



Permitting for Environmental Results (PER)

NPDES Profile: Minnesota and Indian Country

PROGRAM RESPONSIBILITY

State of Minnesota: NPDES authority for base program, pretreatment, general permitting, federal facilities

EPA Region 5: NPDES authority for biosolids

EPA Region 5: NPDES authority for all facilities in Indian Country

Program Integrity Profile

This profile characterizes key components of the National Pollutant Discharge Elimination System (NPDES) program, including program administration and implementation, environmental outcomes, enforcement, and compliance. EPA considers profiles to be an initial screen of NPDES permitting, water quality, enforcement, and compliance programs based on self-evaluations by the States and a review of national data. EPA will use the profiles to identify program strengths and opportunities for enhancements. For more information, please contact Sally Patrick, State of Minnesota, at (651) 297-4786 or Peter Swenson, EPA Region 5, at (312) 886-0236.

Section I. Program Administration

1. Resources and Overall Program Management

The State of Minnesota:

Minnesota's NPDES permit program was authorized in 1974; authorization of other parts of the program occurred as follows: regulation of federal facilities, 1978; pretreatment program, 1979; and general permits, 1987. Minnesota has not been authorized for biosolids.

Minnesota's program for the protection and restoration of surface water quality is under several divisions—the Municipal Division, Industrial Division, Regional Division, and Environmental Outcomes Division—within the Minnesota Pollution Control Agency (MPCA).

In fiscal year (FY) 2003, the State budgeted more than \$16 million and dedicated approximately 170 full-time equivalents (FTEs) for administration of its NPDES program. The 2003 budget included almost \$4 million in federal funds.

According to the NPDES management report, the State has 88 major facilities and 752 minor facilities with individual permits and 343 non-stormwater minor facilities covered by general permits.¹

¹ The State of Minnesota reports numbers for minor facilities that are lower than those obtained by EPA from the Permit Compliance System (PCS) database and shown in the National Data Sources column of the Management Report, measure #2. This difference is due to the fact that MPCA tracks within PCS facilities under State Disposal System (SDS) permits, which are not NPDES permits. This also explains differences in State and EPA numbers for Management Report measures #5, #6, and #7. The values in the Additional Data column for these measures exclude SDS permits.

The State has a multifaceted program for training staff who implement the NPDES program. For example, the State routinely conducts inspector training, which covers procedures for conducting announced and unannounced inspections, completion of Discharge Monitoring Reports (DMRs), discharge sampling and sample-handling protocol, and managing the compliance database. Inspectors are trained on enforcement tools and certified on the basis of their knowledge and experience. New permit writers are mentored by experienced writers. Permit writers have a copy of "How to Write Permits for the State of Minnesota" and attend EPA training and external training provided by MPCA for permittees. MPCA has frequent training sessions that provide an introduction to standards and the effluent limit review process. Detailed training is provided annually. Training on MPCA's electronic permit writing system is included in overall training for new permit writers. MPCA provides training for setting water quality-based effluent limits (WQBELs) for toxic pollutants. This process can be used for setting whole effluent toxicity (WET) limits, but there is no training specifically directed toward WET. Staff with extensive experience in toxicity reviews perform the review of standards and provide in-depth training case by case. The State has a specialist in pretreatment, who meets with compliance, permitting, and technical staff on an ongoing basis to provide information on pretreatment issues. Mentoring between permit writers and the specialist takes place informally on a daily basis. To stay current, the specialist participates annually in EPA training. In addition to the general permit training, the concentrated animal feeding operations (CAFO) program provides training including specific mentoring on permit needs and ensuring that the effluent guidelines for CAFOs are met.

EPA Region 5:

Although MPCA has been authorized to implement the NPDES programs within Minnesota, EPA Region 5 carries out direct implementation activities in Indian Country and maintains federal biosolids program responsibility in the State.

Regional permitting activities in Indian Country are described in section I.3 below.

The Region's NPDES Programs Branch has approximately 0.5 FTEs committed to the non-authorized programs in Minnesota. This staffing is adequate for the current permit load (Tribal permits, stormwater permits in Indian Country, limited biosolids permitting). Congress intended, however, that biosolids requirements would be implemented through permits. Because of resource constraints, the Region includes biosolids requirements in permits that it issues within Indian Country but has not issued permits for other facilities. The Region estimates that an additional 1 FTE would be needed to issue biosolids permits for all facilities in the Region. Additional enforcement and compliance staff would also be needed to monitor compliance. Additional resources would be needed if the Region did not continue to use general permits for stormwater discharges from construction activities.

