states have not implemented

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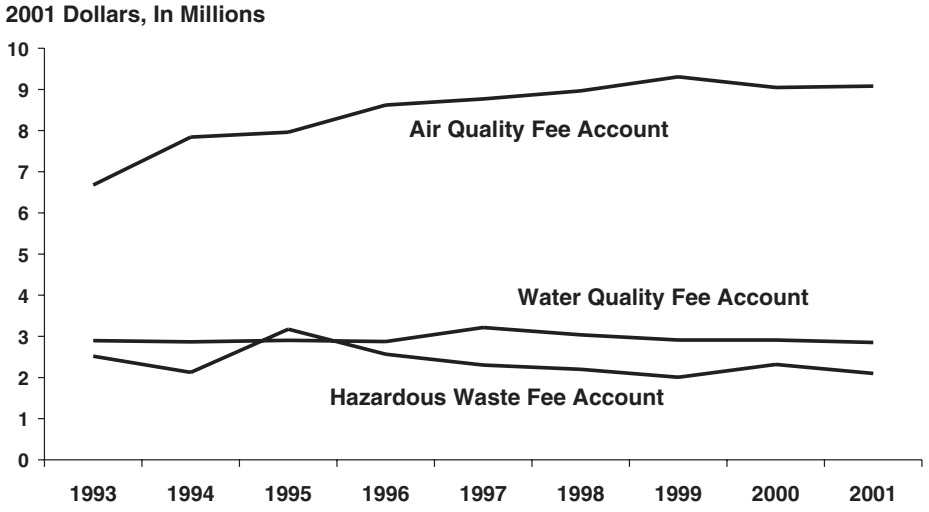
3 In 2000, MPCA projected total water quality fee revenues of $2.9 million in fiscal year 2002 from the following sources: 43 percent from municipal fees (point source and sanitary sewer); 28 percent from industrial point source fees; 21 percent from stormwater permit fees; and 7 percent from feedlot fees.

4 The Clean Air Act Amendments required states to collect fee revenues sufficient to cover the operating costs of their programs for "stationary" air pollution sources. States' fees were presumed to comply with this requirement if states charged fees of $25 per ton of each regulated pollutant and increased the fees annually for inflation.

5 *Minn. Stat*. (2000), §116.07, subd. 4d (d).

Air quality fee revenues grew 36 percent, while water quality fee revenues were flat, and hazardous waste fee revenues declined.

Figure 2.1: Inflation-Adjusted Revenues in the Air, Water, and Hazardous Waste Fee Accounts, FY 1993-2001



SOURCE: Office of the Legislative Auditor analysis of MPCA fund statement data.

automatic, annual inflation adjustments in air quality fees.[6] MPCA estimates that its air quality fee revenues in 2000 were $2.1 million (or 39 percent) higher than they would have been without this statutory inflation adjustment.

State law does not authorize automatic inflation adjustments for MPCA's water and hazardous waste fees. However, state law and rules require MPCA to annually examine and adjust the agency's hazardous waste fees.[7] This provision is unique among MPCA fees, and the agency uses it to *administratively* change hazardous waste fees—without having to get the explicit legislative approval required for changes in the agency's other fees.[8] For example, MPCA administratively increased the fee per gallon for hazardous waste from 55 cents in 1994 to 92 cents in 2000.

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6 Oklahoma Department of Environmental Quality, *Title V/Non-Title V Fee Survey Report* (Oklahoma City: October 1998). This report said that "some states adjust emission fees according to the Consumer Price Index (CPI), others according to their budget" (p. 4). Federal regulations authorize states to charge fees less than the inflation-adjusted amount presumed by the law if they can demonstrate that a lesser amount would provide revenues sufficient to cover their permit program costs.

7 *Minn. Stat*. (2000), §116.12, subd. 1; *Minn. Rules* (2001), ch. 7046.0065; 7046.0020, subp. 1; 7046.0031, subp. 4; 7046.0040, subp. 1.

8 *Minn. Stat.* (2000), §14.18, subd. 2 says that new fees or fee increases adopted by MPCA are subject to legislative approval during the next biennial budget session, and *Minn. Stat.* (2000), §16A.1283 requires all agencies to get legislative approval for new or increased fees. Staff with the Minnesota Department of Finance told us that they consider MPCA's administrative increases in hazardous waste fees to comply with the statutory requirements because the agency is required by law to set fees at levels that recover legislative appropriations (*Minn. Stat.* (2000), §116.12, subd. 1), and the appropriation is considered to be authorization for the agency's overall fee level.

Meanwhile,

- **There were no changes in Minnesota's water quality fees during the past decade, so fee revenues (in 2001 dollars) have been stable in recent years because the number of water-related permits increased.**

MPCA last modified state water quality fee rules in January 1992. MPCA is not authorized to increase water fees administratively or to adjust them for inflation. In 2001 dollars, MPCA's water quality fee revenues have been fairly steady since 1993 (Figure 2.1); the declining value of fee revenues over time was offset by increases in the number of permits being issued or modified. For instance, the total number of facilities with point source water quality permits increased from about 1,100 in 1991 to 1,400 presently.[9] The number of sewer extension permits approved by MPCA increased from 502 in 1991 to 843 in 2000. In sum, the water quality fees charged to individual facilities did not keep pace with inflation in the past decade, but an increase in the number of facilities paying permit-related fees prevented a decline in the total fee revenues collected.

In recent years, MPCA made several proposals to change water quality fees that were not approved by the Legislature. In 1995, MPCA sought authorization in law to base water quality fees on the pollutants in facilities' wastewater, not just on the design capacity of wastewater facilities. In 1997, MPCA requested a $1.9 million biennial fee increase to maintain existing staffing levels and make up for a loss of supplemental funding that the Legislature had appropriated to cover shortfalls in the 1996-97 biennium. In 1999, MPCA requested an increase in animal feedlot fees, but the Legislature prohibited MPCA from approving any such fees until July 2001, at the earliest.[10]

In 2001, MPCA proposed to eliminate water quality and hazardous waste fees, which have not generated enough revenue to cover authorized expenditures.

In 2001, MPCA proposed a package of environmental tax reforms to the Legislature (they were not enacted). One part of the proposal called for eliminating water quality and hazardous waste fees as a way "to provide tax relief to communities and businesses."[11] In addition, MPCA said that abolishing these fees would reduce bureaucracy by eliminating 3.5 full-time-equivalent staff positions dedicated to collecting fees and fee-related data.[12]

The two fees that MPCA proposed to eliminate in 2001 have faced deficits in their accounts for several years. Deficits occur when the legislatively-authorized expenditures from fee accounts exceed the fee revenues. There have been no recent deficits in the air quality fee account. On the other hand, the water quality fee account faced a $590,000 deficit at the end of fiscal year 2001, and the hazardous waste fee account faced a $622,000 deficit at that time. The 2001 Legislature transferred about $1.2 million from the Solid Waste Fund to these accounts to put them into balance. In addition, the Legislature authorized transfers from the Solid Waste Fund to these accounts to address expected gaps between revenues and expenditures in future years. For water quality, these

9 Includes National Pollutant Discharge Elimination System permits, "general" permits, and state disposal system permits.

10 *Minnesota Laws* (1999), ch. 231, sec. 2, subd. 2.

11 *Minnesota Department of Finance, 2002-03 Minnesota Biennial Budget*, D-6.

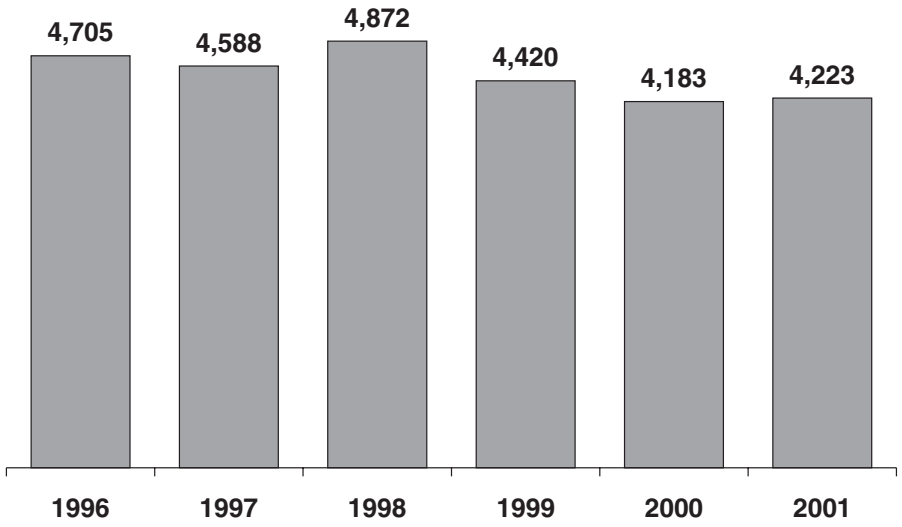
12 MPCA, *Environmental Tax Reform Proposal: Legislative Fact Sheet* (St. Paul, January 22, 2001), 2.

transfers will be $281,000 in fiscal year 2002 and $404,000 annually in fiscal years 2003-05, subject to legislative change.[13] For hazardous waste, these transfers will be $538,000 for fiscal year 2002 and $631,000 annually in fiscal years 2003-05, subject to legislative change. The hazardous waste fee account has faced year-end negative balances since the end of fiscal year 1999, and the water quality fee account has faced deficits for most of the past decade. In fact, a "funding crisis" in the water quality program prompted the Legislature to create the Blue Ribbon Task Force on Water Quality Funding in 1995.[14]

MPCA staff told us that a key reason for the deficits in the hazardous waste fee account has been the decline in the number of hazardous waste generators in Minnesota. MPCA records indicate that the number of fee-paying generators declined by about 10 percent from 1996 to 2001, as shown in Figure 2.2.[15] Thus, MPCA charged the costs of its hazardous waste activities to a smaller pool of hazardous waste generators.[16] As noted earlier, however, MPCA has authority to

The number of fee-paying hazardous waste generators declined 10 percent in recent years.

Figure 2.2: Number of Hazardous Waste Generators That Paid Fees to MPCA, 1996-2001



SOURCE: MPCA.

13 The Legislature also authorized about $1.2 million in additional expenditures from the water quality account in fiscal year 2002—funded through reallocations from various other funds and accounts.

14 Arthur Andersen, "A Report to the Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs," in *Report of the Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs: Findings and Recommendations* (St. Paul, December 1995), 3-A. The Legislature transferred $1.4 million from the motor vehicle transfer account in 1996-97 to address shortfalls in the water quality fee account.

15 In addition, fees could have declined if companies reduced (but did not eliminate) their wastes—for example, changing from being categorized as "large quantity generators" to "small" or "very small quantity generators."

16 According to the Minnesota Department of Revenue, there has also been a decline in revenues from Minnesota's hazardous waste tax—from $1.72 million in fiscal year 1996 to $1.29 million in fiscal year 2000.

administratively raise hazardous waste fees. In fact, the agency is required by *Minn. Stat.* (2000) §116.12 to raise fee revenues that "cover" legislative appropriations for hazardous waste permitting, monitoring, inspection, and enforcement.[17] However,

- **MPCA has not raised hazardous waste fees in recent years to cover the full legislative appropriation for the hazardous waste fee account, as *Minn. Stat.* (2000) §116.12 requires.**

In other words, although the declining number of hazardous waste generators may have contributed to fiscal imbalances in the hazardous waste fee account, the shortfalls faced by this account primarily reflected the agency's decision not to raise fee revenues to equal the appropriation. MPCA staff told us that some legislators and feepayers expressed concern to the agency in 1995 about proposed hazardous waste fee increases, and this has affected the agency's subsequent decisions to set fee levels that were insufficient to recover the full appropriation. In recent years, MPCA limited its hazardous waste spending by holding open some vacancies and reassigning some staff, but the expenditures have still exceeded hazardous waste fee revenues.[18] MPCA officials noted that the 2001 Legislature could have required MPCA to increase its hazardous waste fees but it instead provided the agency with "gap funding" for the hazardous waste program from another source (the Solid Waste Fund). We think that MPCA and the Legislature should resolve this noncompliance with current law.

MPCA and the Legislature should determine how to bring the agency into compliance with hazardous waste fee laws.

RECOMMENDATION

MPCA and the Legislature should determine how to bring the agency into compliance with the law requiring that the agency set fees that fully cover the appropriation to the hazardous waste fee account. Options include (1) increasing hazardous waste fees, (2) reducing legislative appropriations for hazardous waste fee expenditures, or (3) changing the law that requires that hazardous waste fees fully cover the appropriations.

In addition, it is noteworthy that MPCA has authority to administratively adjust hazardous waste fees but not air and water fees. The Legislature may wish to consider whether to adopt consistent policies in law for these various fees.

RECOVERY OF PROGRAM COSTS THROUGH FEES

While hazardous waste fees are required by law to generate revenues sufficient to cover a legislative appropriation, state law also has general requirements that fees should cover certain program costs. We examined the laws and rules for

17 Minn. Stat. (2000), §116.12, subd. 1. Also, *Minn. Rules* (2001), ch. 7046.0065 requires that fee revenues "equal or nearly equal" the legislative appropriation.

18 MPCA's hazardous waste expenditures have not exceeded the legislative appropriation.

Minnesota's air, water, and hazardous waste fees. We also compared fee revenues with selected measures of program costs.

Agency fees are supposed to raise revenues that recover program costs.

According to a general policy in state law, charges levied by a state agency for regulatory purposes "must be set at a level that neither significantly over recovers nor under recovers costs, including overhead costs, involved in providing the services."[19] In addition, the laws governing MPCA state that:

> [MPCA] may collect permit fees in amounts not greater than those necessary to cover the reasonable costs of reviewing and acting upon applications for agency permits and implementing and enforcing the conditions of the permits pursuant to agency rules. Permit fees shall not include the costs of litigation. The fee schedule must reflect reasonable and routine permitting, implementation, and enforcement costs.[20]

There are some important differences in statutory provisions for air, water, and hazardous waste fees. In particular,

- **The law explicitly directs MPCA to charge air quality fees that cover costs for a broad array of services, but the law is more vague for other fees.**

Minnesota's air quality fee law specifically lists a wide range of activities that are supposed to be covered by fees—including the costs of activities such as permitting, enforcement, ambient monitoring, rule development, and others:

> The agency shall collect an annual fee from the owner or operator of all [facilities required to obtain permits under subchapter V of the federal Clean Air Act]. The annual fee shall be used to pay for all direct and indirect reasonable costs, including attorney general costs, required to develop and administer the [federal] permit program requirements... Those costs include the reasonable costs of reviewing and acting upon an application for a permit; implementing and enforcing statutes, rules, and the terms and conditions of a permit; emissions, ambient, and deposition monitoring; preparing generally applicable regulations; responding to federal guidance; modeling, analyses, and demonstrations; preparing inventories and tracking emissions; and providing information to the public about these activities.[21]

In fact, federal rules require each state to establish air quality fee schedules "sufficient to cover the permit program costs," and the permit "program" is defined to include this wide array of activities.[22]

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19 Minn. Stat. (2000), §16A.1285, subd. 2.

20 Minn. Stat. (2000), §116.07. subd. 4d (a).

21 Minn. Stat. (2000), §116.07, subd. 4d (b).

22 40 CFR sec. 70.9 (2001).

