

Who Is Guarding Our Waters?



**A Report on the Wisconsin DNR's
Enforcement of Water Pollution Laws**

Midwest Environmental
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Midwest Environmental Advocates (MEA) is an environmental law center that provides legal and technical assistance to communities working for environmental justice. MEA's mission is to provide high quality legal services that support a multicultural, grassroots social movement; build local leadership; and develop innovative solutions to environmental problems.

Thanks

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Executive Summary

Environmental laws are only effective if they are enforced. Citizens and the government play a vital role in ensuring that our natural resources are protected by bringing environmental enforcement actions against polluters. One of the primary purposes of enforcement is to deter future violations and ensure that our natural resources receive the protections the legislature intended them to have. If facilities can continually violate their permits and pollute Wisconsin's resources with no serious reaction by state regulatory agencies, there is no real incentive for facilities to correct their pollution problems. If facilities are not required to pay penalties to the state to remedy the extra pollution they have added to Wisconsin's natural resources, it makes better business sense to avoid or delay the costs of upgrading systems to reduce pollution.

For this report, Midwest Environmental Advocates (MEA) analyzed a decade of data on the Department of Natural Resources' (DNR's) enforcement of significant permit violations by industrial and municipal sources of water pollution. Never before has the public seen such a comprehensive analysis of water law enforcement in Wisconsin. This information is vital for the public to know how the DNR is doing in its role as trustee of the waters of our state.

This report brings together information from a variety of databases maintained by the DNR and the Environmental Protection Agency (EPA). It assesses how well industrial and municipal sources of water pollution are complying with their permits and how comprehensively the DNR is tracking and enforcing permit violations.

MEA's analysis shows that there is a serious problem with the DNR's enforcement of permit violations by industrial and municipal polluters.

- ✘ From 1990 to 1998, between 28% and 46% of major industrial facilities were in Significant Non-Compliance with their Wisconsin Pollutant Discharge Elimination System (WPDES) permits. During the same time period, between 31% and 55% of major municipal facilities were in Significant Non-Compliance with their WPDES permits.
- ✘ From 1990 to 1998, on average, the DNR sent Notices of Violation to only 10% of all municipal and industrial facilities in Significant Non-Compliance with their WPDES permits.
- ✘ During that same time period, the DNR only referred to the Department of Justice for prosecution 2.5% of all industrial and municipal facilities that were in Significant Non-Compliance with their WPDES permits.
- ✘ Since 1995, the DNR has consistently failed to meet its goal to inspect each major industrial facility with a WPDES permit once per year. The DNR's inspection record went from apparently perfect in the years 1990 through 1994 to failing to inspect up to 53% of all major industrial facilities in 1999. By comparison, the DNR diligently inspected major municipal facilities until 1998 when it failed to inspect 19% of all major municipal facilities.

With so few facilities actually referred to the Department of Justice for prosecution, the state failed to deter future violations and lost a significant amount of revenue that polluters should have paid to the state in the form of penalties or forfeitures. By our calculations, in 1998 alone, due to the absence of enforcement actions, the state failed to collect between 14 and 284 million dollars in potential penalties from industrial and municipal sources of water pollution.

Factories and Municipalities in Wisconsin: Still Polluting After All These Years

Water quality in Wisconsin is an issue that impacts everyone, from anglers to swimmers. Although there are still many unregulated non-point sources of water pollution, such as runoff from farms, golf courses, and urban yards, for the past thirty years the federal Clean Water Act has provided a structure to regulate the more easily identifiable “point” sources of pollution. Point sources of water pollution, such as discharge pipes from factories or municipal sewage treatment plants, are required to obtain Wisconsin Pollutant Discharge Elimination System (WPDES) permits.¹ Despite this permit system, many industrial and municipal point sources are still essentially unregulated because the DNR allows them to violate their WPDES permits without any serious consequences.

The goal of the WPDES permit program is to control water pollution and continually improve the waters of the state. But how well is the program working? Facilities that have WPDES permits test their water discharges and report to the DNR whether or not they are complying with their permits. If a facility reports a particularly severe permit violation, it will be categorized as a facility that is in Significant Non-Compliance (SNC) with its permit.²

One indicator of how well the WPDES program is working to reduce water pollution is to see how many industrial and municipal pollution sources are in SNC with the pollution restrictions in their permits. The following figures show the percentage of industrial and municipal sources that were in SNC with their WPDES permits over the past decade. A facility in SNC is defined as any facility that was listed in SNC one or more times for the applicable year.³ The analysis ends with the year 1998 because in 1999 the DNR changed databases and the way it records the significance of violations.

The scope of this report is limited to analyzing data about industrial and municipal facilities because the data for the four other types of WPDES permits are not centrally located within the DNR.⁴

In addition to the distinction between industrial and municipal facilities, WPDES permits are also classified on the basis of the facility’s size: major or minor. A municipal source is major when it discharges a flow of at least one million gallons of waste water per day.⁵ By contrast, an industrial source is major when the facility receives a score of 80 or more points measured by a variety of factors, such as toxic pollutant potential and public health impact.⁶

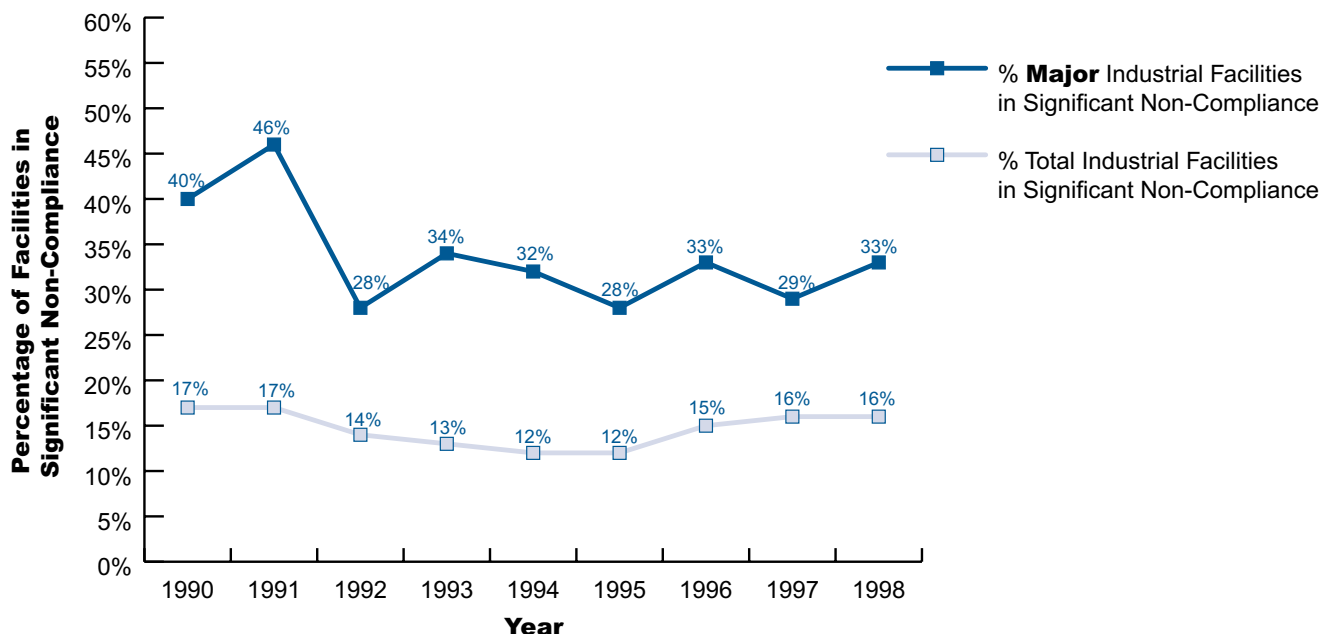
Summary of Findings for Period from 1990 – 1998