The Region has not seen any permit writer staff turnover in recent years. To ensure that quality permits continue to be written, additional staff are being trained by the senior staff.

2. State Program Assistance

The Region made progress in helping Minnesota obtain biosolids program approval. Region 5 provided contract assistance to do a review of Minnesota's existing program, which helped to identify areas of the program that needed to be updated. The Region worked with Minnesota to update the identified areas, including State rules. The State, however, does not wish to seek program approval at this time because it does not see any benefit.

3. EPA Activities in Indian Country

EPA Region 5 is responsible for implementing federal NPDES programs in Indian Country within the State of Minnesota (12 Tribes). Currently, the Region has a universe of 20 facilities needing permits within Indian Country in Minnesota.²

4. Legal Authorities

EPA is conducting a comprehensive review of the State's legal authorities. This review has not yet been completed. As a result, EPA is reserving this section of the profile; when the legal reviews are complete, EPA will update profiles to include the results of the reviews.

5. Public Participation

An evaluation of the State's legal authorities regarding public participation will be included in the legal authority review. As noted above, the legal authority review section of this profile is reserved pending completion of the legal authority review.

The State of Minnesota:

MPCA implements a public participation process consistent with the Clean Water Act (CWA) and as described in the Minnesota Rules (Minn.R.) chapters 7000 (Minnesota Procedural Rules) and 7001 (Permit and Certifications) to ensure an orderly and fair decision-making process, to preserve the integrity and independence of agency decisions, and to promote public confidence in those decisions.

MPCA provides the public, the permittee, and any other interested parties opportunities to obtain information from MPCA about a particular permit and to provide comments on the permitting process. MPCA's training document, "How to Write Water Quality Permits for the State of Minnesota," documents the public participation process.

MPCA provides for public participation in the permit process by including a 30-day public comment period for the permit application and preliminary determination to issue or deny issuance of a permit. Copies of the public notice are mailed to the applicant, to all persons who registered their names and addresses on a mailing list, and to any interested person upon request. The public notice is also available at MPCA's main and regional offices. Interested parties are added to the public notice mailing list on request. Any person may submit a petition for a public informational meeting during the permit public comment period, and all interested parties may ask questions and raise issues in an informal setting. The public may also become involved informally prior to public notice, as part of negotiations with the permittee and other interested parties.

Public Notice: The public involvement period may start informally during the permit-development process, possibly during negotiations with the permittee and interested parties prior to public notice.

² The National Data Sources column of the Management Report, measure #2, shows 17 permits under EPA activity. Three additional permits were not included on a list of EPA-issued permits provided by Region 5 for use in developing the backlog report, which is the national data source for this measure. One of these three permits is scheduled to become inactive, which will bring the universe to 19.

Formal public involvement starts on the date that the draft permit is made available for public comment, and it continues until the public comment period ends and the final permit is issued.

Minn. R. 7001.0100, subpart 4, describes the requirements of the public notice (including a 30-day public comment period) of the permit application and preliminary determination to issue or deny issuance. The public notice also includes the name, address, and telephone number of a contact person at MPCA. According to the rule, any decision the agency makes regarding a permit or permit application is made available for public comment.

Subpart 5 describes the distribution of the public notice, including who should receive a copy of it. As noted above, copies are mailed to the applicant, all persons who registered their names and addresses on a mailing list, and to any interested person upon request. The public notice is also available at MPCA's main and regional offices. If the permit writer is aware of additional persons interested in the permit, they are added to the public notice mailing list.

Public notice documents and the availability of the permit and fact sheet are posted on MPCA's Web site. Notices of Intent (NOIs) for coverage under general permits are not currently available on the Web site.

Public Meetings: Any person may submit a petition for a public informational meeting during the public comment period. Public informational meetings are conducted by MPCA staff, and no formal decision-making takes place. Public meetings allow all interested parties an opportunity to ask questions and raise issues in an informal setting.