In contrast, the statutory provisions that govern MPCA's water and hazardous waste fees are less specific. MPCA's general fee statute indicates that fees must reflect "permitting, implementation, and enforcement" costs.[23] MPCA officials have generally assumed that "implementation" should include activities such as inspections and compliance monitoring, at a minimum. However, this law does not clearly specify whether activities such as ambient monitoring and rule development could be construed as "implementation."

State law also says that air quality fees are supposed "to pay for all direct and indirect reasonable costs" related to facilities subject to federal permit requirements.[24] In contrast, the law governing other MPCA fees is less directive. It says that MPCA *may* collect fees in amounts *not greater than* those necessary to cover reasonable costs (emphasis added).[25]

The varying legal provisions for air, water, and hazardous waste fees complicate efforts to determine the extent to which MPCA's fees cover "reasonable" costs. As a cautious approach, we compared MPCA's estimated fee revenues for fiscal year 2002 with its estimated staffing costs for permit issuance, compliance determination, and enforcement.[26] Our estimates did not include administrative costs or non-personnel costs. We found that:

- **In fiscal year 2002, MPCA's water quality fee revenues will not cover the agency's full staffing costs for permitting, compliance determination, and enforcement, unlike revenues for air quality and hazardous waste fees.**

Water quality fees do not cover the costs of administering water quality regulations.

By our estimate, MPCA's water quality fee revenues ($2.9 million) will equal 58 percent of MPCA's water-related permitting, compliance determination, and enforcement staffing costs.[27] This estimate does not include MPCA's costs to monitor ambient water quality, set water quality standards, develop water quality rules, and conduct water-related environmental reviews—all of which help to fulfill federal requirements for states that operate water quality regulatory programs. Among the various types of water quality permits, animal feedlot permits have recovered a particularly small share of costs. MPCA received feedlot fee revenues of $64,460 in fiscal year 2001, which was about 8 percent of

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23 Minn. Stat. (2000), §116.07. subd. 4d (a). Also, *Minn. Stat.* (2000), §116.12, subd. 1 states that hazardous waste fees should cover the amounts appropriated for permitting, monitoring, inspection, and enforcement expenses, although it does not define "monitoring." Also, the law (subd. 3) says that hazardous waste fees may pay for reasonable and necessary costs of any environmental review required under chapter 116D of Minnesota law; these costs are not specifically mentioned in the laws governing air and water fees.

24 Minn. Stat. (2000), §116.07, subd. 4d (b).

25 As noted earlier, state law also says that fees should not significantly over recover or under recover the costs of providing services, although terms such as "significantly" and "costs" are not defined in this general law.

26 We used MPCA's "work survey" database to determine costs for various functions. MPCA periodically asks supervisors throughout the agency to estimate the proportion of staff time devoted to various programs and activities.

27 Staffing costs are based on staff assignments as of January 2001, using MPCA's estimates at that time of fiscal year 2002 salary costs. The data do not reflect staffing changes made in the 2002 legislative session. MPCA estimates that the total personnel and nonpersonnel costs associated with water quality permitting, compliance, and enforcement activities (and their indirect costs) are about $7.8 million—or well over two times the amount of revenue raised annually from water quality fees.

Animal feedlot permits are one type of water quality permit that has generated fee revenues insufficient to cover MPCA's regulatory costs.

the agency's estimated staffing costs for issuing, monitoring, and enforcing these permits.

The Legislature should clarify which MPCA activities to fund with fees.

In contrast, air quality fee revenues in fiscal year 2002 will total more than 300 percent of staffing costs for air quality permitting, compliance monitoring, and enforcement. This is because air quality fees are required by law to cover not only these types of costs, but they must also cover other components of MPCA's air quality regulatory program—such as rule development and ambient air monitoring. Hazardous waste fee revenues in 2002 will approximately equal the staffing costs for hazardous waste permitting, compliance monitoring, and enforcement activities. However, hazardous waste fees will not cover other staffing costs, such as development of hazardous waste rules or staff assistance intended to help hazardous waste generators manage or reduce their wastes.[28]

In our view, the Legislature should clarify in law the types of MPCA activities that should be funded with fees. Legislators could specify that fees pay for only those activities that most directly affect feepayers (such as permitting, compliance monitoring, and enforcement), but they should also consider whether fees should pay for other activities that are essential parts of a regulatory program (such as rule development, ambient monitoring, environmental review, and technical assistance). If legislators think that fees should not cover the *full* cost of certain activities, this could be specified in law, too. Without such clarification, it will continue to be difficult to conclusively determine the extent to which MPCA fees comply with state laws that prohibit over-recovery or under-recovery of costs.

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28 In June 2001, staff who worked on "assistance" activities accounted for about 30 percent of staff funded by MPCA's hazardous waste fees—making it the largest single category of staff funded by these fees. We estimated that 2002 hazardous waste fees will cover 65 percent of the agency's staffing costs for hazardous waste permitting, compliance monitoring, enforcement, and assistance.

RECOMMENDATION

The Legislature should clarify state laws that define which categories of MPCA activities should be funded with fees. It should then consider any adjustments in fee levels necessary to comply with these laws.

We think the question of how fee revenues, in aggregate, compare to MPCA's related program costs is an issue with broad funding implications that deserves the Legislature's attention. Of lesser importance, from a statewide perspective, some permittees expressed concern to us that the fees they pay for their *individual facilities* have exceeded the cost of the permitting, compliance monitoring, and enforcement services MPCA has provided to them. For instance, we reviewed a recent case in which the estimated MPCA staff costs (less than $3,000) to reissue a power plant's five-year water quality permit were far less than the total fees the facility is to pay over a five-year period ($65,000).[29] More generally, some permittees expressed concern that MPCA has not reissued their permits in a timely manner, despite their timely submittals of permit renewal applications and annual fee payments.

MPCA should ensure that its fee structures are equitable.

In other cases, however, MPCA spends more resources on an individual facility than it collects in permit fees. For example, MPCA spent more than 2,000 hours working on the most recent water quality permit for a facility that proposed a significant expansion. The permit was the subject of a contested case hearing request. The estimated costs of issuing this five-year permit ($66,000, plus additional engineering costs) exceeded the $55,000 in fees that this facility is to pay over a five-year period, and MPCA will likely incur additional costs for compliance monitoring and possibly enforcement.

We think that it will be in MPCA's best interests to continue looking for ways to improve the timeliness of its permitting process and ensure that its fee structures are equitable.[30] For example, although water quality fees have not increased since 1992 and these fee revenues do not cover basic program costs, permittees may be reluctant to support MPCA proposals for fee increases if it appears that the agency has not taken sufficient steps to improve the permitting process. In a separate report, we discuss MPCA's backlog of water quality permits and recommend that the agency continue working to reduce the backlog.[31]

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29 In addition to the permitting costs at this facility, there will also be MPCA costs for compliance monitoring and possibly enforcement.

30 The 1995 Blue Ribbon Task Force on Water Quality Funding concluded that Minnesota's existing fee structure was inequitable. It recommended changing state rules so that water quality fees would be based on the actual amount of wastewater handled by facilities (the "flow") rather than the capacity of wastewater the facilities were designed to handle (the "design flow"). MPCA sought but did not receive legislative authorization to make such changes. The task force said that the fee system still in place today (1) is not directly related to actual flow rates, actual pollution discharges, or the amount of staff time required to issue each permit, (2) can charge different fees to facilities with similar design flow rates, (3) is burdensome to small cities, and (4) creates no incentive to reduce effluent quantity or pollution levels.

31 See Office of the Legislative Auditor, *Water Quality: Permitting and Compliance Monitoring* (St. Paul, January 2002).

COMPARISONS WITH OTHER STATES

Some Minnesota legislators have asked how MPCA's fees compare with those in other states. We focused our attention on water quality fees, and our literature reviews and interviews with experts indicated that no recent reports have systematically compared states' water quality fees. To provide some basis for comparison, we surveyed selected states regarding their point source water quality activities. In August 2001, we sent a questionnaire to the six states (including Minnesota) in the U.S. Environmental Protection Agency's Region 5, as well as nine other states that were identified in the 1995 Blue Ribbon Task Force as having certain demographic, geographic, environmental, or program attributes similar to Minnesota's. We received responses from 13 states, including Minnesota. We did not independently verify the data reported in the surveys, although we contacted several states to clarify their responses.[32]

The survey results showed that:

- **Water quality fee levels vary considerably among states, and fees pay for widely varying portions of states' point-source water quality programs.**

Washington and Wisconsin collected the most water quality fee revenues per capita, while Kentucky and Michigan collected the least.

We asked states to provide information on funding sources for permit issuance, inspection, and enforcement activities related to National Pollutant Discharge Elimination System (NPDES) facilities and state-permitted facilities.[33] As shown in Table 2.1, MPCA reported that 34 percent of its operating expenditures for these activities are paid from fees. Two states (Washington and Montana) told us that 95 to 100 percent of their revenues come from fees. Three states (Kentucky, Wisconsin, and Michigan) said that fees account for 5 to 15 percent of their revenues, although Wisconsin (unlike the other two states) collects substantial revenues from wastewater permit fees and deposits these revenues into the state's General Fund. In fact, Wisconsin is one of two states (Washington is the other) that collected more than $1.50 per capita in fee revenues in the most recent year; in contrast, Minnesota collected $0.56 per capita, and two states (Kentucky and Michigan) collected less than $0.10 per capita.

Our survey also asked states for information about the fees charged to various categories of facilities. It is sometimes difficult to make direct comparisons because of fundamental differences in the methods used to compute fees. Most notably, Wisconsin's annual facility fees are often based on the quantity and types of **pollutants** that are limited by the permit, while the other states' fees typically relate to the **amount of wastewater** discharged. Also, the fees charged to municipal facilities in Washington and Wisconsin are based, in part, on the number of persons or residences served by those facilities. Table 2.2 illustrates

32 Two states (Colorado, Montana) were considering significant fee increases at the time of our survey. In our analysis, we examined existing fees, not proposed fees.

33 We asked agencies to make estimates for NPDES, spray irrigation, infiltration basin, and wetland treatment facilities. We requested that agencies not consider costs or revenues related to general agency overhead and administrative support, rule writing or regulation development, ambient monitoring, wastewater facility construction, septic tank systems, and nonpoint source pollution control.

Table 2.1: Revenue Sources for Water Quality Point Source Programs, Selected States

	Percentage of Expenditures Paid For By:					
State	Federal Funds	State General Funds	Fee Revenues	Other Revenues	Total Fee Revenues ($)	Fee Revenues ($ Per Capita)
Kentucky	10%	85%	5%	0%	$ 345,900	$0.09
Wisconsin	29	65	6[a]	0	8,200,000	1.53
Michigan	33	52	15	0	834,135	0.08
North Carolina	54	25	21	0	4,146,209	0.52
MINNESOTA	**26**	**15**	**34**	**26**[b]	**2,773,034**	**0.56**
Connecticut	31	10	39	20	3,100,000	0.91
Illinois	35	25	40[c]	0	5,500,000	0.44
Ohio	22	32	46	0	8,500,000	0.75
Oregon	10	31	59	0	1,914,607	0.56
Colorado	7	20	73	0	1,604,476	0.37
Indiana	0	25	75	0	4,130,594	0.68
Washington	0	5	95[d]	0	10,786,063	1.83
Montana	0	0	100	0	503,328	0.56

NOTE: The survey asked for information only on expenditures for activities directly related to permit issuance, facility inspection, and enforcement (including attorney fees) for NPDES facilities and spray irrigation, infiltration basin, and wetland treatment facilities. It asked agencies not to consider expenditures related to general agency overhead/administrative support, agency rule writing or regulation development, ambient water quality monitoring, wastewater facility construction, septic tank systems, and nonpoint pollution control activities. States reported information for the most recent year for which data were available.

[a]Includes stormwater fees only. Wisconsin has wastewater permit fees, but revenues are deposited into the state's General Fund.

[b]Includes expenditures paid with Legislative Commission on Minnesota Resources funding, special revenues funds, and Public Facilities Authority funding.

[c]These "fees" are actually interest payments made to the state's revolving fund construction loan program.

[d]Includes revenues for overhead/administrative support, rule writing, and ambient monitoring—in addition to revenues for permit issuance, facility inspection, and enforcement.

SOURCE: Office of the Legislative Auditor, August 2001 survey; state population data from U.S. Census Bureau (2000 census).

Minnesota's water quality fee revenues per capita were in the middle of the surveyed states.

the fees that three types of facilities would pay in each of the surveyed states.[34] It is worth noting that:

- Three of the 12 states that responded to this portion of our survey do not charge annual fees to the categories of wastewater dischargers shown. Michigan's only water quality fees are for stormwater permits. Illinois charges permittees no annual fees or permit issuance fees; rather, the "fees" supporting the state's permitting program are actually a portion of the interest payments that permittees have made on state wastewater construction loans. Kentucky charges a "base permit fee" that must be paid prior to permit issuance, but it has no annual fees.

34 A more complete summary of responses to our fee survey is available on our website, linked to the electronic version of this report. See www.auditor.leg.state.mn.us/ped/2002/pe0202.htm.

Table 2.2: Comparison of Water Quality Fees for Selected Types of Facilities, Selected States

State	Industrial Facility, With Cooling Water Discharge of 5 Million Gallons per Day		Industrial Facility, With Flow of of 0.5 Million Gallons per Day		Municipal Facility, With Flow of 0.5 Million gallons per day	
	Annual fee ($)	Application fee ($)	Annual fee ($)	Application fee ($)	Annual fee ($)	Application fee ($)
Kentucky	$ 0	$ 1,000	$ 0	$2,100-3,200	$ 0	$ 0
Michigan	0	0	0	0	0	0
MINNESOTA	**1,230**	**85**	**1,230**	**85**	**1,140**	**85**
Connecticut	1,360	9,800	5,450	9,800	1,065	2,100
Illinois	0	0	0	0	0	0
Ohio	8,800	200-950	2,950	200-950	2,600	200-950
Oregon	11,304	37,730	5,652-11,304	7,586	[a]	[a]
Colorado	559	0	1,607	0	1,820	0
North Carolina	2,865	0	715	0	715	0
Washington	20,689-25,861	5,172-6,465	21,335-38,793	5,334-9,698	[b]	[b]
Montana	2,500	400	1,000-1,250	250-1,000	1,000-1,250	250-1,000
Wisconsin	*(Fees are based on the quantity of pollutants that are limited by the permit)*					

NOTE: For Montana and North Carolina, we assumed that facilities discharging more than one million gallons per day were subject to the states' fees for "major" permits, and other facilities were subject to fees for "minor" permits. Indiana did not respond to this portion of our survey.

[a]Annual compliance fee of $750-1,176, plus variable fees based on population served (population times $0.09645) and types of treatment/pretreatment.

[b]Fees are based on the number of "residential equivalents" served by the facility.

SOURCE: Office of the Legislative Auditor, August 2001 survey.

- Among states that charge annual fees, Washington has the highest fees for at least two of the three individual categories of facilities shown. Washington's fees are set at levels that are intended to recover the permitting program's full costs, including costs for permit processing, inspections, lab analysis of samples taken during inspections, compliance monitoring, ambient monitoring, rule writing, and administrative support costs.