Industrial Facilities⁷

For industrial facilities (both major and minor), the percentage in SNC with WPDES permit limits ranged from 12% to 17%. For major industrial facilities, however, the percentage in SNC with WPDES permit limits rose, ranging from 28% to 46%.

In other words, while 83% to 88% of all industrial facilities reported compliance with their WPDES permits, only 54% to 72% of major industrial facilities reported compliance with their permits.

Figure 1: Industrial Water Discharge Violations in Wisconsin, 1990–1998

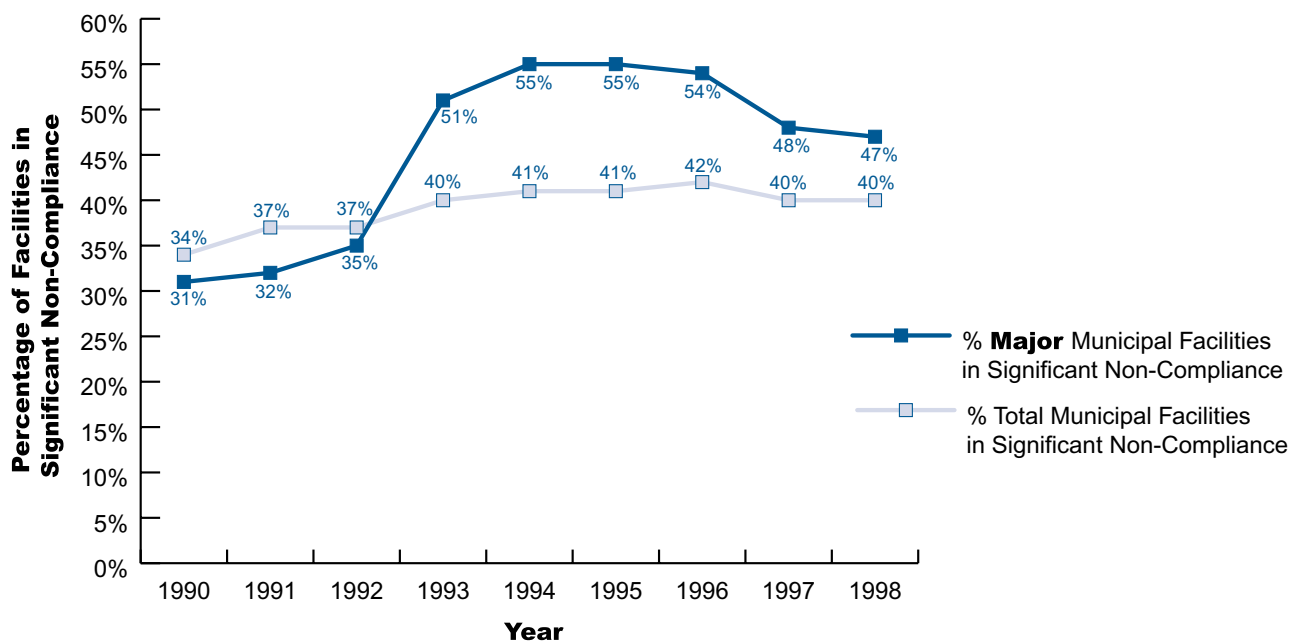


Municipal Facilities⁸

By comparison, for municipal facilities (both major and minor), the percentage in SNC with WPDES permit limits ranged from 34% to 42%. For major municipal facilities, however, the percentage in SNC with WPDES permit limits rose, ranging from 31% to 55%.

In other words, while 58% to 66% of all municipal facilities reported compliance with their permits, only 45% to 69% of major municipal facilities reported compliance with their permits.

Figure 2: Municipal Water Discharge Violations in Wisconsin, 1990–1998



Frequency of Inspections: Who Is Watching the Polluters?

In addition to the monitoring and reporting of pollution discharges by each facility with a WPDES permit, the regulatory agency must inspect every facility (major and minor) with a municipal or industrial WPDES permit at least once per year.⁹ Major facilities are on a fairly regimented inspection schedule overseen by the EPA, while minor facilities are inspected at the discretion of the DNR's water program field officers.¹⁰ Most major facility inspections are conducted by the DNR, although 10% of all inspections may be performed by the EPA.¹¹

Why Does This Report Use the EPA's Inspection Data?

While the DNR is required to report its inspections of major facilities to the EPA, the DNR told MEA that it does not keep its own central record of this information.¹² Thus, this report uses the EPA's data for inspections of major industrial and municipal facilities.

Why Does This Report Only Analyze Inspections of Major Facilities?

Despite the fact that minor facilities make up the vast majority of industrial and municipal water discharge sources (in 2000, minor industrial facilities comprised 90% of the total facilities and minor municipal facilities comprised 87% of the total), neither the EPA nor the DNR keeps a master list of minor facilities that are inspected; these records lie primarily in the scattered files of DNR field offices.¹³ Thus, this report only discusses inspections of major facilities based on data from the EPA's PCS database.¹⁴

What Is an Inspection?

While water permit inspections are generally comprehensive, some types of inspections may involve minimal facility contacts. Most inspections are compliance evaluations, compliance sampling inspections, pretreatment inspections, toxics inspections, pretreatment audits, reconnaissance inspections, and performance audits.¹⁵ The DNR states that all of these inspections "typically include an inspection of treatment facilities, discussion with the permittee of permit conditions, discharge monitoring reports, sludge handling and disposal, and discussion of any problems which are noted."¹⁶ Inspections may have many goals, including verifying compliance, verifying self-monitoring information, developing enforcement information, responding to citizen complaints, providing guidance, and maintaining a regulatory presence.¹⁷

Who Is Guarding the Store?