MPCA Citizens' Board: When the Minnesota Legislature created MPCA in 1967, lawmakers understood that environmental issues could be complex and controversial. The MPCA Citizens' Board was established to ensure that decisions made by the agency would take into account multiple perspectives and allow citizens to share their ideas and concerns. The board consists of nine members: the MPCA Commissioner (who acts as board chairperson) and eight members appointed by the Governor and confirmed by the Minnesota Senate to 4-year, staggered terms. One member must be knowledgeable about agriculture, and another must be a representative of organized labor. The board meets monthly and can also call special meetings to address issues of extraordinary complexity or public interest. Citizens are welcome to provide comments to the board during meetings. A fact sheet titled "MPCA Citizens' Board and Public Participation," which further describes board meetings and how the public can participate, is available on MPCA's Web site.

Contested Case Hearings: A contested case hearing is a formal evidentiary hearing before an independent State administrative law judge and generally involves major technical issues. Minn. R. 7000.1800 lists the requirements for petition for a hearing and how a person may make a petition. Minn. R. 7000.1900 lists the three criteria for granting or denying a contested case hearing:

- A material issue of fact is in dispute;
- The agency has jurisdiction to make a determination; and,
- There is a reasonable basis underlying disputed issues of facts, so that holding a contested case hearing would allow the introduction of more information.

Definition of “Person”: “Public” is not defined in Minnesota regulations, but “person” is defined in Minn. R. 7000.0100, subpart 9: “‘Person’ means any human being, any municipality or other government or political subdivision or other public department or agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agency, legal entity, other than a court of law, or any legal representative of any of the foregoing, but does not include the agency.”

Public Access: The public has access to permit records, including fact sheets, permits, enforcement actions, and correspondence. Documents related to NPDES permits are maintained in MPCA’s main and regional offices, as well as in archival storage at an off-site location. All permit documents are subject to full disclosure except in rare instances when certain documents are determined not to be public information. These instances occur when permit documents are part of litigation, or when certain information is entitled to protection as trade secrets of the applicant, in accordance with Minnesota’s Administrative Procedure Act, which prescribes how and when the State government must respond to requests for disclosure of public records. The law that regulates the handling of all government data created, collected, received, stored, and maintained by a Minnesota State agency is in chapter 213 of the Minnesota Statutes. This chapter is referred to as the “Minnesota Government Data Practices Act.”

Fact sheets are required for all major permits, for general permits, for permits that incorporate a variance, and for permits that are the subject of widespread public interest or which raise major issues. Fact sheets describe the procedures used to develop new effluent limits, special operating conditions or requirements, and considerations given to anti-backsliding and nondegradation.

MPCA’s Web site, <http://www.pca.state.mn.us>, includes a contact list that provides phone numbers for a 24-hour duty officer; a citizen complaint line; and a customer assistance center that assists the public with questions on State rules, water permits, applications, fees, and other program issues. Citizens can also email questions and get a timely response from MPCA staff. Information on MPCA Citizens’ Board meeting schedules and agendas, as well as external training opportunities, is also linked. MPCA also has a special hotline number for information and complaints related to CAFOs.

MPCA regulations and information at <http://www.pca.state.mn.us/rulesregs/index.html> provide access to public notices issued by MPCA. Accompanying text informs visitors that most public notices are open for public comment for 30 days. Citizens may complete an on-line request form to be added to MPCA’s rule mailing list.

Searchable environmental data and summaries of enforcement activities are also available on-line at <http://www.pca.state.mn.us/data/index.html>.

Public information officers are listed with toll-free phone numbers and email forms at <http://www.pca.state.mn.us/newscenter/index.html>. Information regarding citizen environmental lawsuits is provided at <http://www.pca.state.mn.us/water/pubs/factsheets.html#legal>.

Individual NPDES permits and fact sheets issued by MPCA can also be accessed on-line at EPA’s Web site. Instructions for accessing these documents are available at <http://www.epa.gov/npdes/permitdocuments>.

EPA Region 5:

The Region follows the public participation requirements at title 40 of the Code of Federal Regulations (CFR) section 124.10. The Region sends a public notice to all persons on the mailing lists provided by the appropriate State agencies. Copies of the public notice, fact sheet/briefing memo, draft permit, and nondegradation review (if applicable) are posted on the Region's Web site at <http://www.epa.gov/region5/water/npdestek/notices.htm>.

6. Permit Issuance Management Strategy

The State of Minnesota:

The following is an assessment of MPCA's permit issuance rate and permitting strategies. (Note: Major dischargers reflect larger facilities or those discharging pollutants of the highest concern.)