- Four states (Michigan, Illinois, Colorado, and North Carolina) do not charge a one-time permit application fee to the three categories of facilities shown, and another state (Kentucky) does not charge such fees for municipal facilities. Of the responding states that charge application fees, Minnesota reported the lowest fee ($85 for most types of permits). In 1995, Minnesota's Blue Ribbon Task Force on Water Quality Funding recommended that the Legislature consider increasing permit application fees, but no changes in this fee have subsequently occurred.[35]

FEE ADMINISTRATION

MPCA cited high administrative costs as one reason that it proposed in 2001 to eliminate water and hazardous waste fees. MPCA said: "Collecting these two

35 *Report of the Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs*, 46.

fees imposes high administrative costs (for both the payer and state agencies) for the amount of money collected. Out of 12,925 payers of the water quality and hazardous waste fees, 12,898 pay a fee of less than $1,000 per year, and the majority pay less than $130 per year."[36]

To evaluate MPCA's assertion, we obtained information from MPCA regarding its cost of collecting air and water fees throughout the state. In addition, MPCA and the Minnesota Department of Revenue share responsibility for collecting hazardous waste fees and taxes, so we obtained information on collection costs from both agencies.[37] We found that:

- **The cost of collecting MPCA's hazardous waste fee and tax revenues is substantially higher than the cost of collecting air and water fees.**

Fee collection costs range from 1 to 5 percent of the fee revenues collected.

In fiscal year 2001, the estimated cost of collecting hazardous waste fees and taxes was about $153,000, or about 4.5 percent of the anticipated revenues for these fees and taxes. In contrast, MPCA estimated that collection costs were about $20,000 for water quality fees (0.7 percent of revenues collected) and $60,000 for air quality fees (0.7 percent of revenues collected). Staff in the Minnesota Department of Revenue told us they do not have standards or guidelines regarding levels of administrative costs that are "acceptable" for taxes or fees. Department of Revenue staff have previously raised general concerns about fees for which there are large numbers of feepayers and relatively small average fees, but they offered no specific judgments about MPCA's fees. In our view, there appears to be reason for policy makers to carefully consider the cost of collecting hazardous waste fees and taxes, but the costs of collecting MPCA's air and water quality fees do not require legislative attention at this time.

Because MPCA has faced shortfalls in some of its fee accounts in recent years, we also considered whether the agency has had any problems collecting fees it is owed. Specifically, we examined the extent to which air, water, and hazardous waste generator fees have been paid on time. We found that:

- **MPCA has had more difficulty collecting hazardous waste generator fees than air and water fees.**

We focused on fees that were overdue by at least four months because such instances are probably less likely to be inadvertent than fees that were overdue for shorter periods. Our review of MPCA accounts receivable reports since mid-1998 showed that MPCA has averaged $62,000 per quarter in hazardous waste generator fees overdue by at least 121 days—compared with $33,000 in overdue water fees and $18,000 in overdue air fees. At the end of an average quarter, about 3 percent of MPCA's annual hazardous waste generator fee revenues were overdue by at least 121 days—compared with 1 percent for water fees and 0.2 percent for air fees. MPCA's debt collection procedures rely on the Minnesota Department of Revenue to pursue recovery of air, water, and hazardous waste fees that have been delinquent for at least four months.

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36 MPCA, *Environmental Tax Reform Proposal: Legislative Fact Sheet*, 2.

37 Hazardous waste generators outside the Twin Cities area pay hazardous waste fees and taxes through a combined billing process, so it would be difficult to examine the collection costs of the fees alone.

DISCUSSION

There is a strong case for continuing pollution-based fees, but legislators should discuss the levels of these fees.

MPCA proposed in 2001 to eliminate two of its major pollution-related fees, but we think there is strong justification for the continued use of such fees. Pollution sources impose significant regulatory costs on society, and fees are a way to recover at least some portion of these costs directly from the sources. Economists have generally favored pollution-related charges as a way to get consumer prices to better reflect the costs of pollution regulation borne by government agencies and perhaps even the pollution-related costs borne by society at large.[38] Also, pollution-related fees may be more equitable than general revenue sources (such as income taxes) if there is some relationship between the fee level and the amount of pollution generated. In addition, assigning some financial responsibility to polluters provides modest incentives to reduce pollution if the amount of the fee is linked to the volume or toxicity of the pollutants generated. Finally, the administrative costs of collecting Minnesota's air, water, and hazardous waste fees (ranging from 0.7 to 4.5 percent of revenues) do not seem high enough to justify elimination of the fees.

While we think there is a strong case for keeping pollution-related fees, we also think the Legislature should discuss the appropriate levels of these fees. We noted earlier in this chapter that water quality fees do not raise sufficient revenues to cover all of MPCA's staffing costs for water quality permit issuance, compliance monitoring, and enforcement. They also do not cover the costs of water quality ambient monitoring, rule development, and environmental review. The 1995 Blue Ribbon Task Force on Water Quality concluded that MPCA could accomplish more work with its existing funds, but it also said that increases in state General Fund appropriations and fee revenues "*may* be necessary to adequately fund the permit program" (emphasis added).[39]

MPCA officials have advocated for water quality fee increases several times in recent years. Other people we spoke with expressed varying opinions about whether fees should be increased and how they should be determined. For instance:

- Many business and local government representatives are dissatisfied with the amount of time it takes MPCA to issue water quality permits.[40] Some said that they oppose fee increases—because they perceive that their facilities have not received adequate service for the fees paid or that permit

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38 For example, see Lawrence H. Goulder, *Environmental Taxation and the "Double Dividend:" A Reader's Guide* (Cambridge, MA: National Bureau of Economic Research, October 1994), 1; Wallace E. Oates, "Green Taxes: Can We Protect the Environment and Improve the Tax System at the Same Time?" *Southern Economic Journal* 61 (1995), 915-922. However, economists have also noted the challenge of designing an efficient and effective system of pollution charges, given (1) the difficulty of measuring pollution and its full impacts, and (2) the potential adverse economic effects of increased fees or taxes.

39 *Report of the Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs*, 39. The task force also recommended that MPCA charge a "variance fee"—to recover extra costs in cases where permittees request variances from permit requirements—but this has not been enacted.

40 See Office of the Legislative Auditor, *Water Quality: Permitting and Compliance Monitoring* (St. Paul, January 2002) for details on MPCA's large backlog of water quality permit applications.

delays have resulted from slow decisions by MPCA management. Others said that it is in their interest to eliminate the permit backlog, and they said they might support fee increases to accomplish this.

- Some legislators and environmental group representatives expressed concern to us that making MPCA more reliant on fees might give the feepayers more clout in their dealings with agency staff. They also said that they consider it a conflict of interest to have feepayers regulated by MPCA staff whose salaries are funded partly through fees.[41] Chapter 4 and Appendix C discuss a variety of funding alternatives that could be considered if the Legislature thinks that MPCA's fee-related revenues should be capped.

- One state agency administrator (not in MPCA) said that MPCA's fees should be set at levels that reflect the social costs of pollution—not at levels that merely recover the cost of services provided by MPCA.[42] Under this approach, permit fees would not be viewed merely as a "fee-for-service," and the prices of permittees' products or services would probably reflect the costs of pollution more fully. On the other hand, however, such an approach could increase fees significantly, and large fee increases have been a source of legislative concern in the past. Also, it would be difficult to precisely measure some of pollution's health and environmental costs.

As a starting point, we think that the Legislature should clarify which types of MPCA activities should be funded with fees. Once this occurs, policy makers will be able to better evaluate the extent to which MPCA fees comply with state laws that prohibit over-recovery or under-recovery of costs.

For the most part, the fees discussed in this chapter are ones that are charged to individual facilities that generate pollution. The next chapter discusses "nonpoint" and mobile sources of pollution, which tend to be more widely dispersed than "point sources" of pollution and are harder to trace to their place of origin. For these types of pollution, permit-related fees are a less attractive funding option than some of the broader-based funding options discussed in Chapter 4 and Appendix C.

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41 The Legislature has also avoided conflicts of interest by limiting the amount of environmental penalty collections appropriated to MPCA. In this way, MPCA does not benefit directly if it assesses larger penalty amounts.

42 The "social" costs of pollution would include things such as the additional expenses incurred by people as a result of pollution-related health problems.

3 Emerging Pollution Control Issues

SUMMARY

Federal requirements for a new approach to water quality management will present new challenges for the Minnesota Pollution Control Agency (MPCA)—particularly because they will require more emphasis on control of "nonpoint" water pollution. Likewise, MPCA has focused largely on "point sources" of air pollution in the past, but mobile sources of pollution also pose health risks. It will be difficult to evaluate whether such issues justify new state spending until MPCA can better identify (1) expected program costs, (2) specific pollution control strategies (and how these strategies would use existing and possible new staff), and (3) the potential impact of these initiatives.

In 2001, MPCA proposed environmental tax reform partly because it believed that its funding structure could not adequately respond to emerging pollution issues. For instance, the agency said that:

> The greatest environmental gains to be made in the future will be from reducing pollution from smaller, widely dispersed sources, commonly referred to as "nonpoint" sources. Reducing pollution from these smaller sources—examples of which include vehicles, failing septic systems, and urban and agricultural runoff—is a priority for the MPCA, but there is no dedicated source of funding for environmental programs of this nature.[1]

Some MPCA officials think that such issues might require additional funding or new revenue *sources*. This chapter focuses on two of these emerging issues: (1) management of water quality through "total maximum daily loads" (or TMDLs) and (2) air quality problems with the potential to violate federal standards or endanger public health. We address the following questions:

- **How will federal TMDL requirements affect the way that Minnesota manages water quality? What is the status of Minnesota's TMDL program? Are the resource needs of the TMDL program clear at this time?**

- **To what extent does Minnesota's air pollution come from mobile sources (such as vehicles) and other small sources? Should MPCA devote increased attention to these sources and the risks they pose?**

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1 MPCA, *2001 Legislative Fact Sheet: Environmental Tax Reform* (St. Paul, 2001), www.pca.state.mn.us/hot/legislature/factsheets/taxreform01.html; accessed December 12, 2001.

WATER QUALITY MANAGEMENT

Congress passed the federal Clean Water Act in 1972 to "restore and maintain the chemical, physical and biological integrity" of the nation's water resources. The best long-term data on the condition of Minnesota streams comes from measurement of six key pollutants at 80 stream locations over a 40-year period, according to MPCA. These data show reductions at a majority of sites in fecal coliform, ammonia, phosphorus, and biochemical oxygen demand. A majority of sites show no change in total suspended solids, and a majority of sites show increases in nitrogen levels.[2]

Federal requirements significantly affect state water quality management.

The condition of individual lakes, rivers, and streams is important because of federal requirements for "total maximum daily loads," also known as TMDLs. A TMDL establishes the amount of pollution that a water body can receive and still meet water quality standards for its designated uses (such as drinking, fishing, swimming, irrigation, or industrial purposes). Calculation of a TMDL is based on pollutant "loads" from point source and nonpoint source discharges, as well as a margin of safety. Federal law requires states to develop a list of "impaired" water bodies, and states are expected to develop a TMDL for each relevant pollutant in each water body on the list. Although the federal Clean Water Act has had TMDL requirements for decades, little action occurred to enforce these requirements until environmental groups filed lawsuits in recent years against the federal government and various states.

In 1998, MPCA identified impairments on about 140 rivers, streams, or lakes in Minnesota (or portions of these). Agency staff told us that the agency's draft of the latest list of impaired waters would more than double the 1998 number. According to federal regulations, states have 13 years from the initial listing date (starting in 1998) to develop TMDLs for each impaired water body. So far,

- **MPCA has not completed any TMDLs, and federal officials told us that Minnesota's TMDL program is off to a slower start than most other states' programs.**

Federal data indicate that more than 3,900 TMDLs have been approved in recent years by the U.S. Environmental Protection Agency (EPA).[3] MPCA intended to complete several TMDLs during 2001, but it did not do so. Minnesota is now the only state in EPA Region 5 without an approved TMDL. MPCA had contracts for studies of 23 TMDLs as of October 2001, and MPCA staff told us that they expect Minnesota's first TMDL to be completed in 2002.

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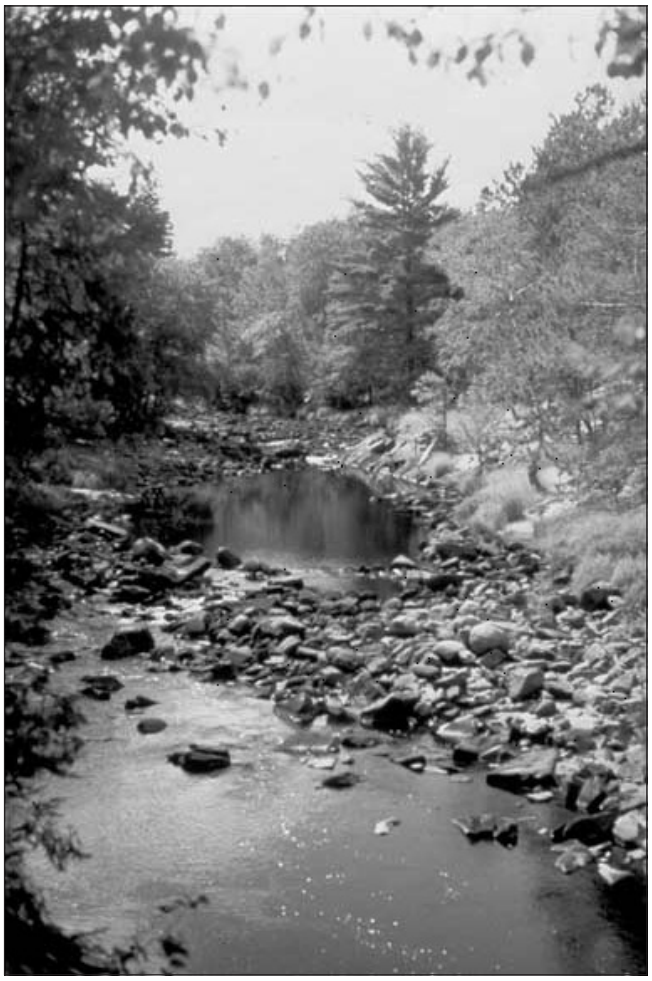
2 MPCA, *Minnesota Environment 2000*, www.pca.state.mn.us/about/pubs/mnereport/part_3.pdf; accessed October 18, 2001. Some streams that have improved may still have pollution levels in excess of standards designed to protect human health, aquatic life, and wildlife. Unfortunately, it is not possible to make reliable comparisons of water quality across states—see U.S. General Accounting Office, *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data* (Washington, D.C., March 2000), 5.

3 EPA, *National 1998 Section 303(d) List Fact Sheet*, http://oaspub.epa.gov/waters/national_rept.control?p_cycle=1998; accessed December 12, 2001.

To meet federal requirements, Minnesota will probably need to improve its ambient water quality monitoring.

MPCA officials told us that TMDL development will require significantly more water quality monitoring than Minnesota presently does. In 1995, the Blue Ribbon Task Force on Water Quality Funding said that Minnesota "has one of the most inadequate ambient monitoring programs in the nation, due to a lack of monitoring stations," noting that only 4 percent of Minnesota's river and stream mileage was monitored.[4] The task force recommended that the Legislature accelerate the purchase of monitoring stations outlined in MPCA's 10-year water quality monitoring plan. Since that report was issued, there have been some improvements in Minnesota's water monitoring network, but the percentage of water bodies monitored has not increased significantly. In 1998, 5 percent of Minnesota's river and stream mileage and 57 percent of its lake acreage were monitored.[5] In response to a survey for a federal study, MPCA reported that Minnesota had less than half the data it needed to assess whether all state waters were meeting water quality standards.[6] According to MPCA, it takes several years of monitoring data to develop a TMDL for a water body—for instance, to look at changes in pollution impacts as water levels vary over the years. A rough estimate by MPCA indicated that it would cost $5 million a year for five years to implement a



Minnesota has water quality information on 5 percent of the state's river and stream mileage.