Although the DNR is supposed to inspect every facility at least once a year, since 1995 it has consistently failed to meet this goal for major industrial facilities with WPDES permits. The DNR's inspection record went from apparently perfect in the years 1990 through 1994 to failing to inspect up to 53% of all major industrial facilities in 1999. By comparison, the DNR diligently inspected major municipal facilities until 1998 when it failed to inspect 19% of all major municipal facilities.

Figure 3: Percentage of Major Industrial and Major Municipal Facilities Inspected Per Year, 1990–1999¹⁸

Figure 3A: Percent Major Industrial Facilities Inspected Per Year, 1990–1999

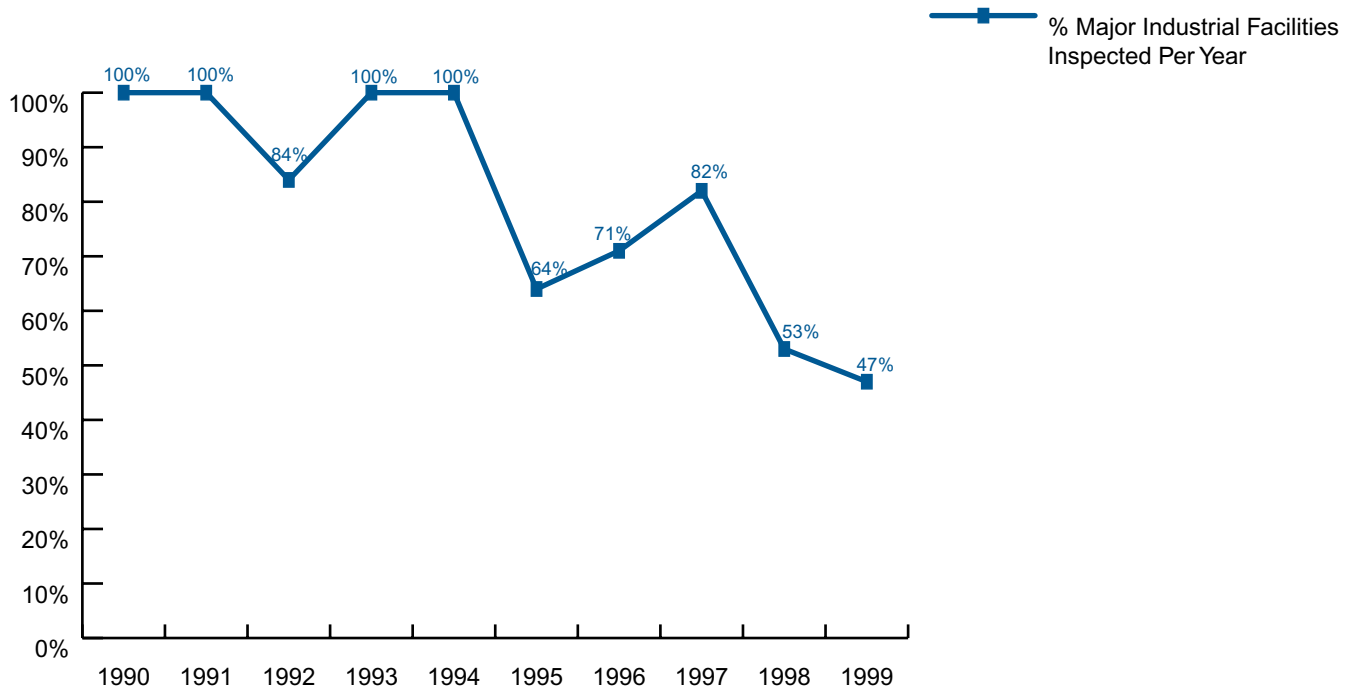
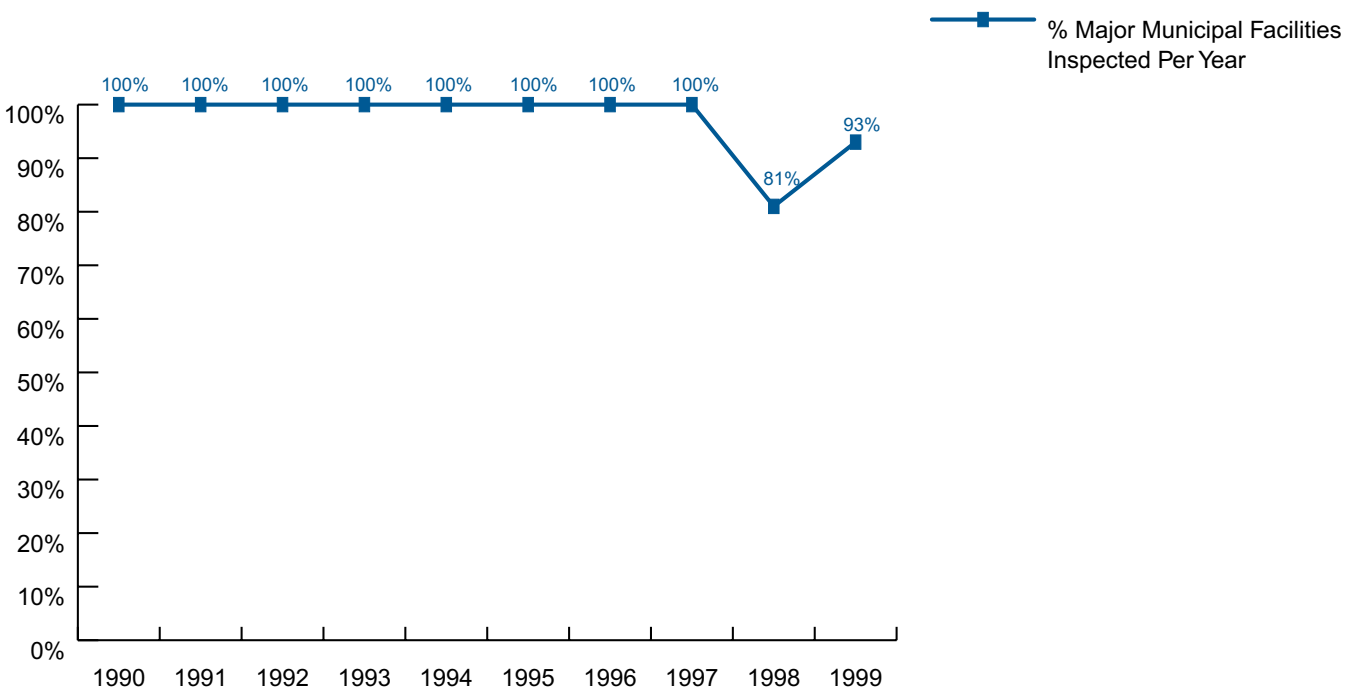


Figure 3B: Percent Major Municipal Facilities Inspected Per Year, 1990–1999



Is the DNR Protecting Wisconsin's Water?