Major dischargers:

- No major facilities hold permits expired for more than 10 years.
- Eighty-two percent of the major facilities have current permits as of July 9, 2004. Minnesota plans to reach the goal of 90% current permits for major discharges by December 2004.
- Nine dischargers have permits that expired more than 2 years ago.
- In calendar years 2001, 2002, and 2003, MPCA issued 11, 26, and 18 permits, respectively, for major facilities.

Minor dischargers:

- Eighty-eight percent of the minor facilities have current permits.
- Twenty-one minor facilities have permits that expired more than 10 years ago.
- Seventy-nine dischargers have permits that expired more than 2 years ago.
- MPCA issued 107, 189, and 161 permits, respectively, to minor facilities during calendar years 2001, 2002, and 2003.

CAFOs:

- MPCA issued a general NPDES permit specific to CAFOs in May 2001.
- In calendar years 2001, 2002, and 2003, MPCA issued 231 permits (8 individual and 223 general); 250 permits (6 individual and 244 general); and 67 permits (15 individual and 52 general), respectively.

MPCA has a permit backlog reduction strategy in place. MPCA plans to reduce the backlog of major permits to 10% by December 2004 and to reduce the backlog of minor permits to 10% by December 2005. As part of this strategy, the State accelerated the effluent limits-setting process by prioritizing

reviews and setting deadlines, developed a permit writers' manual (currently being updated), coordinated EPA training for all permit-writing staff in the State, established a permit forum system to resolve permitting conflicts quickly, assessed and modified permitting policies and procedures to reduce permit issuance delays, made improvements to the data management system (called DELTA), and expanded the use of general permits.

**Table 1: Percentage of Facilities Covered by Current Permits in Minnesota
(State-Issued Permits)**

	2000	Nat'l Avg.	2001	Nat'l Avg.	2002	Nat'l Avg.	2003	Nat'l Avg.
Major Facilities	53%	74%	51%	76%	75%	83%	85%	84%
Minor Facilities Covered by Individual Permits	53%	69%	52%	73%	67%	79%	78%	81%
Minor Facilities Covered by Individual or Non-stormwater General Permits	N/A	N/A	N/A	N/A	74%	85%	83%	86%

Source: PCS, 12/31/00; 12/31/01; 12/31/02; 12/31/03. (The values in the National Data Sources column of the Management Report, measures #19 and #20, are PCS data as of 6/30/04.)

EPA Region 5:

The Region issues permits for facilities that discharge within Indian Country in Minnesota. In general, the prioritization for issuing permits is as follows:

1. Facilities that must be, but are not currently, permitted, emphasizing those that pose the greatest threat to public health or the environment
2. Facilities that were permitted by a State
3. Instances where the Tribal government raises important considerations
4. Expired permits

Currently, the Region has a universe of 20 facilities requiring permits within Indian Country in Minnesota. This number does not include stormwater permits covered under the national general permit. No permits in the universe are considered backlogged. [Note: The National Data Sources column in the Management Report indicates that there are 17 such facilities. This latter number does not include three additional facilities tracked by Region 5, including one stormwater permit scheduled to become inactive.]

7. Data Management

The State of Minnesota:

The system for managing NPDES permit data relies primarily on two databases—EPA’s Permit Compliance System (PCS) and Minnesota’s DELTA database. The State uses DELTA to manage information about NPDES permits; the applications on which they are based; and the facilities, outfalls, and monitoring points that they cover. DELTA facility information includes facility contacts, address, receiving water, and geographic information. All permits issued, reissued, or modified after October 1998 were developed in DELTA. The system contains the entire text of the permit as well as application information, the public notice, and issue, expiration, and modification dates. The DMRs are generated directly from the limits and monitoring requirements as they are written in the permit. Construction schedules and date requirements for other reports due throughout the life of the permit are tracked in the system as well. A violation-detection process runs nightly, and several reports are available to evaluate facility compliance. There is no capability for data exchange between PCS and the DELTA system, and thus Water Enforcement National Data Base (WENDB) data elements must be entered into PCS manually. DELTA also tracks inspection and compliance information for both major and minor facilities. Finally, DELTA tracks sanitary sewer overflow (SSO) events in its incident reporting program.

For CAFOs, the database contains information on animal type, animal numbers, animal units, and manure storage facilities. It also includes global positioning system (GPS) locational data for feedlots or manure storage facilities.