4 *Report of the Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs: Findings and Recommendations* (St. Paul, December 1995), 31-32.

5 This includes water bodies monitored for aquatic life, recreational use, or both. A substantial share of the monitored waters do not meet state standards. For instance, MPCA determined that 65 percent of the lakes and 68 percent of the rivers monitored in 1998 met state water quality standards for recreational uses. The monitored rivers and lakes are not necessarily representative of all rivers and lakes in the state, so the overall quality of Minnesota's surface water cannot be determined from existing data.

6 The survey was conducted by the U.S. General Accounting Office for its report titled *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data*.

"relatively complete assessment" of the state's surface waters.[7] MPCA expects to complete a more thorough estimate by June 1, 2002.

EPA's "preliminary estimate" is that improved water quality monitoring to support TMDL development may cost $17 million per year nationally In addition, EPA estimates that it may cost $69 million annually to develop TMDL cleanup plans.[8] However,

- **MPCA's resource needs for TMDL implementation are unclear at this time, partly because federal and state rules have not been completed.**

Federal and state water quality rules are still under development.

First, the status of EPA's TMDL rules is uncertain. EPA published final revisions to its TMDL rules in July 2000. Initially, however, Congress prohibited EPA from implementing the new rules, due to concerns about their costs, rigidity, and scientific basis. In August 2001, EPA announced that it would delay the effective date of the revisions for 18 months, seeking further public input in the meantime. A study mandated by Congress recently recommended that EPA consider many changes in the TMDL program to improve its scientific basis and cost-effectiveness.[9]

Second, MPCA is in the midst of a rule-making process that will result in criteria for designating waters as impaired.[10] MPCA has a draft of these criteria, and it expects to issue rules in October 2002. Third, MPCA officials predict that Minnesota's list of impaired waters (and, thus, its number of TMDLs) will grow to many times its present size as the state increases its level of monitoring. The 1998 list of impaired waters was based on the limited number of water bodies for which adequate monitoring data had already been collected. For instance, the 1998 list included only 11 lakes.[11]

Fourth, MPCA hopes to develop some TMDLs on a watershed basis, rather than developing a separate TMDL for each impaired water body. A regional approach might be a more efficient use of staff time, although it is unclear exactly how many TMDLs could be prepared in this way. MPCA has been working for several years with communities throughout the state to develop watershed plans.[12]

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7 MPCA, "Revised Preliminary Cost Estimates for a Complete Assessment of Surface Waters of the State" (St. Paul, January 30, 2001). The estimate was based on increasing the number of river biomonitoring sites from 100 presently to 400 and increasing the number of lake monitoring sites from 40 presently to 500.

8 U.S. EPA, *The National Costs of the Total Maximum Daily Load Program (Draft Report)* (Washington, D.C., August 3, 2001). MPCA and other states' environmental agencies have expressed concerns that EPA has underestimated TMDL implementation costs.

9 National Research Council, *Assessing the TMDL Approach to Water Quality Management* (Washington, D.C.: National Academy Press, 2001).

10 States are not required to adopt rules on their impairment criteria, but MPCA decided to do this upon the advice of the Minnesota Attorney General.

11 MCPA staff told us that 100 to 300 new water bodies might be added to the list of impaired waters every four years, but this may be difficult to estimate more precisely until federal and state rules are finalized.

12 There are ten watershed basins in Minnesota, and MPCA hopes to develop and revise plans for the watersheds on a five-year cycle. In the first five years of planning, however, only two watershed plans were completed. MPCA hopes to complete the others by mid-2003.

Fifth, MPCA still needs to identify specific strategies for addressing impaired waters. This may be particularly challenging in the case of nonpoint source pollution, for which MPCA and other states have relied mostly on voluntary actions.[13] In 2000, MPCA determined that nonpoint sources were the main cause of impairment for 88 percent of the river miles deemed impaired in their ability to support aquatic life.[14] Recently, an MPCA staff report said that the agency's water programs lacked coherence, limiting MPCA's ability to respond effectively to nonpoint source pollution problems.[15]

Finally, it is unclear exactly how much TMDL work can be done with existing MPCA staff and resources. As of early 2001, MPCA had at least 100 staff working on activities that were in some way connected to nonpoint source pollution activities, as shown in Table 3.1. Most of these staff were funded by the state's General Fund or federal sources. MPCA officials estimated that the number of full-time-equivalent staff working on TMDL issues increased to about 12 during 2001, up from the 6.9 staff shown in the table.

MPCA's need for additional staff to deal with nonpoint source pollution issues is unclear.

Overall, as a recent federal report concluded, "states will need additional tools, resources, and assistance in developing TMDLs for their waters—a task that will

Table 3.1: MPCA Staff Activities That Address Nonpoint Source Water Pollution, January 2001

		Percentage of Staffing Costs Paid by:				
Activity	Total FTEs[a]	General Fund	Federal Sources	Environmental Fund	Other Sources	Total
TMDLs	6.9	36	64	0	0	100
Clean Water Partnership	12.1	58	39	3	0	100
Watershed/Basin Planning	26.1	44	41	15	<1	100
Feedlots	24.8	79	18	<1	3	100
Septic Tanks	7.4	45	26	29	0	100
Minnesota River	3.1	70	30	0	0	100
Lake Assessment	7.3	53	34	12	1	100
Stormwater	10.4	28	33	39	<1	100
Wetlands	2.2	45	48	7	0	100
Other Nonpoint Source	16.2	39	57	4	0	100

NOTE: The funding columns represent the percentage of FTEs, not total expenditures or personnel expenditures, funded by the various funds.

[a]For some activities, only a portion of the total FTE are involved with nonpoint source pollution. The FTE data do not reflect changes made during the 2001 legislative session.

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

13 One recent assessment of TMDLs said, "The litmus test of the TMDL program's success will be its ability to promote more effective nonpoint controls at the state level." See James Boyd, *The New Face of the Clean Water Act: A Critical Review of the EPA's Proposed TMDL Rules* (Washington, D.C.: Resources for the Future, March 2000), 20.

14 MPCA, "Causes and Summary of Impairment," Summary of data from MPCA's 305 (b) assessment report to EPA, 2000.

15 MPCA Program Delivery Design Team, *Phase I Final Report* (St. Paul, February 26, 2001).

significantly tax already limited resources over a sustained period of time."[16] The TMDL program has considerable potential to provide a comprehensive, overarching approach to water pollution control, but many details about its implementation remain unclear. MPCA staff told us that they presently do not have a sound basis for estimating future TMDL resource needs. We think that MPCA should provide the Legislature with more information about its TMDL plans to facilitate future discussions about funding needs and compliance with federal requirements.

MPCA should provide legislators with better information on resources needed to implement federal water quality requirements.

RECOMMENDATION

MPCA should provide the 2003 Legislature with a multi-year TMDL implementation and financing plan, outlining (1) what mix of existing and new resources would be needed to meet federal requirements, (2) specific strategies the agency will use to assess water quality statewide, and (3) the types of strategies the agency will likely pursue to clean up impaired waters.

POTENTIAL AIR QUALITY VIOLATIONS AND HEALTH RISKS

Just as nonpoint water sources account for a significant share of Minnesota's water pollution, MPCA estimates that a substantial share of air pollutants come from mobile sources. Table 3.2 shows the proportion of Minnesota's air emissions that are produced by mobile sources (such as cars, trucks, buses, and off-road vehicles and equipment[17]), point sources (such as power plants and refineries), and area sources (such as gas stations, dry cleaners, home furnaces, and wood stoves). The table indicates that mobile sources account for the majority of acrolein, diesel exhaust, benzene, carbon monoxide, formaldehyde, and nitrogen oxide emissions. State regulation has traditionally focused on point sources of air pollution, and all of MPCA's air emission fees (totaling more than $9 million annually) are from point sources.

Air pollutants come from a mix of mobile, point, and "area" sources.

The federal Clean Air Act originally focused on so-called "criteria" air pollutants: carbon monoxide, sulfur dioxide, particulate matter, ozone, nitrogen dioxide, and lead. Minnesota concentrations for all six of these pollutants were below federal standards throughout the 1990s, and the monitored levels of all of these pollutants except ozone and nitrogen dioxide declined during this period. However,

- **According to MPCA, there is a reasonable risk of Minnesota violating federal ozone standards in the future without preventive action.**

Nitrogen oxides and volatile organic compounds contribute to the formation of ozone, and neither of these pollutants comes primarily from point sources.

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16 GAO, *Water Quality: Key EPA and State Decisions Limited by Inconsistent and Incomplete Data*, 12.

17 "Off-road" emissions include those from construction, industrial, agricultural, logging, lawn and garden, recreational, and airport vehicles and equipment.

Table 3.2: Share of Selected Air Pollutant Emissions in Minnesota Produced by Various Sources

Pollutant	Percentage of Air Pollutants That Come From: Mobile Sources	Area Sources	Point Sources
Criteria Pollutants (or Their Precursors)[a]			
Carbon Monoxide	84	10	6
Lead	5	1	95
Nitrogen Oxides	55	6	39
Particulate Matter[b]	29	12	59
Sulfur Dioxide	22	5	73
Volatile Organic Compounds	38	52	10
Non-Criteria Pollutants (Also Called "Air Toxics")[c]			
Acrolein[c]	68	0	32
Arsenic	0	2	98
Benzene	71	28	1
Butadiene	24	76	0
Carbon Tetrachloride	0	92	8
Chloroform	0	33	67
Chromium	4	38	59
Diesel Exhaust	99	0	1
Formaldehyde	81	2	17
Nickel	2	22	76

[a]Nitrogen oxides and VOCs are responsible for the formation of ozone, a criteria pollutant.

[b]Included here is PM_{10}, also known as inhalable particulate matter. It includes fine particulate matter, known as $PM_{2.5}$, and coarser material up to 10 microns in size. As defined here, particular matter includes direct emissions only; it does not include "fugitive" sources, such as road dust.

[c]"Air toxics" is the term commonly used for pollutants that are not criteria pollutants but which are known or suspected to cause serious harm to individuals exposed to large enough amounts.

SOURCE: MPCA, *Air Quality in Minnesota: Problems and Approaches* (St. Paul, January 2001), B4, C3, C5, C6, C8, D12-14, E3. The air toxics and lead data are based on the 1996 Minnesota emissions inventory; other percentages reflect 1997 data.

Violation of federal ozone standards could be expensive for MPCA and Minnesota businesses.

Violation of a federal ozone standard resulting in designation of "nonattainment" areas in Minnesota would likely have significant cost implications for MPCA and the private sector. A study conducted for the Minnesota Chamber of Commerce estimated that private costs of several ozone reduction strategies would likely range from $189 to $266 million per year, in 1998 dollars.[18] According to MPCA staff, Wisconsin's Department of Natural Resources hired an additional 30 to 40 staff as a result of Milwaukee's violation of federal ozone standards, and they said it would take MPCA a minimum of 10 additional staff to put in place the most basic elements of a program to respond to ozone nonattainment.

There are two federal ozone standards:

- The "old" standard (which will remain in effect for an uncertain period of time) is based on ozone concentrations over a one-hour period. A violation of this standard occurs if a monitor detects ozone levels in excess of 0.12 parts per million for one hour on three or more days in a three-year period.

18 Ted R. Aulich and Kenneth Neusen, *Estimated Economic Impact of Twin Cities Ozone Nonattainment* (St. Paul: Minnesota Chamber of Commerce, February 1999), 10.

One monitor in the Twin Cities area exceeded the one-hour standard in 2001, so the earliest possible federal violation would occur if this same monitor were to exceed the standard twice in 2002. (No Minnesota monitors reported ozone levels in excess of the one-hour standard in 1998-2000.)[19]

- EPA implemented an eight-hour ozone standard in 1997 because the one-hour standard was considered too volatile. The eight-hour standard is based on a three-year average of each ozone monitor's fourth highest daily reading during the year, with the daily readings based on each day's highest measured ozone levels over an eight-hour period. A monitor would have to have a three-year average of 0.085 parts per million on this measure to violate the federal standard. The monitor with the highest readings in the Twin Cities area recorded a fourth highest reading during 2001 of 0.078, and this monitor's most recent three-year average was 0.075. This monitor would have to have a fourth-highest reading of 0.107 in 2002 to cause a violation next summer. Alternatively, fourth-highest readings of 0.089 or more in each of the next two years would cause a violation in 2003.

MPCA staff think that ozone levels may be on an upward trend.

Weather plays a significant role in ozone readings. If the weather during the next two summers is comparable to the warm, humid weather in 2001, MPCA staff said that a violation of the one-hour standard might occur. In general, however, MPCA staff are concerned that ozone levels may be on an upward trend in the state—perhaps leading to ozone violations several years from now.

MPCA staff are also concerned that Minnesota could violate the federal standard for fine particulate matter (particulates smaller than 2.5 microns in diameter, commonly known as "$PM_{2.5}$").[20] Airborne particulates are generated mostly by

Mobile sources account for a large percentage of certain air pollutants, such as carbon monoxide, nitrogen oxides, and diesel exhaust.

19 There are eight ozone monitors in Minnesota—four in the Twin Cities area and four at locations in the northern half of the state.

20 The federal $PM_{2.5}$ standard was promulgated in 1997. Fine particulates are less than one-tenth the diameter of a human hair.

States have limited experience measuring "fine particulates," so trends in the levels of this pollutant are hard to predict.

combustion sources, such as vehicles, power plants, and wood burning. Fine particulate measurements at two monitors in St. Paul were recently within about 10 percent of the federal standard.[21] For a federal violation to occur, a single monitor must have an annual average reading above the standard. It is difficult to estimate the likelihood for fine particulate violations because MPCA and other states' environmental agencies have little experience measuring this pollutant. Minnesota has a longer track record of measuring "coarse particulates" (particulates smaller than 10 microns in diameter, or "PM_{10}"). In general, PM_{10} levels at Minnesota monitoring sites declined from the mid-1980s to the mid-1990s, but they have since leveled off or increased slightly.

Air pollutants can have adverse health effects, even when their concentrations do not exceed federal or state ambient air quality standards. A recent study of Twin Cities air pollution costs concluded that "the most costly pollution appears to result from particulate matter," although MPCA recently concluded that precise health impact estimates cannot be made without further investigation.[22] In addition, MPCA modeling and monitoring data indicate that some parts of Minnesota have exceeded inhalation health benchmarks for various "air toxics."[23] MPCA said in 1999 that the air toxics for which "current information warrants action" included benzene, carbon tetrachloride, chloroform, and formaldehyde, although MPCA has subsequently suggested that average exposures to some of these pollutants may be less than previously measured.[24] MPCA said that further study was needed to evaluate the threats from several other air toxics for which modeling or monitoring data indicated potential problems, and the agency cautioned that the cumulative effects of a wide variety of air toxics have not been adequately measured.[25] Also, exposure to persistent, bioaccumulative, toxic (PBT) air pollutants—such as dioxin, mercury, and cadmium—occurs through means other than inhalation. There are often no health benchmarks for these pollutants, although there is widespread recognition that PBTs have potentially serious health impacts. MPCA does not routinely monitor ambient air quality for most PBTs, and some PBTs cannot be detected through ambient monitoring.[26]

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21 During the initial sampling period (April 1999 to September 2000), two St. Paul locations had average one-hour readings of 13.5 and 13.4 micrograms per cubic meter—compared with the federal one-hour standard of 15 micrograms per cubic meter.