With anywhere from 28% to 55% of major industrial and municipal facilities in Significant Non-Compliance with their WPDES permits throughout the 1990s, it is highly questionable whether the DNR is adequately enforcing the law. One of the primary purposes of enforcement is to deter future violations. If facilities are allowed to continually violate their permits and pollute Wisconsin's waters without the DNR doing anything to stop them, these facilities cannot be expected to correct their pollution problems. If facilities are not required to pay penalties to the state to remedy the extra pollution they have added to Wisconsin's public water resources, they can be expected to avoid or delay the costs of upgrading systems to reduce pollution.

This report analyzes data related to the DNR's primary and secondary enforcement of WPDES permits for industrial and municipal sources of water pollution.

Primary Enforcement in the WPDES Program: Notices of Non-Compliance

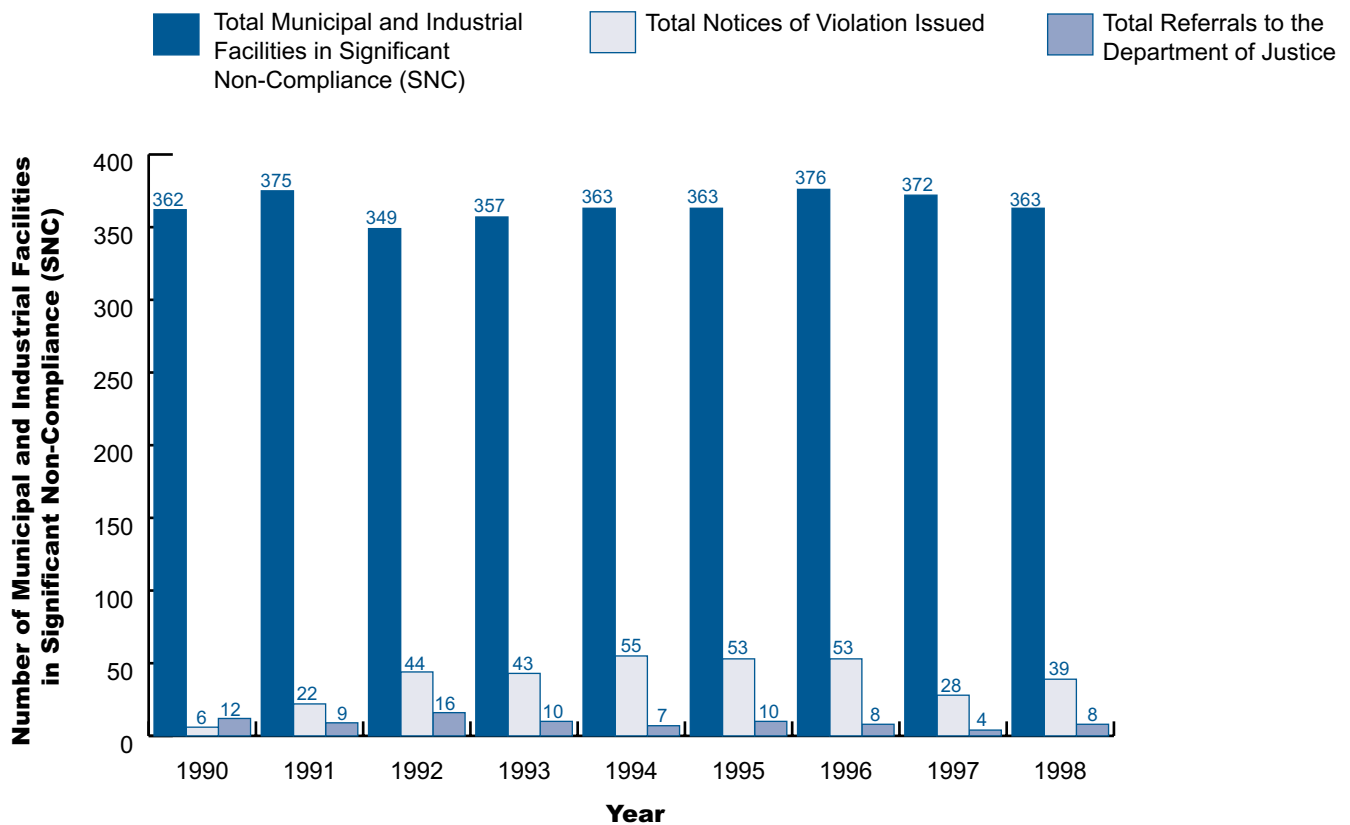
The DNR's field staff responsible for carrying out the WPDES program handle most primary enforcement actions, such as issuing Notices of Non-Compliance (NONs), which are basically informal warnings to the facility. The DNR does not keep track in any centralized database of the NONs it issues. Instead, it is each regional office's responsibility to monitor the NONs it issues.¹⁹ One DNR official noted that some regions may not document their NONs at all.²⁰ Thus, it appears the DNR's primary enforcement activities are fragmented and inconsistent between the DNR's regional offices. Due to this fragmented and inconsistent system, there is no accurate way to assess the effectiveness of this informal step in the enforcement process. Despite this lack of data, DNR officials maintain that 85% to 90% of all violations end at the NON level.²¹ Given the lack of data, there is no way to verify this claim.

Secondary Enforcement in the WPDES Program

The DNR's Bureau of Law Enforcement (BLE) generally conducts secondary enforcement measures. These measures include Notices of Violation (NOVs), enforcement conferences, compliance agreements, close-outs, and referrals. Secondary enforcement typically starts with the DNR issuing an NOV to a facility that is in Significant Non-Compliance with its WPDES permit. This might be followed by an enforcement conference between the facility and the DNR enforcement specialists. The violation(s) may be corrected through a compliance agreement at this point and the case might be closed out. The case might also be referred to the Department of Justice or (rarely) to a District Attorney for formal enforcement action in state court.

The Bureau records enforcement actions in its Casetrack database, from which the following information is derived.²²

Figure 4: Secondary Enforcement Actions in the WPDES Program, 1990–1998²³



For those who manage or own an industrial or municipal facility in Wisconsin that is significantly violating its WPDES permit, the chances of the DNR actually sending NOV's to initiate enforcement actions are very slim. On average, only 10% of all municipal and industrial facilities in SNC with their WPDES permits received NOV's from 1990 through 1998.²⁴ That percentage dipped to a low of 2% of facilities in violation receiving NOV's in 1990 and peaked to a high of 15% receiving NOV's in 1994 and 1995.