With respect to the stormwater program, data from the permit applications are entered into the DELTA database to facilitate permit issuance and tracking. The MS4 database, which is currently under construction, will contain information similar to the other two permit categories. MPCA is developing an electronic (Web-based) NOI application submission and electronic fee payment process for construction stormwater permits that will further increase program efficiency.

Finally, with respect to the pretreatment program, compliance information is tracked in DELTA and inspection information is tracked in both DELTA and PCS.

Data Quality: Minnesota enters all WENDB data into PCS and consistently has a DMR entry rate at or above the national goal of 95%.

DELTA has the capability to track location (latitude/longitude) information at both the facility and the pipe levels. Facility-level latitude/longitude data for major facilities are nearly complete. Pipe-level information for major facilities is present for effluent discharge points. Minor facility-level latitude/longitude data are present for the majority of facilities, while the pipe-level data are not complete. These data were derived from either GPS or address matching. As described above, geolocal data are also available for the location of feedlots and manure storage facilities.³

³ The number of pipes at facilities covered by individual permits shown in the National Data Sources column of the Management Report, measure #5, is high because it includes pipes at non-NPDES SDS facilities. See also section I.1 and measures #2, #6, and #7.

To ensure timely and accurate reporting of data, DELTA is updated nightly and by design automatically translates permit conditions into DMR forms, thereby eliminating potential data entry errors. DMR data are entered into DELTA. The limits and monitoring requirements of those permits not yet issued in the DELTA system have been coded to support timely data entry of the DMRs. Data management staff members are charged with reviewing permits before public notice for any inconsistencies that might prevent proper data feedback once the permit is issued. MPCA does not currently have any NPDES electronic reporting systems. The State is working on developing that capability and is evaluating authentication options. MPCA will monitor developments as EPA works on this issue. MPCA's goal for entry of DMR data is the 10th day of the month after the data are due. The quality assurance/quality control (QA/QC) process is ongoing. Because data are entered into two systems and reports are run from both systems, the data are cross-checked regularly. In addition, DMR and compliance schedule data are provided for major facilities only, and the quarterly noncompliance report (QNCR) is used as a QA/QC tool. MPCA periodically checks DELTA for violations.

EPA Region 5:

The Region uses PCS to track all permitting activities for the permits the Region issues.

The Region enters most WENDB data elements, with the exception of latitude/longitude data and compliance schedules. The Region ensures that all permit limits and measurement data are entered into PCS.

Biosolids data are not loaded into PCS for Tribal permits because the Region enters only Class 1 and major facilities. The Region provides preprinted DMRs for each Tribal and nontribal facility with a federally issued permit. This approach helps to facilitate the data entry process. However, not all facilities use the preprinted form or complete the form in its entirety, slowing the data entry process and possibly creating erroneous reporting or numeric violations.

Section II. Program Implementation

1. Permit Quality

The State of Minnesota:

MPCA works to ensure permit quality by providing guidance and training to permit writing staff and by interacting with EPA.

MPCA permit writers are provided many training opportunities. In addition to attending EPA-sponsored permit writers' training, staff attend annual MPCA training on the development of effluent limit sheets and checklists. Topics include water quality standards overview and update, NPDES effluent limit review process, agency strategies (e.g., the phosphorus strategy), Lake Superior Basin standards and toxic effluent limits, mercury strategy, and total maximum daily loads (TMDLs). Training on MPCA's electronic permit writing system (DELTA), including instruction on individual screens, is also included in overall training for new permit writers. MPCA's staff includes individuals with extensive experience who perform the review of water quality standards and provide in-depth toxicity training case by case for individual staff members. The State does not use national tools, but MPCA has developed two permit checklists (one for more-experienced and one for less-experienced permit writers.). MPCA's DELTA system also includes a number of permit writing functions. These tools help to ensure that consistent and complete requirements are included in permits issued by MPCA.

For all discharges within the Great Lakes Basin, MPCA develops WQBELs for toxic pollutants and for WET consistent with the procedures in the "Final Water Quality Guidance for the Great Lakes System" ("Great Lakes Guidance," 40 CFR part 132). MPCA's procedures are included in Minnesota Water Quality Rule 7052 and include procedures for determining when there is reasonable potential that pollutants in a permittee's discharge are present at levels that will cause or contribute to a violation of a water quality standard (including WET) and therefore require the development of a limit; procedures for developing WQBELs, including accounting for background concentrations of pollutants; and "nondegradation" procedures. Where a discharge is to an impaired water body where a TMDL has not been established, effluent limits are based on meeting the in-stream water quality criterion at "end of pipe" (i.e., no dilution is allowed).