22 David Anderson and Gerard McCullough, *The Full Cost of Transportation in the Twin Cities Region* (Minneapolis: University of Minnesota, August 2000), 134; MPCA, *Air Quality in Minnesota: Problems and Approaches*, B-50.

23 Air toxics are substances known to cause cancer or other serious health problems.

24 MPCA, *Staff Paper on Air Toxics* (St. Paul, November 1999). A 2001 update noted that carbon tetrachloride levels have dropped below the inhalation health benchmark at all Minnesota sites monitored since 1998, chloroform does not exceed a revised inhalation benchmark at any sites, and the formaldehyde benchmark may increase (MPCA, *Air Quality in Minnesota*, D-1). MPCA's analyses were based on average exposure levels in large geographic areas, and pollution levels at sites close to pollution sources may pose important health problems to persons who live or work nearby—even in cases where average exposure levels do not exceed benchmarks.

25 The air toxics identified for further study included ethylene dibromide, butadiene, acrolein, arsenic, nickel, chromium, diesel particulate matter, and polycyclic organic matter.

26 MPCA, *Air Quality in Minnesota*, F-1 to F-4.

In our view,

- **It is appropriate for MPCA to focus increased attention on mobile pollution sources that pose potential health risks and could contribute to violations of federal standards, but it is not clear at this time whether strategies to control this type of pollution would require additional state funding.**

According to MPCA, the preferred solutions to Minnesota's air pollution problems are (in order) (1) reductions in fuel and energy consumption, (2) use of cleaner fuels, and (3) more effective pollution controls in vehicles.[27] Some of these solutions require action at the national level. In addition, MPCA believes that additional progress will depend on "encouraging consumers and citizens to make less polluting choices."[28] The extent to which MPCA could change fundamental consumer preferences (and how it would do so) is unclear.

It is unclear whether MPCA needs additional state funds to address mobile sources of air pollution.

Table 3.3 shows the staff presently working on activities related to mobile air pollution sources.[29] In 2001, MPCA proposed to address air toxics and mobile air pollution issues by reallocating three full-time-equivalent (FTE) staff from the agency's land-related pollution control activities to air-related pollution control activities. (This required legislative approval because it involved reallocation of funds between two appropriations.) MPCA proposed to divide this reallocated

Table 3.3: MPCA Staff Working on Emerging Air Quality Issues (Including Mobile Sources), September 2001

Approximate FTE	Assignment
2	Transportation and energy issues, including carbon monoxide planning[a]
2	Regional haze and regional air planning issues—as required by EPA
1	Public outreach and communication regarding alternative vehicle fuel technologies
1	Research on greenhouse gas science, trends, and policies
1	EPA-funded air toxics inventory
1	Air toxics risk reviews
<1	Working with petroleum industry to encourage voluntary reductions in benzene emissions[b]

[a]About 1.5 FTE work on EPA carbon monoxide planning requirements—due to the Twin Cities area having once violated federal carbon monoxide standards.

[b]Through (a) implementation of vapor recover systems at gas stations, and (b) sale of gas with lower benzene content.

SOURCE: Interviews with MPCA air quality managers.

27 Ibid., 5.

28 Ibid., 9.

29 In January 2001, MPCA had about 11 FTE working on these issues. The main sources of funding for these staff were federal grants (65 percent) and the state Environmental Fund (31 percent).

staff time between: (1) designing and implementing strategies to reduce emissions from gas stations, wood burning stoves, and certain industrial sectors not addressed by federal rules, (2) studying Minnesota air toxics and ozone trends, and their potential impacts, and (3) educating the public on the role of vehicles in producing greenhouse gases, ozone, air toxics, and other pollutants. The Legislature did not authorize this initiative.

For now, MPCA should pursue low-cost options to minimize the potential for federal air quality violations.

Although MPCA did not persuade legislators in 2001 of a need to reallocate resources from other appropriations to these air quality activities, the agency is pursuing some of its air toxics agenda with existing staff. For example, MPCA is working to secure voluntary agreements with gas stations to reduce benzene emissions through vapor controls, and it is trying to get agreements with gasoline producers to reduce benzene content in gasoline. Given the potential cost and health implications that violating federal air quality standards could have, we think that MPCA should continue exploring low-cost options within its present budget to minimize the likelihood of violations and better understand the factors contributing to Minnesota's air pollution problems. If necessary, MPCA could reallocate staff from activities on which the agency's impact is likely to be small.

RECOMMENDATION

MPCA should continue exploring low-cost options within its present budget to minimize the likelihood of federal air quality violations and better understand the factors contributing to Minnesota's air pollution problems. MPCA should report to the 2003 Legislature regarding what, if any, additional state-level strategies would cost-effectively help the state to avoid violations of federal standards for ozone and particulate matter.

4 Funding Options

SUMMARY

The Minnesota Pollution Control Agency (MPCA) could be funded in various ways, and policy makers' judgments about which options are most appropriate may depend on their preferences regarding (1) general versus "polluter pays" revenue sources, and (2) whether it is desirable for revenue sources to be directly linked to the purposes for which they will be used. Also, there could be practical or legal obstacles to implementing some funding alternatives that have been suggested.

During the MPCA's 35-year history, the agency's primary funding sources have shifted from the state General Fund and federal funds to pollution-related fees and taxes. The 2001 Legislature authorized reductions and reallocations of MPCA staff, and it did not pass an agency proposal for reform of the agency's funding structure. Nevertheless, legislators expressed an interest in exploring MPCA funding options further, and this chapter addresses the following questions:

- **What are the advantages and disadvantages of alternative methods of funding MPCA's operating costs?**
- **Does MCPA need additional flexibility in its use of state funds?**

REVENUE OPTIONS

At the outset of this study, legislators asked us to examine options for ways to fill potential "holes" in MPCA's operating budget. We focused primarily on options that might address (1) areas in which MPCA has recently faced funding shortfalls (particularly water quality and hazardous waste operations), and (2) emerging issues of nonpoint or mobile pollution sources, as discussed in Chapter 3.

We did not comprehensively evaluate whether MPCA's present funding levels are "adequate." Every two years, as part of the state budget process, agencies have an opportunity to explain their spending priorities to the Legislature. The Governor's budget includes proposals for new spending or reallocations of existing resources, and legislators often make their own proposals for changes. In sum, there is a deliberative process for evaluating the adequacy of agency budgets, and that process had just been completed when we began this study.

We focused on funding options that could be considered if the Legislature decided to seek substitutes for existing funding sources or authorize new spending. Presumably, the executive and legislative branches would explore the possibility of reallocating existing resources within MPCA (as occurred during the 2001 legislative session) before considering new revenue options.

In determining the most appropriate funding sources for MPCA, legislators have various options.

Table 4.1 lists criteria that legislators might use to judge MPCA funding options, based partly on criteria that have been discussed elsewhere.[1] Policy makers may judge that some of the listed criteria are more important than others. Even with clear criteria for evaluating policy options, however, it may not be possible to *empirically* determine which options are preferable. Ultimately, the choice of appropriate funding sources will depend upon the judgments of policy makers.

Table 4.1: Possible Criteria for Evaluating MPCA Funding Options

- **Revenue stability and size:** Could this source provide a stable, predictable revenue stream? Would the revenue be sufficient to address the purposes for which it would be used?
- **Linkage between revenues and uses:** Would there be a logical relationship between the revenue source and the purposes for which the revenue would be used? For example, do the revenue sources (1) produce or process pollution, (2) create demand for products/services that pollute, or (3) benefit from the services provided with the revenues?
- **Equity:** Would the revenue source impose excessive burdens on some residents or sectors of Minnesota's economy? Would the revenue source put Minnesota at a competitive disadvantage, relative to other states?
- **Incentives for environmental improvement:** Would the revenue source create incentives for pollution control or reduction? Would it result in product or service costs that better reflect their true social costs?
- **Practicality:** Are there important legal, administrative, or political impediments to implementing this revenue source? Would the general public and key constituent groups support this revenue source? Is this a revenue source that has been implemented effectively elsewhere?
- **Flexibility:** Would use of the revenue source limit the ability of the Legislature or MPCA to direct resources to the highest priority environmental issue areas?
- **Administrative cost and ease:** To what extent would the costs of collecting the revenue offset the revenues collected? Would there be any difficulties collecting the revenues owed?

SOURCE: Minnesota Office of the Legislative Auditor.

1 For useful discussions of possible criteria for environmental funding sources, see U.S. Environmental Protection Agency, *A Guidebook of Financial Tools* (Washington, D.C., April 1999), and Victoria S. Kennedy, *Fee-Based Models for Funding Water Quality Infrastructure* (Washington, D.C.: U.S. Environmental Protection Agency, January 1996).

The box at the right lists a variety of potential revenue options that policy makers could consider for MPCA, and Appendix C of this report discusses the pros and cons of these options in more detail. However, decisions regarding these options may require legislators to consider the overall funding strategy for MPCA. In particular,

- **The choice of appropriate funding options for MPCA will depend partly on policy makers' preferences about the relative roles that should be played by broad-based, general revenue sources and "polluter pays" funding sources.**

Possible MPCA funding options (discussed in Appendix C)

- Water, hazardous waste, or air fees
- General Fund revenues
- Solid Waste Fund revenues
- Tax/fee on farm pesticides or fertilizers
- Water appropriation fee
- Petroleum distribution fee
- Gasoline tax
- Environmental penalty revenues
- Motor vehicle title transfer fee
- Sales tax on sewer services
- Sales tax on residential water services
- Carbon tax
- Lottery proceeds
- Federal funds for air quality improvement projects

Funding MPCA involves finding the appropriate mix of general and "polluter pays" funding sources.

The most broad-based state funding source would be the state General Fund, which derives most of its revenue from personal income and sales taxes. Pollution problems often reflect societal preferences—for instance, about what we buy, what we throw away, and how much we drive. Furthermore, many types of pollution control provide broad public benefits—for example, through clean air and water. For reasons such as these, an argument can be made for using broad-based revenue sources such as the General Fund to pay for pollution control. In Chapter 1, we noted that MPCA pays for less of its staffing costs from the General Fund than do most state agencies.

In contrast, a "polluter pays" funding strategy is based on the philosophy that it is fairer to impose the costs of pollution control directly on the polluters—through fees or taxes. As summarized in one recent report, "Environmentalists generally regard pollution as an infringement of our right to clean air and water. …Under this view, polluters should pay for costs they impose on others, not to achieve an optimal level of pollution, but to place the burden of the injury caused by pollution on those who create it rather than those who bear it."[2]

Presently, Minnesota has a variety of pollution-related fees and taxes—including the water, air, and hazardous waste fees that we discussed in Chapter 2. In that chapter, we recommended that the Legislature clarify the types of services that existing fees are intended to cover and then authorize adjustments, if necessary, in the fee levels. For instance, water quality fees do not cover MPCA's costs of issuing, monitoring, and enforcing water quality permits. These fees also do not help to cover other costs of operating MPCA's water quality regulatory programs, such as ambient monitoring, rule development, and environmental review. If the Legislature wishes to consider funding sources other than permit fees for these types of services, Appendix C provides some options. In general, however, we

2 J. Andrew Hoerner, *Harnessing the Tax Code for Environmental Protection: A Survey of State Initiatives* (Washington, D.C.: Center for a Sustainable Economy, April 1998), 8.

think that the Legislature should clarify the role of existing pollution fees before it considers *new* types of pollution-related revenue sources.

Another pollution-related revenue source that merits legislative attention is the solid waste management tax. In 2001, MPCA proposed that the Legislature deposit half of Minnesota's solid waste management taxes into the state Environmental Fund, to be available for a wide range of purposes "such as mercury reduction, air pollution reduction, global climate change, clean lakes and rivers, and other nonpoint-source issues."[3] MPCA officials regarded the solid waste tax as a broad-based pollution tax suitable for a variety of uses—stating that garbage disposal has adverse environmental implications on air, water, and land, and noting that this tax is paid by individuals and businesses throughout the state. Half of the solid waste tax revenues presently go to the state General Fund for unspecified purposes, and MPCA suggested that dedicating the other half to general environmental purposes would be a reasonable policy.

MPCA proposed using solid waste tax revenues for a broad array of environmental purposes.

In 2001, the Legislature used revenues from solid waste taxes to fill many of MPCA's funding gaps.

The 2001 Legislature did not approve MPCA's proposal to deposit solid waste tax revenues (from the Solid Waste Fund) into the Environmental Fund, but it used revenues from the solid waste tax to help fill many of the agency's existing and projected funding gaps. Policy makers decided to use a portion of the Solid Waste Fund's large fund balance, rather than raising fees or taxes elsewhere. However,

- **The solid waste management tax might not be a viable long-term funding source for MPCA unless the agency can obtain support for broad-based uses of this tax from key interest groups that initially supported its use for solid waste purposes.**

3 MPCA, *Environmental Tax Reform Proposal: Legislative Fact Sheet* (St. Paul, January 22, 2001), 2. Half of the solid waste taxes are now deposited in the state Solid Waste Fund, and these revenues totaled $28.7 million in fiscal year 2000.

But some groups prefer to have solid waste tax revenues used only for purposes directly related to solid waste.

Business and local government groups favored the adoption of the solid waste management tax in 1997 but objected to MPCA's 2001 proposal. They said they initially supported the tax with the understanding that MPCA's portion of the revenues would be used for solid waste purposes, such as landfill cleanups. These groups expressed concern to us that the 2001 Legislature used revenues from the solid waste management tax to pay for things not directly related to landfills—such as feedlot regulation, point source water quality permitting, and MPCA's Fair Labor Standards Act settlement costs. Their opposition to the tax's use for broad purposes—and the 2001 Legislature's reluctance to make Solid Waste Fund revenues a "permanent" part of MPCA's funding—raised questions about the viability of the Solid Waste Fund as a long-term MPCA funding option. Business groups such as the Minnesota Chamber of Commerce believe that the solid waste tax has generated more revenue than originally anticipated and should be reduced—particularly if revenues from this tax are going to be used for purposes other than those directly related to solid waste.[4]

If legislators wish to consider MPCA funding options besides the General Fund and existing types of fees or taxes, Appendix C provides a sampling of potential "new" pollution-related revenue sources for MPCA. Economists have long touted the potential of pollution taxes to create incentives to develop better pollution abatement technology.[5] Many European nations have established charges on various types of pollution or pollution-producing commodities—including taxes on gasoline, motor vehicle registration, motor vehicle transfer, motor vehicle weight, electricity, oil products, coal, carbon dioxide emissions, nitrous oxide emissions, sulfur emissions, fertilizer, and water pollutants.[6] In 1999, environment-related tax revenues represented at least 8 percent of total tax revenues in Denmark, Greece, Ireland, the Netherlands, Norway, Portugal, and the United Kingdom.[7]

As stated previously, we think that "new" revenue sources should be considered only after the Legislature (1) reviews MPCA's existing funding sources—including the General Fund, permittee fees, hazardous waste generator fees, and the solid waste management tax, and (2) determines whether additional funding is necessary for MPCA to fulfill its mission. While the funding alternatives in Appendix C are intriguing,

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4 MPCA officials contend that growth in revenues from solid waste taxes has largely reflected growth in the amount of solid waste generated in Minnesota. Consequently, they think that reducing solid waste taxes in response to growth in solid waste tax revenues would be contrary to a "polluter pays" approach.