An NOV is just the first step in the more formal, secondary enforcement process. The percentage of facilities in SNC that were actually referred to the Department of Justice for prosecution was even lower. From 1990 through 1998, on average, only 2.5% of all industrial and municipal facilities that were in Significant Non-Compliance with their WPDES permits were referred to the Department of Justice for prosecution.

An Incentive to Pollute

With so few facilities ever actually facing repercussions from the DNR for polluting Wisconsin’s water resources, the state is giving facilities an incentive to pollute and to engage in anticompetitive business practices. The industrial facilities that comply with the state’s water laws are at a competitive disadvantage to the facilities that save money by violating pollution limits.

The number of facilities that have to pay penalties and the size of those penalties impacts business decisions about whether to violate pollution limits. Although inadequate to compensate the public for the loss of full recreational and aquatic life uses of lakes and streams, penalties do help offset these harms by requiring the polluter to pay for violating state water laws.

Data in these tables are derived from the BLE’s Casetrack system. This figure displays the penalties assessed for violations of industrial and municipal WPDES permit violations.

Figure 5: Civil and Criminal Penalties Assessed for Violations of Industrial and Municipal WPDES Permits, 1990–2000²⁵

Figure 5A: Civil Penalties

Year	Total Number Prosecuted	Total Amount
1990	4	\$84,940
1991	6	\$226,250
1992	11	\$615,373
1993	3	\$26,885
1994	22	\$1,232,558
1995	5	\$167,370
1996	7	\$378,385
1997	5	\$263,263
1998	6	\$181,000
1999	9	\$327,319
2000	4	\$212,217

Figure 5B: Criminal Penalties

Year	Total Number Prosecuted	Total Amount
1990	1	\$860
1991	2	\$125,223
1992	2	\$64,814
1993	1	\$60,000
1994	0	0
1995	2	\$8,140
1996	3	\$201,990
1997	4	\$17,030
1998	0	0
1999	0	0
2000	0	0

Many polluters are not paying to compensate the public for the pollution they create in Wisconsin (see Fig. 5). Of the 363 industrial and municipal facilities in SNC in 1998, the State of Wisconsin received a total of only \$181,000 in penalties from just six facilities.

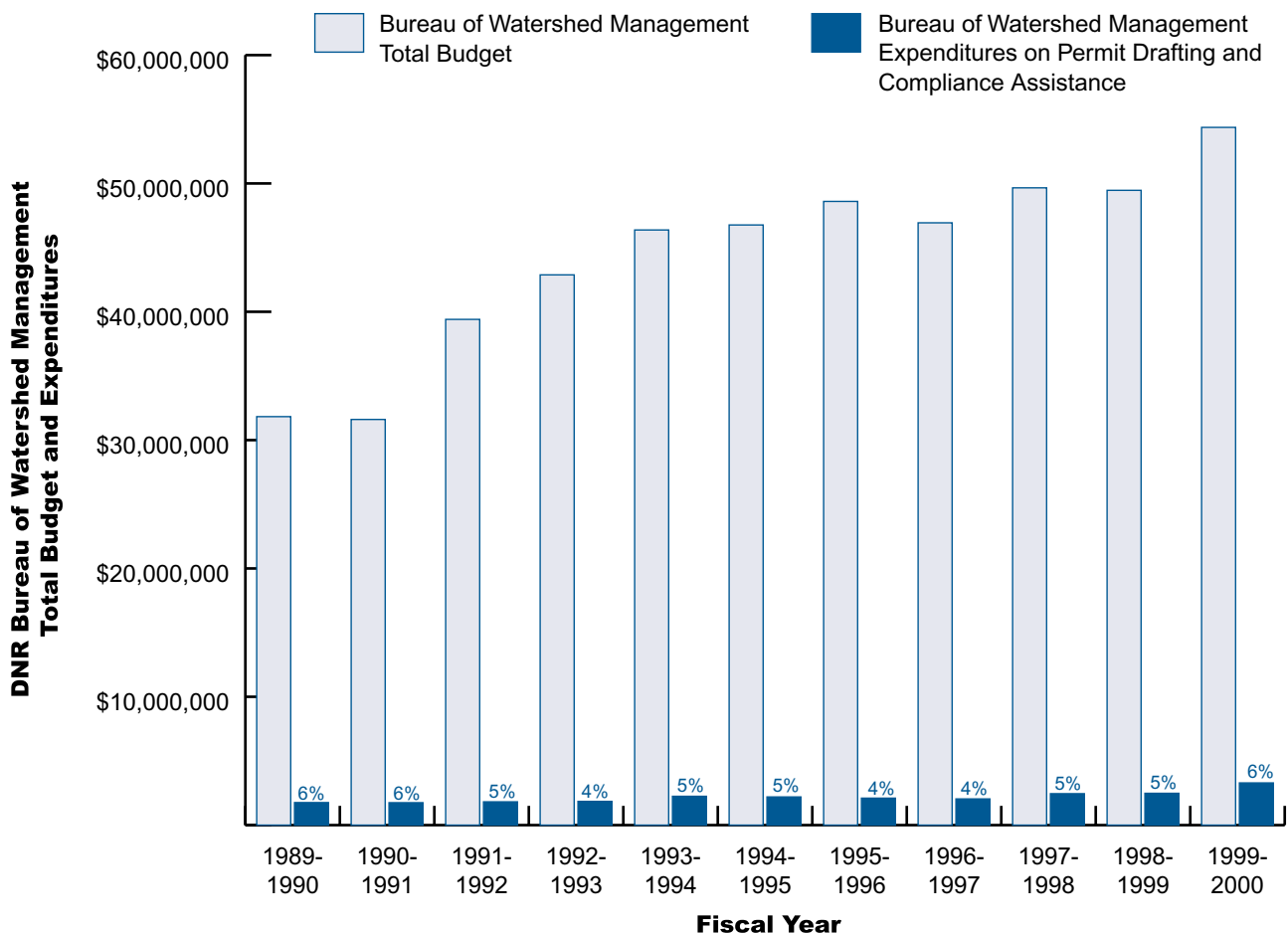
State law allows the DNR to prosecute polluters and seek up to \$10,000 per day in penalties for every violation. The DNR’s lack of enforcement may be causing the state to lose a significant source of revenues. For example, in 1998 municipal and industrial facilities had 28,436 separate violations for which penalties could have been assessed and paid to the state. If the DNR had been awarded the maximum penalty for each of these violations, the state could have received over 284 million dollars.