Discharges outside the Great Lakes are covered under Minnesota Water Quality Rule 7050. MPCA has developed written procedures similar to those in effect for Great Lakes discharges that describe the processes for determining WET and chemical-specific pollutant parameter "reasonable potential," development of WQBELs, and nondegradation.

MPCA's water quality standards include a narrative standard to protect against in-stream toxicity. MPCA has developed procedural and implementation guidance for WET and chemical-specific requirements in permits. MPCA is completing revisions to this guidance, which will be forwarded to Region 5. The guidance covers the Lake Superior Basin and statewide requirements consistent with the Great Lakes Guidance. Although no specific WET training program has been developed for MPCA staff, new staff undergo general toxics overview training for setting WQBELs, primarily aimed at chemical-specific limits, and this process can also be used for whole effluent toxicity.

Each year MPCA and Region 5 discuss the State's program direction for the upcoming year, taking into consideration an assessment of program needs. MPCA provides the Region with information on permit issuance and backlogged permits, as well as annual work plan and staff assignments. Region 5 reviews a sample of draft permits each year. The State provides copies of the public notice, fact sheet, draft permit, and supporting documents. Public notices, fact sheets, and final issued permits are sent to EPA for all major permits and certain other permits. In 2003 Region 5 reviewed nine MPCA NPDES permits. Permit review selections are based on priority issues and diversity, including Great Lakes Initiative (GLI) dischargers, toxicity, combined sewer overflows (CSOs), critical industrial sectors, a sample of municipal dischargers, and long-expired permits.

MPCA fact sheets provide clear explanations of facilities, processes, and the basis for modified permit requirements and limits.

MPCA works with EPA to ensure that its permits are consistent with federal requirements. MPCA shares the initial draft with the permittee and EPA Region 5 at the same time prior to public notice. Region 5 permit reviewers discuss issues with MPCA permit writers and usually resolve any issues through informal communications. MPCA corrects Region-identified issues or clarifies facts based on Region 5's comments. For example, Region 5 identified that MPCA's CSO permit requirements needed to be modified to conform to federal requirements. Minnesota has also developed and implemented a mercury permitting strategy consistent with federal rules, including the GLI. MPCA provides Region 5 copies of all citizens' comments.

In developing the "permit quality" section of this program profile, State permits were not independently evaluated or compared to a national standard. Rather, the discussion is based primarily on an assessment of the QA/QC procedures established by Minnesota and routine permit quality reviews performed by EPA Region 5.

EPA Region 5:

The Region uses data included in the application and from PCS in preparing the draft permit and requests additional data from the applicant if needed. The Region will also use the permit as a tool to collect additional data for use in future permit actions. The Region believes its permits are of high quality. Over 90% of the permits that the Region issues are for municipal dischargers. The technology standards have not changed in many years, and Regional permit writers are very comfortable in their applicability. To ensure water quality standards are properly applied, the Region coordinates with the Tribes and Minnesota to determine where their standards apply and what limits are needed. The Region's Water Quality Standards Branch also has an opportunity to review the permits prior to issuance. All Regional permit writers take EPA's permit writers' course. All draft permits are reviewed by the senior permit writer. The Region has been able to withstand petitions to the Environmental Appeals Board (EAB). Over the past five years, three petitions for review have been received. All three have been denied by the EAB.

2. Pretreatment

The State of Minnesota:

On July 16, 1979, the State of Minnesota received authorization to administer the pretreatment program. Minnesota has a single pretreatment specialist, which appears to be an appropriate staffing level given the State's relatively small number of approved pretreatment programs. The pretreatment coordinator

meets with compliance, permitting, and technical staff on an ongoing basis to provide information on pretreatment issues. In addition, mentoring between permit writers and the pretreatment coordinator takes place informally on a daily basis. The pretreatment coordinator participates annually in EPA national training to stay current on national issues.

In Minnesota, nine publicly owned treatment works (POTWs) implement approved pretreatment programs and issue permits to 382 significant industrial users (SIUs). The State also requires 62 additional smaller POTWs to implement certain aspects of the pretreatment program in their communities.