5 Wallace E. Oates, "Green Taxes: Can We Protect the Environment and Improve the Tax System at the Same Time?" *Southern Economic Journal* 61 (1995), 915-922. Oates notes that "as economists have long argued, appropriately designed taxes can, in principle at least, efficiently restrain levels of polluting activities" (p. 915).

6 Richard Morgenstern, "Environmental Taxes: Is There A Double Dividend?" *Environment* (April 1996), 20; Rolf-Ulrich Sprenger, "Market-Based Instruments in Environmental Policies: The Lessons of Experience," in *Market-Based Instruments for Environmental Management: Politics and Institutions*, ed. Mikael Skou Anderson and Sprenger (Northampton, MA: Edward Elgar, 2000), 15-17.

7 Organisation for Economic Cooperation and Development, Environmentally Related Taxes Database, http://www.oecd.org/oecd/pages/home/displaygeneral/0,3380,EN-document-471-14-no-1-3016-471,FF.html, accessed December 13, 2001. Percentages do not include pollution-related fees or charges that were levied in proportion to services provided.

- **Many of the options for "new" MPCA funding sources would face practical or legal obstacles before they could be implemented.**

For instance:

- The 1995 Blue Ribbon Task Force on Water Quality Funding recommended that the Legislature consider the option of using state lottery proceeds as a source of funding for MPCA's water quality program. However, state law presently says that the state's Environment and Natural Resources Trust Fund (funded by lottery revenues) cannot be used as a substitute for traditional funding sources.[8]

Legislators could consider new funding sources for MPCA, but some choices would require changes in law or policy.

- A gasoline tax might be a logical source of revenue for activities related to control of vehicle pollution. But using revenues from the state's excise tax on gasoline for pollution-related purposes might be contrary to the Minnesota Constitution's provisions that limit expenditure of motor fuel taxes to "highway purposes."[9] It is also unclear whether a *sales tax* on gasoline would be subject to this constitutional restriction.[10]

- Agricultural chemicals contribute significantly to nonpoint source water pollution. There are various fees and surcharges on these chemicals that partly support programs operated by the Minnesota Department of Agriculture, but agricultural chemicals are exempt from state sales taxes. Some environmentalists advocate a sales tax on agricultural pesticides or fertilizers as a way to pay for pollution control from agricultural runoff or discourage use of these chemicals. However, the exemption of these chemicals from the sales tax reflects a broader Minnesota tax policy which opposes sales taxes on business production inputs.[11]

- Minnesota's Petroleum Tank Release Cleanup Fund (or "Petrofund") was adopted by the Legislature and supported by industry as a means of helping to address leaking petroleum tanks—which were both an environmental problem and a business liability. Now that most of these cleanups have been completed, some state officials have considered whether to propose using this fee to address other petroleum-related pollution problems—such as vehicle emissions. This would require substantial revision to the Petrofund laws, and—similar to the solid waste management tax—it is unclear whether policy makers would favor using the petroleum fee for a more general pollution control purpose than the fee was originally intended to serve.

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8 *Minn. Stat.* (2000), §116P.03.

9 *Minn. Const.*, art. XIV, sec. 5 and 10.

10 Kenneth E. Raschke, Jr., Assistant Attorney General, memorandum to Arthur Roemer, Commissioner of Revenue, "Application of Sales Tax to Gasoline Sales," February 1, 1983. The author said that "while the issue is, we believe, an extremely close one, there are legitimate arguments that the proceeds [from a sales tax on gasoline] are not constitutionally required to be deposited in the highway user tax distribution fund… but might be paid to the general fund."

11 *Minn. Stat.* (2000), §297A.68, subd. 2 exempts from the sales tax materials used in the production of goods that will be sold at retail. On the other hand, economists often suggest that taxes on externalities (such as pollution) should, wherever possible, be levied directly on the activity that generates the cost, not on the commodity that is eventually produced—see Oates, "Green Taxes," 919.

Some environmental taxes might raise more revenue than MPCA needs.

In addition, some pollution taxes have the potential to raise considerable revenue and should be thought of as fundamental changes in Minnesota's tax system, not merely as methods for plugging modest-sized budget holes in the budget of one agency (MPCA). For instance, by one estimate, applying Minnesota's full sales tax to agricultural chemicals would yield more than $60 million annually.[12] Minnesota and a few other states have considered proposals for a "carbon tax," but the potential magnitude of this tax's impact on a small number of industries probably makes it a better candidate for discussion at the national level. Some economists have advocated raising environmental tax revenues primarily as a means to reduce other taxes, rather than as a means of funding environmental activities.[13]

Finally, it is worth noting possible financial risks if a significant portion of MPCA funding comes from sources that are directly linked to pollution levels. Specifically, desirable declines in the amount of pollution in Minnesota could result in reduced program revenues. For instance, hazardous waste fee revenues were not sufficient to cover expenditures in recent years, partly because of a decline in the number of hazardous waste generators. On the other hand, reductions in the amount of pollution (or the number of pollution generators) might reduce MPCA's workload, thus allowing the agency to reduce its spending.[14] Also, people we talked with generally did not think that Minnesota's present pollution fee and tax levels are high enough to cause many pollution generators to significantly reduce their pollution levels.

FUNDING FLEXIBILITY

MPCA receives legislative appropriations for five separate "programs:" air, water, land, integrated environmental programs, and administrative support.[15] Like other agencies, MPCA cannot shift funds appropriated for one program to another program area without legislative authorization. In Chapter 1, we described how MPCA sought and received legislative approval in 2001 for various budget reallocations among its programs—to reflect changing priorities and budget constraints. MPCA does not need legislative authorization to reallocate funds within program areas to address emerging needs, and it has done this several times in recent years (Table 4.2). For instance, in fiscal year 1999, MPCA reallocated $578,000 from its point source water quality permitting program to feedlot regulation.

12 Friends of the Earth, *F.A.C.T: Fair Agricultural Chemical Taxes: Tax Reform for Sustainable Agriculture* (Washington, D.C., 1999), 10. The report said that Minnesota was the top "revenue loser" among the states that exempted agricultural chemicals from sales taxes.

13 Studies that have examined whether environmental taxes can help the environment without hurting the economy have shown mixed results. For example, see: Benoit Bosquet, "Environmental Tax Reform: Does It Work? A Survey of the Empirical Evidence," *Ecological Economics* 34 (2000), 19-32; Ian W. H. Parry and Wallace E. Oates, "Policy Analysis in the Presence of Distorting Taxes," *Journal of Policy Analysis and Management* 19, n. 4 (2000), 603-619. The impact of environmental tax reform would depend partly on how the tax levels would be set and how the revenues would be used.

14 Likewise, increases in pollution (such as Minnesota's recent growth in the amount of solid waste generated statewide) could provide additional pollution-based tax revenues to address the resulting environmental impacts.

15 The land appropriation addresses ground water and solid waste activities.

Table 4.2: Internal MPCA Reallocations, FY 1997-2001

Program Activity Increased (and Number of Staff Added)	FY	Amount Reallocated ($)	Source of Funding	Effect of the Funding Reductions
Feedlot regulation (12 FTE)	1999	$578,000	Water quality fees, General Fund water quality "bridge" funding	Reduced effort issuing water quality point source permits
"Listed metals" program—to reduce the amount of certain toxic metals in the waste stream	2000	53,000	General Fund hazardous waste funding	Less MPCA staff support for county hazardous waste programs
Mobile sources of air pollution (2 FTE); stakeholder process	2000	270,000	Federal Performance Partnership Grant	Reduced effort issuing Title V air quality permits
National Pollutant Discharge Elimination System (NPDES) water quality point source permitting (2 FTE)	2001	128,000	Water quality fees, General Fund water quality "bridge" funding	Reduced effort issuing minor water quality permits
Federal air quality permitting (4 FTE)	2001	257,000	Air fees	Reduced staffing for state-only air quality permit program
Environmental analysis support for Department of Commerce's initiative for electrical industry restructuring (1 FTE)	2001	64,000	Air fees	Reduced staffing for state-only air quality permit program

NOTE: There were no internal reallocations in fiscal years 1997 and 1998. In some of the cases shown above, reallocations of funds to programs did not result in the addition of new staff in the programs that received funding.

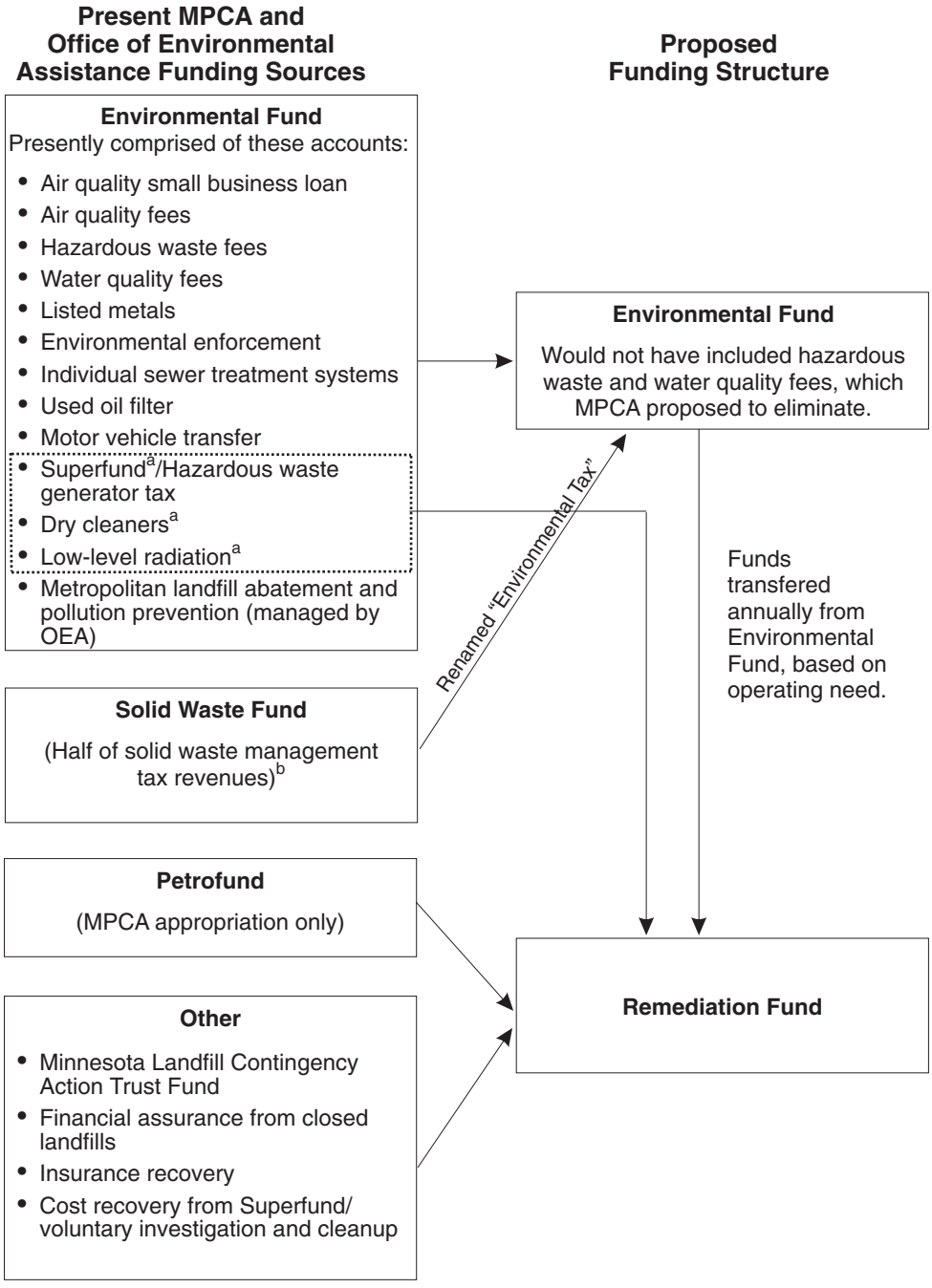
SOURCE: MPCA.

MPCA can reallocate funds within a broad "program" category without getting legislative approval.

MPCA proposed "environmental tax reform" in 2001, partly to give the agency more flexibility in its use of appropriated funds. A centerpiece of this proposal involved a restructuring of the state's Environmental Fund. The fund is comprised of a variety of accounts—for instance, separate accounts for air quality fees, water quality fees, and hazardous waste fees (see Figure 4.1). MPCA proposed to eliminate the separate accounts in the Environmental Fund "because environmental priorities should not be determined by whether (as is often the case) an account contains more money than is needed to do the job—or not

In 2001, MPCA proposed significant changes in the agency's funding structure.

Figure 4.1: MPCA's 2001 Environmental Tax Reform Proposal



NOTE: This proposal would not have affected MPCA's other General Fund and federal fund appropriations.

[a]These three accounts would have moved to the Remediation Fund under MPCA's proposal..

[b]The remaining half of the solid waste tax is deposited in the state General Fund.

SOURCE: MPCA.

enough to do even part of the job."[16] MPCA also proposed elimination of the water quality and hazardous waste fees, as discussed in Chapter 2. In addition, MPCA proposed that the Legislature deposit half of the receipts from Minnesota's solid waste management tax into the Environmental Fund (rather than the Solid Waste Fund), where they "could be budgeted, with approval of the Legislature, for high-priority environmental issues such as mercury reduction, air pollution reduction, global climate change, clean lakes and rivers, and other nonpoint-source issues."[17] (The other half of the solid waste tax receipts is deposited in the state General Fund and is not dedicated to any particular purpose.) MPCA emphasized that this reform proposal was not a request for new money; rather, it was intended to "establish broad-based, stable funding sources for environmental protection and allow the Governor and Legislature the flexibility to fund programs that we need."[18]

The 2001 Legislature did not approve MPCA's tax reform proposal. The Legislature used revenues from the Solid Waste Fund to eliminate deficits in the water quality and hazardous waste fee accounts, but it did not eliminate these two fees, nor did it authorize permanent changes in MPCA's fund structure.

Environmental tax reform could make MPCA's funding simpler and more flexible.

MPCA management considers the present funding structure to be inflexible in two ways. First, the present structure requires the agency and Legislature to address deficits in 15 individual accounts. Each account must be kept in balance, not just the overall fund of which an account is a part. Thus, in cases where expenditures in an account exceed (or are projected to exceed) revenues, the Legislature must address the deficit—for example, through transfers from other accounts. The Legislature has, in fact, addressed such potential deficits in individual accounts over the years, but MPCA officials believe that this account-based focus complicates its biennial budget discussions with legislators—resulting in too much focus on small account balances and too little focus on larger environmental issues. Under MPCA's proposal, there would be no individual accounts in the Environmental Fund for the agency to balance. Rather, MPCA would only have to ensure that the Environmental Fund, as a whole, was in balance.

Second, MPCA thinks that the present funding structure makes it more difficult for the agency to respond to changing priorities—either in its budget proposal or after the budget has been established. MPCA officials think that "increasingly, the funding sources drive the budget and activities of the agency," and they believe that the elimination of individual accounts within the Environmental Fund would give the agency more flexibility to target funds to areas of environmental priority.[19]

Presently, MPCA prepares twice-yearly fund statements for each account in the Environmental Fund, showing revenues and expenditures. Under MPCA's proposed reform, fund statements would continue to be prepared for the

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16 MPCA, *Environmental Tax Reform Proposal: Legislative Fact Sheet* (St. Paul, January 22, 2001), 2.