Under a more conservative projection, were the DNR to have prosecuted only half of the violations (14,218) and recovered one tenth of the maximum penalty allowed by law (\$1,000 per violation), the state could have received over 14 million dollars in penalty payments.²⁶ Instead, the vast majority of municipal and industrial facilities that significantly violated their WPDES permits paid nothing to the state because the DNR quietly accepted this pollution of our public waters.

Where the Money Is Spent

During MEA's interviews with the DNR for this report, agency staff emphasized repeatedly that their limited enforcement budgets force them to work cooperatively with facilities to try to resolve permit violations outside a formal legal process.²⁷ The amount of money the legislature and the governor appropriate for enforcement over other activities greatly influences how much DNR staff time can be spent protecting our natural resources.

Figure 6: Bureau of Watershed Management Expenditures, FY 1990–2000²⁸



Throughout the 1990s, the Bureau of Watershed Management spent an average of only 5% of its total budget on permit drafting and compliance assistance. More money needs to be spent on enforcement, and Wisconsin voters would likely support an increase in funding for the DNR's enforcement budget. Of 500 potential Wisconsin voters polled in May of 2000, 82% wanted either tougher enforcement of environmental laws or stronger laws.²⁹

Conclusion

If the public interest in clean and healthy water resources is to be served, something must be done to increase the DNR's enforcement of WPDES permit violations by industrial and municipal facilities. In order to protect public rights to fish, swim, and otherwise enjoy the many waters of Wisconsin, the government and citizens must work together to increase environmental enforcement.

Enforcement should be a DNR priority. Several necessary reforms within the DNR include:

- ✘ Consistently and routinely send Notices of Violation to facilities in Significant Non-Compliance with WPDES permits.
- ✘ Increase referrals to the Department of Justice for prosecution.
- ✘ Increase inspections of industrial and municipal facilities to ensure that every facility is inspected at least once per year.
- ✘ Set up a central system to track primary enforcement so its effectiveness can be reasonably assessed.
- ✘ Facilitate citizen enforcement by establishing a public, central repository for all enforcement-related data including, but not limited to, all inspection reports, discharge monitoring reports, and primary enforcement data.

Several legislative reforms are also necessary in order to increase the accountability of those who pollute Wisconsin's waters:

- ✘ Conduct a legislative audit of the DNR's enforcement of all environmental laws.
- ✘ Facilitate citizen enforcement efforts by allowing citizen suits and recovery of costs and attorney's fees for all environmental laws.
- ✘ Restore the Public Intervenor's Office to protect public rights in water and other natural resources.
- ✘ Make enforcement a government priority by increasing the DNR's enforcement budget relative to the amounts budgeted for other activities.
- ✘ Authorize the Attorney General to independently initiate enforcement actions.

Endnotes

¹ Wis. Stats. § 283.31 (1997-98).

² Significant Non-Compliance (SNC) is a term used to designate more severe types of permit violations. It is also important because DNR and EPA data are frequently sorted by the “significance” of a violation. However, multiple definitions of SNC are in circulation between the DNR and the EPA. The following paragraphs outline the primary definitions of SNC used by the EPA and the DNR. This report uses the DNR’s definition of SNC because it uses the DNR’s data.

The EPA’s definition of SNC derives from federal regulations. See 40 C.F.R. 123.45; 40 C.F.R. 123.45 Appendix A (1999). These regulations describe several ways a facility may be in SNC. Most important of these are violations of permit effluent (or pollution) limits; however, not every violation of an effluent limit qualifies as “significant.” According to the EPA, a violation is not considered significant until a facility discharges 40% or more of conventional pollutant limits or 20% or more of toxic pollutant limits for periods of two months or more. See 40 C.F.R. 123.45 Appendix A (1999). In the federal regulations, all Category I violations are instances of SNC, and some Category II violations are instances of SNC. See 40 C.F.R. 123.45(a)(2)(ii) and (iii). The percentages (40% and 20%) are called “technical review criteria” in the regulations. See 40 C.F.R. 123.45 Appendix A (1999).

These percentages, similar to a margin of error, allow permittees to violate their permits in small amounts for short time periods and not be listed as significant violators. However, chronic violations below the relevant percentages qualify as significant if they last for four months of a six month period, as will violations of conditions in enforcement orders, and a few other types of violations. See 40 C.F.R. 123.45(a)(2)(ii). EPA officials may also use their discretion in finding a facility in SNC for reasons not described in the regulations. See id.; see also Telephone interview by MEA with Information Management Coordinator, Water Enforcement and Compliance Assurance Branch, EPA Region V (Nov. 28, 2000).

The DNR’s primary definition of SNC is similar to the EPA’s, but more stringent. The DNR has programmed this definition into its Discharge Monitoring Report (DMR) database, where information on all major and minor violations is stored. As with the EPA’s version of SNC, there are multiple ways the DNR may find a facility in SNC, including effluent limit violations. The DNR also allows facilities to exceed these limits in small amounts without being penalized, but sets thresholds for “significant” at a lower level than the EPA’s 20% and 40% in some instances. (See Table 4, below.) Thus, violations that may not be “significant” by the EPA’s definition may qualify as “significant” according to the DNR. In addition, the DNR’s database includes information on pollutants that the EPA’s does not, such as fecal coliform and flow, and does not require violations to persist for two months to become significant. See Interview by MEA with Permits Process & Facility Management Section Chief, Bureau of Watershed Management, Wisconsin Department of Natural Resources, in Madison, Wis. (November 20, 2000); see also Telephone Interview by MEA with Information Management Coordinator, Water Enforcement and Compliance Assurance Branch, EPA Region V (Nov. 28, 2000).

DNR and EPA “Significant Violation” Thresholds for Selected Pollutants

	DNR	EPA
Biochemical Oxygen Demand (BOD)	30%	40%
Oil and Grease	10%	40%
Total Suspended Solids	20%	40%
Lead	25%	40%
Cyanide	5%	20%
Ammonia Nitrogen	25%	40%

See 40 C.F.R. 123.45 Appendix A (App. 7); see also STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL ENFORCEMENT HANDBOOK 10-3 (1986).

Since the DNR’s thresholds (also called “adjustment factors”) for SNC are programmed into its DMR database, there can be problems in identifying significant violations when some data is not present or entered correctly. For example, the DMR database only flags violations as “significant” when they exceed their adjustment factors. See Interview by MEA with Permits Process & Facility Management Section Chief, Bureau of Watershed Management, and Monitoring System File Manager, in Madison, Wis. (Nov. 20, 2000). However, sometimes pollutants are not assigned adjustment factors, or sometimes adjustment factors are not entered in the DMR database. When this happens, the database cannot flag the violation as significant, even if the violation is substantial. Thus, some violations are never noted as significant for reasons unrelated to the violation itself. For example, oil and grease, flow, fecal coliform, methylene chloride, pH, zinc, and cyanide were all missing adjustment factors in the DMR database at various points during 1990-1992. This undercounts the number of facilities in SNC with their permits.