An additional 117 SIUs not subject to categorical pretreatment standards discharge to POTWs without an approved pretreatment program. Of these SIUs, 113 have control mechanisms issued by their receiving POTW. Four of the SIUs have no control mechanism in place

Minnesota issues permits to the 61 known categorical industrial users (CIUs, which are SIUs subject to categorical pretreatment standards) that discharge to POTWs without approved pretreatment programs. The State has identified three additional CIUs discharging to POTWs without programs for which the State has not issued permits. These permits are currently under development.

Minnesota has audited 100% of its pretreatment programs in the past 5 years.

Knowledgeable staff review the findings of pretreatment compliance inspections and pretreatment audits of POTWs with pretreatment programs. Staff then prepare inspection reports and transmit the reports to the POTW, generally within 30 days after the audit. MPCA requires the POTW to take corrective actions on any deficiencies within 30 days of notification.

MPCA generally reviews annual reports within 30 days of receipt. The agency requires the POTW to submit any missing information within 30 days of notification. If discrepancies are found, MPCA requires the POTW to correct the deficiencies within 30 days. For 2003 Minnesota reviewed pretreatment annual reports from all approved programs. No follow-up actions were required.

The State conducts pretreatment inspections and annual report reviews less frequently for POTWs without approved local pretreatment programs.

3. Concentrated Animal Feeding Operations

The State of Minnesota:

MPCA has concluded that it has adequate legal authority to administer the 2003 revisions to the federal regulations for CAFOs. The following summarizes MPCA's progress in implementing the regulations.

Permitting: Minnesota issued a general permit for CAFOs in 2001. The permit contains effluent limitations based on the 1974 Effluent Limitations Guidelines and New Source Performance Standards, as well as water quality standards, and it requires implementation of a manure management plan. Five hundred nineteen CAFOs are authorized under the general permit, and an additional 29 are authorized under individual permits. MPCA plans to issue a new general permit in 2004. MPCA asked the public to comment on a draft general permit in July 2003. When issued, this permit will authorize animal feeding operations (AFOs) that are "newly defined" as Large CAFOs under the 2003 changes to the federal

clean water program for CAFOs. EPA is working closely with the State to ensure that the new general permit (1) contains effluent limitations based on the 2003 Effluent Limitations Guidelines and New Source Performance Standards, (2) requires implementation of the nine minimum control measures in 40 CFR 122.42(e), and (3) reflects adjustments to the State's technical standards for nutrient management as may be required under 40 CFR 123.36.

Minnesota regulations require that all AFOs with more than 300 animal units develop a comprehensive nutrient management plan (CNMP) by January 1, 2005. All CAFOs are required to have an approvable CNMP before permit issuance. CNMPs for non-CAFOs are reviewed during inspections.

Compliance Evaluation: Minnesota has a very good inventory of its Large CAFOs. In December 2003 MPCA completed periodic inspections of all Large CAFOs.

EPA Region 5:

Permitting: EPA Region 5 has received no applications for permits from CAFOs in Indian Country within Minnesota.

Compliance Evaluation: Although the current Region 5 inventory is probably incomplete, it indicates that eight AFOs (1) are located in or near Indian Country in Region 5 and (2) are or might be Large CAFOs. EPA Region 5 has performed no periodic (i.e., proactive) inspections of CAFOs in Indian Country in the Region.

4. Stormwater

The State of Minnesota:

Overall, Minnesota has five stormwater permits in place, and two are current (one of which has been appealed).⁴

Construction Activities: Minnesota's new general stormwater permit for construction activity (MN R100001) went into effect August 1, 2003. Permits are required from owners and operators for any construction activity disturbing 1 acre or more of land. The previous general stormwater permit for construction activity (MN R10000) expired September 4, 2003. Owners and operators who have permit coverage under the old permit must amend their stormwater pollution prevention plans (SWPPPs) to conform to the requirements of the new permit by February 1, 2005. Construction sites that discharge near special waters and waters with qualities that warrant extra protection must use additional best management practices (BMPs) and enhanced runoff controls. Sites that discharge near an impaired water for which there is a TMDL allocation for sediment and parameters associated with sediment transport must meet special conditions.