17 *Ibid.*

18 MPCA, "Legislature Considering Environmental Tax Reform Proposal," *Minnesota Environment* (Winter 2001), 1. In addition to the proposal to restructure the Environmental Fund, MPCA proposed to consolidate revenues related to site cleanup into a Remediation Fund.

19 MPCA, *Environmental Tax Reform Proposal: Legislative Fact Sheet*, 1.

Environmental Fund as a whole, but individual accounts would be eliminated.[20] In addition, the Legislature would maintain the authority to review the agency's spending priorities through the biennial budget appropriation process.

We think that MPCA has articulated legitimate concerns about the agency's complicated structure of accounts and funds. The "right" solution to these issues cannot be empirically determined, and we offer no recommendation. However, we think that legislators should continue to consider the tradeoffs that would be involved in MPCA's 2001 proposal. In our view,

- **MPCA's 2001 proposal would simplify a complex funding structure and help focus legislative discussions on broad environmental priorities, but it would also remove some of the direct, predictable linkages between the Environmental Fund's revenue sources and the purposes for which they would be used.**

Such reform could also blur the linkages between revenue sources and the programs for which they are used.

In 1999, the Legislature placed many of the Minnesota Department of Agriculture's fee accounts into a broad, new Agriculture Fund. Since that time, however, the department has tried to ensure that the fees raised for a specific purpose are used only for that purpose—in part, department officials told us, because that is what its feepayers expect. Many of the revenues in MPCA's proposed Environmental Fund would come from fees that were established for specific purposes, so some feepayers may question a funding structure in which these fees are commingled. Under such a structure, it might be more difficult to track the relationship between a particular revenue source and its uses.

On the other hand, MPCA officials and others expressed concern to us that an account-based funding structure encourages feepayers to view the accounts as "theirs"—that is, as a payment for MPCA services provided, rather than as payments for producing something that is socially undesirable (pollution). MPCA's proposed environmental tax reform would move away from a "fee-for-service" model. It would give MPCA greater flexibility to use (with legislative approval) revenues from a fee or tax to pay for services that are not directly related.

We heard some ideas for alternative ways to give MPCA more flexibility. For instance, some people suggested that a small portion of each Environmental Fund account—perhaps the interest earnings portion—be placed in a separate account that could be directed to emerging environmental priorities. However, such an approach presumes that it is appropriate for certain portions of fee revenues to be used for purposes other than direct services to the feepayers. In addition, this approach would not eliminate the need to balance individual accounts within the Environmental Fund.

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20 Under the reform proposal, revenues would be deposited as non-dedicated receipts to the Environmental Fund and directly appropriated by the Legislature. Presently, some Environmental Fund revenues are dedicated for specific purposes and others are not. Also, some spending from this fund is directly appropriated by the Legislature, while other spending is appropriated by statute.

Summary of Recommendations

- MPCA and the Legislature should determine how to bring the agency into compliance with the law requiring that the agency set fees that fully cover the appropriation to the hazardous waste fee account. Options include (1) increasing hazardous waste fees, (2) reducing legislative appropriations for hazardous waste fee expenditures, or (3) changing the law that requires that hazardous waste fees fully cover the appropriations (p. 28).

- The Legislature should clarify state laws that define which categories of MPCA activities should be funded with fees. It should then consider any adjustments in fee levels necessary to comply with these laws (p. 32).

- MPCA should provide the 2003 Legislature with a multi-year total maximum daily load (TMDL) implementation and financing plan, outlining (1) what mix of existing and new resources would be needed to meet federal requirements, (2) specific strategies the agency will use to assess water quality statewide, and (3) the types of strategies the agency will pursue to clean up impaired waters (p. 44).

- MPCA should continue exploring low-cost options within its present budget to minimize the likelihood of federal air quality violations and better understand the factors contributing to Minnesota's air pollution problems. MPCA should report to the 2003 Legislature regarding what, if any, additional state-level strategies would cost-effectively help the state avoid violations of federal standards for ozone and particulate matter (p. 49).

MPCA Citizens Board, 2001

APPENDIX A

Karen A. Studders*, MPCA Commissioner
Sidney R. Mason**, General Insurance Agency
Brian J. Bensen, Sherburne County administrator
Jackie G. Duncanson, Farmer
James N. Dunlop, Clean Air Action Alliance
Robert L. Esse, Esse Technologies, Inc.
Daniel D. Foley, M.D., United Hospital
Marcus M. Marsh, Minnesota Association of Farm Mutual Insurance Companies
Chester A. Wilander, Labor representative

*Board chair
**Board vice chair

1995 Blue Ribbon Task Force on Funding Minnesota's Water Quality Programs

APPENDIX B

	Appointed to represent
Mike Robertson, Task Force Chair, Mike Robertson & Associates	
William Bassett, City of Mankato	Coalition of Greater Minnesota Cities
Archie Chelseth, Potlatch Corporation	Minnesota Business Partnership
Rebecca J. Flood, Metropolitan Council	Metropolitan Council Environmental Services
William M. Heaney, Northern States Power Company	Minnesota Environmental Coalition of Labor and Industry
Diane Jensen, Clean Water Action Alliance	Environmental advocates
Sherry Munyon, Minnesota Chamber of Commerce	Minnesota Chamber of Commerce
Jim Nelson, Faribault Foods	Midwest Food Processors Association
Todd Prafke, City of Blooming Prairie	Association of Small Cities
David H. Senjem, City of Rochester	League of Minnesota Cities
Joel C. Smith, American Crystal Sugar Company	Minnesota agribusinesses
John N. Smith, S. B. Foot Tanning Company	Central States Water Environment Association, Minnesota Section
Kurt N. W. Soderberg, Western Lake Superior Sanitary District	Western Lake Superior Sanitary District

MPCA REVENUE OPTIONS

APPENDIX C

MODIFICATION OF WATER QUALITY FEES

Pro

- State law requires that fees be "set at a level that neither significantly over recovers nor under recovers costs" (*Minn. Stat.* (2000), §16A.1285). MPCA's water quality fees do not cover the full cost of permit issuance, compliance monitoring, and enforcement. Water quality fees have not been increased since 1992, even for inflation. At the end of fiscal year 2001, the Water Quality Fee Account faced a deficit of nearly $600,000, and the Legislature used solid waste management tax revenues to make up this shortfall.
- In general, it is reasonable to expect that facilities that produce or process polluted water will help pay for their own regulation—even if they pass along fee costs to consumers.
- The cost of administering MPCA's water quality fees is relatively modest (0.7 percent of all revenues collected).
- The 1995 Blue Ribbon Task Force on Water Quality said that fee increases *may be* necessary to adequately fund Minnesota's point source permit program—even with the adoption of efficiency measures by MPCA.

Con

- The general public benefits from pollution control, so there may be a role for broader-based revenue sources rather than increased reliance on "user charges."
- Without proper staff training and agency management, there is some risk that greater reliance on fees to fund MPCA would make the agency less aggressive in its enforcement of regulations affecting permittees.
- Presently, Minnesota's annual water quality fees are based largely on the "design flow" of facilities—that is, how much wastewater they are designed to handle. Fees are not directly related to the amount or type of pollutants in the wastewater. Thus, fees are not based on a pure "polluter pays" approach, and higher fees would not necessarily create an incentive for pollution reduction.
- Legislators have often been reluctant to impose higher fees on units of government, and 57 of Minnesota's 84 major water quality facilities are operated by municipalities.

MODIFICATION OF HAZARDOUS WASTE FEES/TAXES

Note: There are three types of hazardous waste fees/taxes: (1) Hazardous waste generators pay a tax on the waste they generate, and the proceeds of this tax are used for Superfund cleanups. (2) Hazardous waste generators pay fees on the waste they generate, and these fees help to offset MPCA's costs of administering its hazardous waste program activities. (3) Facilities that treat and store hazardous waste must obtain permits and pay fees that are used to offset MPCA's costs of administering its hazardous waste program activities.

Pro

- State law requires that fees be "set at a level that neither significantly over recovers nor under recovers costs" (*Minn. Stat.* (2000), §16A.1285). Likewise, state law requires MPCA to adjust its hazardous waste fees so that fee revenues "cover" the legislative appropriation" (*Minn. Stat.* (2000), §116.12, subd. 1). In recent years, MPCA has not raised hazardous waste fees to a level that fully recovers its legislative appropriation for these activities. Also, although hazardous waste fees have generated enough revenue to cover the staffing costs for hazardous waste permitting, compliance monitoring, and enforcement, they have not been sufficient to cover these costs *plus* the cost of MPCA technical assistance to hazardous waste generators.
- If cleanup activities in MPCA's Superfund program decline in future years, as expected, it may be reasonable to devote a portion of Minnesota's hazardous waste tax—which is now used exclusively for the Superfund program—to pay for MPCA's hazardous waste program costs. (Note: The hazardous waste tax sunsets in 2004 and would have to be reauthorized.)
- In general, it is reasonable to expect that facilities that generate, treat, or store hazardous wastes will help pay for the cost of their regulation or the cost of hazardous waste cleanups—even if they pass along fee costs to consumers.

Con

- If hazardous waste fees were set at levels that fully recovered legislative appropriations, some companies that generate these wastes would face large fee increases. In part, this is because there has been a reduction in the number of companies that generate, treat, and store hazardous waste—leaving more of the fee burden on the companies that still handle these wastes. MPCA staff said they have not adjusted hazardous waste fees to fully cover legislative appropriations because legislators have questioned whether it is fair for companies that are reducing their wastes to pay increased fees.
- Hazardous waste fees and taxes have higher administrative costs (4.5 percent of revenues collected) than MPCA's air and water fees. This likely reflects the fact that there are a large number of generators in Minnesota (about 9,000), and the average amount that each pays in hazardous waste fees/taxes is relatively small.
- Because the general public benefits from pollution control, there may be a role for broader-based revenue sources rather than increased reliance on "user charges."
- Without proper staff training and agency management, there is some risk that greater reliance on fees to fund MPCA would make the agency less aggressive in its enforcement of regulations affecting permittees.

INCREASE IN MPCA GENERAL FUND REVENUES

Pro

- State General Fund revenues comprise a relatively small portion of MPCA's overall budget (and its staffing expenditures) compared with most other state agencies.
- Many MPCA activities are intended to provide benefits to the general public throughout Minnesota, not just to people in certain locations or to people engaged in certain activities.
- All Minnesotans contribute in some way to pollution problems, and the General Fund consists of revenues from broad-based taxes that all wage-earners and consumers pay.
- Funding MPCA with broad-based revenue sources would reduce the likelihood of conflicts of interest that could occur when fee-funded MPCA staff are expected to regulate the feepayers.
- The existence of an MPCA "citizens board" to make final decisions on permits sometimes contributes to delays in the permitting process. This extra layer in the decision process may be justified by the need for public discussion on environmental controversies, but perhaps the cost of such delays should be borne by a broad-based revenue source (like the General Fund) rather than by permittees.

Con

- It may not be equitable to rely too much on general revenue sources to pay for MPCA activities that regulate or assist particular categories of businesses. Rather than asking the general public to shoulder the cost of pollution control activities, it might be better to make permittees responsible for the cost of the regulatory activities that their activities necessitate. In this way, pollution costs would be borne by the facilities that generate pollution (or the consumers of their products/services)—perhaps in some proportion to the pollution generated.
- There is considerable competition for state General Fund dollars among state agencies. Thus, there might be more threats to the stability of this revenue source over the long term than some revenue sources that are more directly tied to pollution activities.

CONTINUE USING THE SOLID WASTE FUND FOR MPCA ACTIVITIES NOT DIRECTLY RELATED TO SOLID WASTE

Pro

- The solid waste management tax (the revenue source for the Solid Waste Fund) is a tax paid by most households and businesses throughout Minnesota—so it is "broad-based." The tax is applied to a commodity—garbage—that contributes to pollution problems, and such a tax could (1) provide funding to address garbage-related or other pollution problems, or (2) create incentives for Minnesotans to reduce their waste generation.
- Fund balances in the Solid Waste Fund were larger than anticipated in recent years, so it has been possible for policy makers to use this fund as a revenue source without raising solid waste taxes beyond present levels or raising other fees/taxes.
- Half of the solid waste tax is already deposited in the General Fund, where it is used for purposes not directly related to solid waste.

Con

- Business and local government representatives that supported the solid waste management tax in 1997 contend that the tax was adopted to address very specific solid waste issues, such as closed landfills. Many business representatives would like to see the tax reduced, particularly if it generates revenues beyond those needed for solid waste purposes.
- The Legislature has used the Solid Waste Fund to pay for some purposes not closely linked to garbage—such as paying for MPCA's recent Fair Labor Standards Act settlement and additional MPCA feedlot staff.
- There are potential threats to the stability of Solid Waste Fund revenues. Revenues have declined as a result of the current economic slowdown. Revenues could also decline if increases in recycling result in less garbage production. Also, interest groups that have supported the solid waste tax might seek reductions in the tax if MPCA were to use it for a broader array of services.

Note: Half of the solid waste tax revenues presently go to the General Fund. Another option would be to modify the law to redirect more of the tax to environmental purposes.

SALES TAX OR FEE ON FARM PESTICIDES AND FERTILIZERS; USE A PORTION OF REVENUES FOR WATER PROGRAMS

Pro

- Farm chemicals are a significant source of nonpoint source water pollution, so such a tax might be a reasonable source of revenues for MPCA's activities related to nonpoint water pollution. Such a tax would help ensure that the prices of agricultural chemicals more accurately reflect their regulatory and clean-up costs (and perhaps the cost of their impacts on human health and the environment).
- Extension of the sales tax to agricultural chemicals would raise substantial revenue—in fact, far more than would be needed to fund MPCA's present nonpoint water pollution activities. A recent analysis estimated that this tax exemption costs Minnesota $65 million per year, more than any other state.[1]

Con

- State law exempts from the sales and use tax any materials "stored, used, or consumed in agricultural or industrial production of personal property intended to be sold ultimately at retail… whether or not the item so used becomes an ingredient or constituent part of the property produced." (*Minn. Stat.* (2000) §297A.68, subd. 2.) Chemicals applied to lawns or home gardens are taxable, but chemicals applied to agricultural crops are not.
- Policy makers have had concerns about the adverse impact that higher agricultural chemical costs might have on Minnesota's farm economy.
- Although Minnesota does not charge a sales tax on agricultural chemicals, there are a variety of fees and surcharges on these chemicals that are paid by persons who sell or use them.

1 Friends of the Earth, *F.A.C.T.: Fair Agricultural Chemical Taxes: Tax Reform for Sustainable Agriculture* (Washington, D.C., 1999), 10.

INCREASE DNR'S WATER APPROPRIATION FEE

Note: A water use permit from the Department of Natural Resources (DNR) is required for all users withdrawing more than 10,000 gallons of water per day or one million gallons per year.

Pro

- This fee is water-related and broad-based, so there is some justification for using a portion of such a fee to fund activities related to point and nonpoint source pollution control. The feepayers include power generators, public water suppliers, industrial processing facilities, and farmers who irrigate.
- Presently, water appropriation fees increase with volume, creating some incentive for water conservation.
- There has not been a significant increase in water appropriation fees since 1989.

Con

- Users of water are not necessarily water polluters—or do not necessarily pollute proportionate to the amount of water they use. For instance, most of the water used by power plants is for cooling purposes, so a fee on water use would not necessarily be consistent with a "polluter pays" approach.
- Water appropriation fees presently generate less than $3 million per year, and the amount of "appropriated" water will likely decline in the near future as alternatives to "once-through" systems are implemented.[2]
- Water appropriation fees presently go to the General Fund; they are *not* dedicated to the Department of Natural Resources, which operates the water appropriation permit program. Thus, it may be difficult to justify dedicating a portion of these fees to an agency (MPCA) that does not operate this program.