Sometimes this omission is not accidental. For example, pollutants that are not monitored by the EPA may not be assigned adjustment factors, such as fecal coliform and flow readings. Interview by MEA with Permits Process & Facility Management Section Chief, Bureau of Watershed Management, and Monitoring System File Manager, in Madison, Wis. (Nov. 20, 2000). Some are not assigned adjustment factors because they are very rare, such as poly aromatic; also, some parameters requiring a lab or chemical analysis, and not simply a meter reading, may not be assigned adjustment factors. *Id* Lastly, some parameters are listed as significant depending upon the limit type; that is, whether the violation is of a weekly, daily, or monthly limit. This category of parameters includes water temperature, nitrogen (ammonia), and total residual chlorine.

³ One DNR section chief protested our inclusion of facilities with just one or two instances of SNC per year in this total. Interview by MEA with Permits Process & Facility Management Section Chief, Bureau of Watershed Management, and Monitoring System File Manager, in Madison, Wis. (Nov. 20, 2000). However, MEA chose to include facilities that were in SNC for one or more reporting period in a year for several reasons: 1) the designation as SNC generally means that these violations are not administrative in nature, but that there is a significant violation of a pollution discharge limit; 2) if the violation is administrative, it must be a serious and chronic breach in order to be listed as SNC; 3) in order for a discharge of pollution to rise to the level of SNC, the facility must discharge so much pollution into a water of the state that the pollution is anywhere from 5% to 30% higher than that allowed by the permit before it is even recorded in Wisconsin’s Discharge Monitoring Report database. See also “State Environmental Agency Contributions to Enforcement and Compliance,” ECOS, April 2001, at 26 (explaining SNC designation).

⁴ Bureau of Watershed Management, *Types of WPDES Wastewater Permits* (Last modified December 21, 1998) <<http://www.dnr.state.wi.us/org/water/wm/ww/PmtTypes.htm>>.

⁵ Wis. Admin. Code § NR 200.02(7) (1999). See also SUSAN HUNTER & RICHARD W. WATERMAN, ENFORCING THE LAW: THE CASE OF THE CLEAN WATER ACTS 36 (1996).

⁶ Memorandum from James E. Elder, Director, Office of Water Enforcement and Permits, United States Environmental Protection Agency, to Regional Water Management Division Directors (June 27, 1990); Memorandum from James F. Pendergast, Acting Director, Permits Division, United States Environmental Protection Agency to Regional Water Management Division Directors (February 6, 1995). Some of these factors include toxic pollutant potential, flow/wastewater type, conventional pollutant load, and public health impact. Memorandum from James F. Pendergast, Acting Director, Permits Division, United States Environmental Protection Agency to Regional Water Management Division Directors (February 6, 1995). See also *Types of WPDES Wastewater Permits: WPDES Industrial Discharge Permits* (Last modified December 21, 1998) <<http://www.dnr.state.wi.us/org/water/wm/ww/PmtTypes.htm>>.

⁷ Industrial Water Discharge Violations in Wisconsin, 1990-1998

Year	Total No. of Industrial Facilities	No. of Industrial Facilities in SNC	% of Industrial Facilities in SNC	No. of Major Industrial Facilities	No. of Major Industrial Facilities in SNC	% of Major Industrial Facilities in SNC
1990	727	127	17%	50	20	40%
1991	706	122	17%	50	23	46%
1992	706	100	14%	50	14	28%
1993	672	85	13%	50	17	34%
1994	672	81	12%	50	16	32%
1995	672	80	12%	50	14	28%
1996	595	87	15%	49	16	33%
1997	595	95	16%	49	14	29%
1998	595	97	16%	49	16	33%
1999	595	No Data	---	49	No Data	---
2000	478	No Data	---	46	No Data	---

Total number of industrial and major industrial facilities came from the following: 1990 figures from Wisconsin Department of Natural Resources, *Water Quality Report to Congress 70* (1990); 1992 figures from WDNR, *Water Quality Report to Congress 152* (1992); 1993 figures from WDNR, *Water Quality Report to Congress 27* (1994); 1996 figures from WDNR, *Water Quality Report to Congress 10* (1996); 2000 figures from Email from Permits Process and Facility Management Section Chief, WDNR, to MEA (Sept. 12, 2000).

The DNR was unable to produce data on the total number of industrial facilities for the following years: 1992, 1994, 1995, 1997, 1998, 1999. It was therefore necessary for MEA to apply data from previous years to complete this analysis.

No information on the number of major industrial facilities was available for: 1990, 1991, 1992, 1994, 1995, 1997, 1998, 1999. It was therefore necessary for MEA to extrapolate data for those years from known data.

Number of facilities in SNC came from the DNR. Data for 1993-1998 came from the DNR's Discharge Monitoring Report database. Data for 1990-1992 came from DNR microfiche.

⁸ Municipal Water Discharge Violations in Wisconsin, 1990-1998

Year	Total No. of Municipal Facilities	No. of Municipal Facilities in SNC	% of Municipal Facilities in SNC	No. of Major Municipal Facilities	No. of Major Municipal Facilities in SNC	% of Major Municipal Facilities in SNC
1990	685	235	34%	85	26	31%
1991	681	253	37%	85	27	32%
1992	681	249	37%	85	30	35%
1993	685	272	40%	85	43	51%
1994	685	282	41%	85	47	55%
1995	685	283	41%	85	47	55%
1996	693	289	42%	85	46	54%
1997	693	277	40%	85	41	48%
1998	693	266	40%	85	40	47%
1999	693	No Data	---	85	No Data	---
2000	665	No Data	---	85	No Data	---

Total number of municipal and major municipal facilities came from the following: 1990 figures from Wisconsin Department of Natural Resources, *Water Quality Report to Congress 70* (1990); 1992 figures from WDNR, *Water Quality Report to Congress 152* (1992); 1993 figures from WDNR, *Water Quality Report to Congress 27* (1994); 1996 figures from WDNR, *Water Quality Report to Congress 10* (1996); 2000 figures from Email from Permits Process and Facility Management Section Chief, WDNR, to MEA (Sept. 12, 2000).

The DNR was unable to produce data on the total number of municipal facilities for the following years: 1992, 1994, 1995, 1997, 1998, 1999. It was therefore necessary for MEA to apply data from previous years to complete this analysis.

For the number of major municipal facilities, only data from 2000 was available from the DNR. Email from Permits Process and Facility Management Section Chief, WDNR, to MEA (Sept. 12, 2000). This data was therefore used for all years to complete this analysis.

Number of municipal facilities in SNC came from the DNR. Data for 1993-1998 came from the DNR's Discharge Monitoring Report database. Data for 1990-1992 came from DNR microfiche.

⁹ Memorandum from Stan Kleinert and Steve Sisbach, WDNR, to Jon Kleinert, et al, WDNR, *Final Enforcement Management Strategy for the Department's Wastewater Control Program 2* (June 29, 1994).

This memo describes the process which the DNR uses to determine appropriate enforcement action. This strategy summary is required by federal law. 33 U.S.C. § 1256.

¹⁰ *Id.* Telephone Interview.

¹¹ Kleinert & Sisbach, at 2.

¹² Telephone Interview by MEA with Wastewater Permits and Pretreatment Section Chief (Sept. 12, 2000).

¹³ *Id.*; Kleinert & Sisbach, at 3.

¹⁴ Inspection data provided by Information Management Coordinator, Environmental Protection Agency, Region 5, Water Enforcement and Compliance Assurance Branch (Nov. 28, 2000).

¹⁵ Kleinert & Sisbach, at 2.

¹⁶ *Id.*

¹⁷ *Id.* One group has said that reconnaissance inspections do not even require inspectors to leave their cars. JOHN COEQUYT & RICHARD WILES, ENVIRONMENTAL WORKING GROUP, PRIME SUSPECTS: THE LAW BREAKING POLLUTERS AMERICA FAILS TO INSPECT 2 (2000).

¹⁸ **Percentage of Major Industrial and Major Municipal Facilities Inspected Each Year, 1990-1999**

	Inspections / Total No. of Major Industrial Facilities	% Major Industrial Facilities Inspected Per Year	Inspections / Total No. of Major Municipal Facilities	% Major Municipal Facilities Inspected Per Year
1990	53/50	100%	135/85	100%
1991	56/50	100%	168/85	100%
1992	42/50	84%	148/85	100%
1993	56/50	100%	158/85	100%
1994	53/50	100%	131/85	100%
1995	32/50	64%	121/85	100%
1996	35/49	71%	104/85	100%
1997	40/49	82%	102/85	100%
1998	26/49	53%	69/85	81%
1999	23/49	47%	79/85	93%

Inspection data provided by Information Management Coordinator, Environmental Protection Agency, Region 5, Water Enforcement and Compliance Assurance Branch (Nov. 28, 2000).

¹⁹ Telephone Interview by MEA with Permits Process & Facility Management Section Chief, Bureau of Watershed Management (Sept. 13, 2000).

²⁰ Telephone Interview by MEA with Wastewater Permits & Pretreatment Section Chief, Bureau of Watershed Management (Sept. 12, 2000).

²¹ Telephone interview by MEA with Permits Process and Facility Management Section Chief, WDNR (Sept. 13, 2000); telephone interview by MEA with Wastewater Permits and Pretreatment Section Chief, WDNR (Sept. 12, 2000).

²² For an enforcement action to be recorded in this database, the BLE must have a copy of that action, e.g., a copy of an NOV. Because physical copies of enforcement actions may not make it to the BLE—for example, in those situations where WPDES field staff conduct secondary enforcement—the information presented in Figure 4 may underrepresent the actual number of enforcement actions. Nevertheless, this is the best available data from the DNR.

²³ **Secondary Enforcement Actions in the WPDES Program, 1990-1998**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total No. of Municipal and Industrial Facilities in SNC	362	375	349	357	363	363	376	372	363	No Data
NOVs	6	22	44	43	55	53	53	28	39	39
% of Facilities in SNC that received NOVs	2%	6%	13%	12%	15%	15%	14%	8%	11%	--
Referrals to the DOJ	12	9	16	10	7	10	8	4	8	6
% of Facilities in SNC that were Referred to DOJ	3 %	2 %	5 %	3%	2%	3 %	2%	1%	2%	--

Number of NOVs and referrals to the DOJ obtained from Environmental Enforcement Officer, on Sept. 29, 2000, and Oct. 11, 2000.

Number of facilities in SNC came from the DNR. Data for 1993-1998 came from the DNR's Discharge Monitoring Report database. Data for 1990-1992 came from DNR microfiche.

²⁴ See table above.

²⁵ Data obtained from Environmental Enforcement Officer, on Sept. 29, 2000, and Oct. 11, 2000. Data for the year 2000 current through Sept. 29, 2000.

²⁶ Total number of violations of WPDES permits by municipal sources comes from 1998 DMR database. Violations of monthly, weekly, and annual limits constitute violations for every day of that time period. See *United States v. Smithfield*, 191 F.3d 516, 527 (4th Cir. 1999), cert. denied, 121 S.Ct. 46 (2000). The maximum penalty the state can seek for a violation of WPDES permit is \$10,000 per violation per day. Wis. Stat. 283.91(2).

²⁷ Telephone Interview by MEA with DNR Environmental Enforcement Officer, (Sept. 15, 2000); Telephone Interview by MEA with Permits Process and Facility Management Section Chief, Bureau of Watershed Management (Sept. 13, 2000).

²⁸ **Bureau of Watershed Management Expenditures, FY 1990-2000**

Fiscal Year	Bureau of Watershed Management, Total Budget	Bureau of Watershed Management, Expenditures on Permit Drafting and Compliance Assistance	Enforcement as a Percentage of Total Bureau of Watershed Management Budget
1989-1990	\$31,829,900	\$1,757,943	6%
1990-1991	\$31,610,300	\$1,749,731	6%
1991-1992	\$39,407,000	\$1,817,510	5%
1992-1993	\$42,875,700	\$1,851,461	4%
1993-1994	\$46,373,900	\$2,248,508	5%
1994-1995	\$46,764,600	\$2,198,216	5%
1995-1996	\$48,601,000	\$2,104,033	4%
1996-1997	\$46,932,600	\$2,044,149	4%
1997-1998	\$49,658,900	\$2,451,299	5%
1998-1999	\$49,463,800	\$2,482,208	5%
1999-2000	\$54,367,700	\$3,290,961	6%

Data obtained through e-mails from Policy and Budget Analyst, WDNR, to MEA (Dec. 8, 2000, Feb. 8, 2001, Feb. 14, 2001). The total amount spent reflects estimated average salary, fringe benefits, and supplies and services expenditures for all regions. It does not include expenditures for outside contractors hired by a department (i.e. computer programmers). Telephone Interview by MEA with Policy & Budget Analyst, Department of Natural Resources (Dec. 14, 2000).

²⁹ Fairbank, Maslin, Maullin & Associates telephone survey conducted for the League of Conservation Voters Education Fund, May 17-21, 2000. A random sample of this type is likely to yield a margin of error of +/- 4.8 percent in 95 out of 100 cases.