2 A "once-through" system" is a space heating, ventilating, air conditioning, or refrigeration system that circulates and discharges ground water without reusing it for a higher priority purpose. State law requires that permits for "once-through" systems using in excess of five million gallons annually be terminated by December 31, 2010.

USE PETROLEUM FEE REVENUES FOR AIR POLLUTION CONTROL

Pro

- To address air quality problems caused by internal combustion engines (i.e., "mobile sources" of air pollution), it might be reasonable to use a petroleum-based fee. Such fees would help ensure that petroleum prices more accurately reflect the regulatory costs associated with petroleum use (and perhaps costs associated with emission impacts on the environment or human health).
- Presently, petroleum distributors pay a fee of $20 per 1,000 gallons of petroleum products. These revenues go to The Petroleum Tank Release Cleanup Fund (or "Petrofund") to help pay for cleanups at leaking storage tank sites. As Minnesota's cleanup program winds down, it might be reasonable to use a portion of The Petrofund—or a similar petroleum-based fee—to pay for transportation-related pollution control activities.

Con

- If the Legislature wished to use the Petrofund for air pollution activities, it would have to redefine in law the activities for which this fund could be used. The oil and gas industry has supported the Petrofund because it has helped to address a business liability (leaking tanks). It is unclear whether industry and legislators would support use of petroleum fee revenues for pollution problems that (a) are not site-specific, and (b) have not yet occurred (as opposed to cleanup of spills and leaks).

INCREASE IN THE STATE GASOLINE TAX, OR ADOPTION OF A SALES TAX ON GASOLINE

Pro

- It might be reasonable to use revenues from a gasoline tax to address air quality problems that are a by-product of internal combustion engines. Persons who consume more gasoline would pay more in taxes, and this would roughly reflect a "polluter pays" funding approach.
- Significant public and private health costs are attributable to air pollutants from vehicle emissions. Taxing gasoline might be a way for individuals to more closely bear the social costs of their driving choices—or at least to pay for the costs of regulating these emissions.

Con

- The Minnesota Constitution authorizes the Legislature to levy an excise tax on gasoline and place the proceeds into the Highway User Distribution Fund, but this fund is "to be used solely for highway purposes specified" in the Constitution. There is little case law clarifying "highway purposes." Unless the Constitution were to be amended, it is questionable whether use of excise tax revenues for pollution control would comply with the constitutional requirements. An alternative to the excise tax might be a *sales tax* on gas. (Presently, there is no sales tax on gas.) Legal experts told us that it is unclear whether a sales tax on gas would be subject to the same constitutional restrictions as an excise tax.

APPROPRIATE MORE ENVIRONMENTAL PENALTY REVENUE TO MPCA

Note: Recoveries from civil penalties, agreements, stipulations, settlements, and other provisions of Minn. Stat. chapters 115A and 116 are credited to an account in the Environmental Fund—up to the amount appropriated for each biennium. The remainder is deposited in the General Fund. Over the past five fiscal years, MPCA has collected about $2.7 million in penalties above the amounts that it has been appropriated in its environmental enforcement account. For instance, in fiscal year 2001, MPCA received an appropriation of $626,000 from this account, out of $1.6 million collected.)

Pro

- The revenues from environmental penalties should, to some degree, offset the costs that MPCA incurs to enforce environmental regulations.
- The 1995 Blue Ribbon Task Force on Water Quality Funding recommended that the Legislature increase the appropriation for MPCA's environmental enforcement account. However, the appropriated amount has remained about the same.
- The Legislature's environmental finance committees make budget decisions on just a portion of the state's General Fund revenues (including environmental penalty revenues deposited in the General Fund). If all environmental penalty revenues were deposited in the state Environmental Fund, these committees would have more authority to determine how penalty revenues are spent.

Con

- When regulatory agencies like MPCA have the potential to benefit financially from penalty revenues they collect, there may be an incentive for the agency to assess larger penalties.
- It is unclear whether the Legislature's environmental finance committees would appropriate more environmental penalty revenues to MPCA if they had authority to appropriate the full amount of penalty revenues collected.
- Placing penalty revenues in the Environmental Fund could result in fewer revenues in the General Fund.

INCREASE (OR MODIFY PRESENT USES OF) THE MOTOR VEHICLE TITLE TRANSFER FEE

Pro

- A title transfer fee could be dedicated to nonpoint source pollution to reflect the pollution impact of runoff from vehicle-related causes (such as the construction of roads, with surfaces impervious to precipitation). Wisconsin uses revenues from a title transfer fee for this purpose.
- It might be reasonable to have a vehicle-related revenue source—such as a title transfer fee—to address pollution from vehicles.
- In Minnesota, the title transfer fee has been used for environmental protection and remediation purposes since 1984.

Con

- Although vehicles and road construction contribute to air and water pollution, there is little direct relationship between the transfer of a vehicle title and the amount of pollution produced by that vehicle.
- Presently, state law allocates revenues from the title transfer fee to Superfund cleanups and the General Fund. Unless the fee is increased beyond its present level ($4 per title transfer), MPCA would be unable to use the fee's revenues for nonpoint water pollution or mobile sources of air pollution without supplanting existing Superfund revenues.

EXTEND SALES TAX TO SEWER BILLS

Pro

- Department of Revenue staff told us they were uncertain why Minnesota's sales tax has never applied to sewer services. If such a tax were implemented and dedicated to a particular area, pollution control would be a fairly logical choice.
- The exemption of sewer services from Minnesota's sales tax represents $22 million in foregone revenue each year. Various other residential services (electricity, gas, steam, and certain telephone services) *have* been subject to sales taxes.

Con

- Minnesota's executive branch has pursued a policy of trying to limit the dedication of revenues to particular purposes, except in cases where the revenues clearly represent a user charge.

EXTEND SALES TAX TO RESIDENTIAL WATER SERVICES

Pro

- Although various other residential services (electricity, gas, steam, and certain telephone services) *have* been subject to sales taxes, the provision of water services for residential use has not. Department of Revenue staff do not recall reasons why residential water services were exempted by the Legislature in 1979. (They noted that this exemption followed exemptions for residential heating fuels that happened around that time.)
- Extending the sales tax to residential water services would produce revenues of about $20 million per year.

Con

- The tax would apply to the large majority of Minnesota housing units that use public water supplies. However, housing units that do not use public water supplies might represent a disproportionate source of pollution problems, and they would not be subject to this tax.
- Minnesota's executive branch has pursued a policy of trying to limit the dedication of revenues to particular purposes, except in cases where the revenues clearly represent a user charge.

USE PORTION OF ENVIRONMENT AND NATURAL RESOURCES TRUST FUND (FROM LOTTERY REVENUES) TO SUPPORT MPCA PROGRAMS

Pro

- The total revenues for the trust fund are relatively stable. (The fund is established in the Minnesota Constitution. Forty percent of the lottery's net proceeds are dedicated to environment and natural resource purposes.)
- The 1995 Blue Ribbon Task Force on Water Quality Funding said that "following the sunsetting of constitutional provisions for state lottery proceeds in the year 2001, we recommend that the Legislature consider allocating a portion of these proceeds to the point-source [water quality] program."

Con

- State law says that the trust fund may not be used as a substitute for traditional sources of funding environmental and natural resources activities; it must supplement traditional funding sources. Also, the law says that the trust fund is for long-term activities. (*Minn. Stat.* (2000) §116P.03).
- Although overall trust fund revenues are quite stable, the Legislature must appropriate funds to be spent for particular purposes—and priorities may vary from biennium to biennium.

CARBON TAX

Note: The 1998 Legislature considered a revenue-neutral proposal that would have placed a $50/ton tax on the carbon content of energy inputs, to generate $1.3 billion in revenue annually. The funds would have been used to reduce local property taxes.

Pro

- By raising the price of energy relative to other goods, producers and consumers would respond by buying fewer energy-intensive goods—presumably reducing emissions in the process.
- Carbon taxes have been implemented in several European countries.

Con

- A carbon tax would put certain Minnesota industries at a competitive disadvantage with industries in states without a carbon tax. To address greenhouse gas issues, a national (or international) approach might be preferable to a unilateral state approach.
- The merits of such a tax would depend considerably on how its revenues were used (i.e., which taxes would be reduced with the revenues a carbon tax would generate—and the resulting tax efficiencies).
- If policy makers' intent is merely to find a revenue source for MPCA's existing budget deficits, a carbon tax may be the wrong approach—providing too much revenue, while having implications far beyond those related to MPCA.
- Compared with some other revenue approaches, it may be politically more difficult to enact a tax that would have adverse financial impacts on one category of industry (e.g., power plants).

USE FEDERAL FUNDING FROM THE CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ) PROGRAM

Pro

- This federal program is intended to fund projects in air quality "non-attainment areas" which reduce transportation-related emissions. Minnesota received about $19 million in fiscal year 2001. Program funds could be used to address mobile sources of pollution in the areas with the most serious pollution problems.
- MPCA has authority to review and approve CMAQ-funded projects.

Con

- The program can be used to fund "projects," so it may not be a viable source of funding for ongoing, long-term MPCA services.
- MPCA would have to compete with other projects for funding, so there would be no assurance of stable funding. In fact, funding for the presently-authorized federal program is now committed to various projects, and it is unclear whether the program will be reauthorized by Congress (or at what level) in 2003.
- Funding is available only on a reimbursement basis.
- The program focuses on noncompliance for ozone and carbon monoxide, not air toxics.

Further Reading

Arthur Andersen LLP. *Minnesota Pollution Control Agency Point-Source Improvement Initiative* (St. Paul, November 1996).

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Minnesota Pollution Control Agency. *Air Quality in Minnesota* (St. Paul, January 2001).

National Academy of Public Administration. *Environment.gov: Transforming Environmental Protection for the 21st Century* (Washington, D.C.: November 2000).

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National Research Council. *Assessing the TMDL Approach to Water Quality Management* (Washington, D.C.: National Academy Press, 2001).

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Minnesota Pollution Control Agency

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January 9, 2002

Dear Legislative Audit Commission Members and Interested Parties:

The Office of the Legislative Auditor recently completed an evaluation of the Minnesota Pollution Control Agency (MPCA). The review included funding the MPCA environmental programs, and an evaluation of the water quality point source regulatory program, which are provided in separate reports. This letter addresses the Minnesota Pollution Control Agency Funding Report (Funding Report).

We appreciate the research and study the Office of the Legislative Auditor put into this report. The evaluation is fair in pointing out the difficulties of sustaining polluter-pays fee funding at appropriate levels for the on-going regulatory programs, particularly the water quality fees. In addition, the report accurately describes the limited flexibility of the Environment Fund structure that constrains the ability of the MPCA and the Legislature to address higher priority environmental issues.

For example, to address the serious problems pointed out in the Legislative Audit on Feedlots in 1998 (FY99), the MPCA was forced to divert funding from another top priority program (water quality point source regulation) to feedlot regulatory efforts because funds dedicated to lower priority environmental programs could not be used instead. While this helped make needed improvements in the feedlot program, it negatively impacted the water quality point source program.

While we agree with the fee-related recommendations, we must point out that the Legislature received almost the exact same set of recommendations concerning clarification of polluter-pays fees in the 1991 Legislative Audit of the MPCA. Subsequent legislative program audits and the Governor's Blue Ribbon Commission have also recommended additional resources for regulatory programs funded by increases in existing fees and since 1992, the Legislature has not been willing to authorize increased fees. When the full costs of a federally delegated regulatory program are included, for example, "polluter-pays" water quality permit fees represent only 23% of the funding necessary to run the water quality point source program.

Therefore, we would like to draw the Legislature's attention to the broader-based funding options described in Appendix C of the Report. The amount of pollution related to point source polluters has been declining, and the amount of pollution attributable to non-point sources is increasing. For example, in 2000, 86% of Minnesota's water pollution and 57% of Minnesota's air pollution comes from non-point sources; the majority of polluters are not currently paying

fees to the State of Minnesota for the pollution they create, yet the general public expects the MPCA to address this pollution.

Broadly based fees and taxes more equitably reflect consumption of the environment because revenue rises when there are more impacts on the environment. *These broad-based fees and taxes offer an opportunity to both replace the current (inadequate) permit fee structure and also fund non-point source activities from polluter-based sources rather than the General Fund.*

The Funding Report indicates the need to accurately project funding needs for emerging issues, such as air toxics and Total Maximum Daily Load Limits (TMDLs). The MPCA is finalizing a TMDL implementation strategy with the Environmental Protection Agency in 2002, and will be prepared to report to the 2003 Legislature as recommended. The MPCA's 2001 Air Quality Report contained both recommended strategies and timeframes for implementation, but will be revised in 2002 based on the impact of last summer's air quality ozone alerts. We will also propose funding options to implement strategies recommended in the Air Quality Report, as recommended.

The Funding Report and Water Quality Regulatory report cite problems with the organizational change the MPCA implemented in 1998. We believe that in 2001 we made the necessary corrective changes to the MPCA's organization and believe these changes will allow us to improve implementation of our core environmental programs. We are measuring our progress monthly to ensure that the 2001 changes result in the necessary improvements to our core programs.

The MCPA appreciates the thoughtful and thorough nature of the Funding Report. We will continue to consider the recommendations in the Funding Report in much greater detail as we prepare budget proposals for the upcoming biennium and through our discussions with legislators and stakeholders throughout the year.

Sincerely,

/s/ Karen A. Studders

Karen A. Studders
Commissioner

KAS:bb

Recent Program Evaluations

Game and Fish Fund Special Stamps and Surcharges, Update, January 1994 94-01
Performance Budgeting, February 1994 94-02
Psychopathic Personality Commitment Law, February 1994 94-03
Higher Education Tuition and State Grants, February 1994 94-04
Motor Vehicle Deputy Registrars, March 1994 94-05
Minnesota Supercomputer Center, June 1994 94-06
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Early Retirement Incentives, March 1995 95-04
State Employee Training: A Best Practices Review, April 1995 95-05
Snow and Ice Control: A Best Practices Review, May 1995 95-06
Pollution Control Agency's Use of Administrative Penalty Orders, Update July 1995 95-07
Development and Use of the 1994 Agency Performance Reports, July 1995 PR95-22
State Agency Use of Customer Satisfaction Surveys, October 1995 PR95-23
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9-1-1 Dispatching: A Best Practices Review, March 1998 98-06
Minnesota State High School League, June 1998 98-07
State Building Code, January 1999 99-01
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Metropolitan Mosquito Control District, January 1999 99-03
Animal Feedlot Regulation, January 1999 99-04
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Directory of Regulated Occupations in Minnesota, February 1999 99-05b
Counties' Use of Administrative Penalties for Violations of Solid and Hazardous Waste Ordinances, February 1999 99-06
Fire Services: A Best Practices Review, April 1999 99-07
State Mandates on Local Governments, January 2000 00-01
State Park Management, January 2000 00-02
Welfare Reform, January 2000 00-03
School District Finances, February 2000 00-04
State Employee Compensation, February 2000 00-05
Preventive Maintenance for Local Government Buildings: A Best Practices Review, April 2000 00-06
The MnSCU Merger, August 2000 00-07
Early Childhood Education Programs, January 2001 01-01
District Courts, January 2001 01-02
Affordable Housing, January 2001 01-03
Insurance for Behavioral Health Care, February 2001 01-04
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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