Industrial Stormwater Discharges: The existing NPDES general stormwater permit for industrial activity (MN G611000) has expired. The new draft general permit was placed on public notice in fall 2002. MPCA considered comments received and expects to have the general permit redrafted, made available

⁴ The National Data Sources column of the Management Report, measure #28, shows that there are no expired Phase I stormwater permits. The three expired permits—industrial general, Minneapolis municipal separate storm sewer system (MS4), and St. Paul MS4—were inadvertently not included in the count for two reasons: (1) the nature of the data source and (2) the fact that the Minneapolis and St. Paul permits had expired shortly before the 6-month grace period that was in effect when the data were pulled on July 1, 2004.

for public comment, and issued in 2005. Therefore, until the general permit is reissued, regulated industrial facilities should continue operating under the terms of the expired permit, which requires implementation of a site-specific SWPPP. New, non-municipal facilities and newly regulated municipally owned or operated industrial facilities must submit a permit application in order to meet the federal requirements of applying for NPDES permit coverage for an industrial activity. Until the general permit is reissued, the State recommends that facilities develop and implement an SWPPP that complies with the draft NPDES general stormwater permit for industrial activity, which includes the SWPPP requirements contained in the expired permit.

Municipal Separate Storm Sewer Systems (MS4s): MPCA issued two Phase I MS4 permits to Minneapolis and St. Paul. Those two permits expired at the beginning of 2004 and have not yet been reissued. MPCA plans to make the Minneapolis MS4 permit and the St. Paul MS4 permit available for public comment in 2004. The final permit is expected to be issued in 2005. MPCA issued the small MS4 general permit in June 2002. In July 2002 the Minnesota Center for Environmental Advocacy (MCEA) filed an appeal of the permit. MCEA alleged several deficiencies, including inappropriate use of general versus individual permits, failure to address nondegradation issues, and lack of adequate public participation and monitoring requirements. In May 2003 the Minnesota Court of Appeals ruled that the use of general permits and BMPs was appropriate and that the monitoring required in the permit was adequate. The court also called for the opportunity for public comment and public hearing on each permittee's proposed SWPPP, required MPCA to determine whether additional control measures are necessary if the permittee has new or expanded discharges, and ruled that the language of Minnesota's permit must follow federal language and require permittees to reduce (instead of minimize) pollutants.

MPCA is reviewing the court's decision and examining the current program in light of this ruling and will keep the public and regulated community informed as to necessary permit and program changes.

The Management Report states that there are no expired Phase I Stormwater permits in Minnesota. As discussed above, however, the two Phase I MS4 permits and the industrial stormwater general permit are currently expired.

EPA Region 5:

Municipal Separate Storm Sewer Systems (MS4s): Region 5 has received an individual permit application from the Shakopee Mdewakanton Sioux Community for its small MS4 in Indian Country within the State of Minnesota. The Region expects to make a proposed permit available for public comment by December 2004.

Construction Activities: EPA's general permit for stormwater discharges from construction sites, which encompasses Indian Country in three Region 5 States, was issued on July 1, 2003. Region 5 has sent letters and NOI forms to operators of construction sites larger than 1 acre that began construction activities before the permit was issued, in accordance with EPA's interim stormwater permitting policy. New applicants may apply for coverage by submitting an NOI by mail or by accessing EPA's Electronic Notice of Intent (eNOI) Web site (<http://cfpub.epa.gov/npdes/stormwater/enoi.cfm>). Once a complete NOI is submitted, the permittee may begin land-disturbing activities 7 days after the NOI appears on the eNOI system, as long as such activities comply with all requirements of the general permit. Construction operators and others can access the system and check for NOIs at <http://cfpub.epa.gov/npdes/stormwater/noi/noisearch.cfm>.

General Permit for Stormwater Discharges Associated with Industrial Activities in Indian Country: EPA Region 5 is continuing to work with EPA headquarters on options for providing general permit coverage for stormwater discharges associated with industrial activities in Indian Country. Region 5 will work with the Tribes to identify all facilities in Indian Country that might need permits. Until a general permit option is available, the Region will prioritize its permitting efforts in Tribal areas on facilities with the greatest potential risk to the environment.

5. Combined Sewer Overflows/Sanitary Sewer Overflows

The State of Minnesota:

Combined Sewer Overflows: The State's approach to controlling CSOs has been to require sewer system separation. As a result, only two communities in the State hold CSO permits. Minnesota believes that all sewers within the service area of these two communities have been separated. In one case, the community has successfully eliminated overflows. The other city still experiences occasional overflows but has an aggressive program to eliminate the sources of the extraneous water causing the bypassing. Over the past several years, the number of events and volume of flow bypassing from the city have been greatly reduced.

Permittees are required to maintain a plan for notifying the public of potential health threats due to discharges of untreated or partially treated wastewater and to notify the public in accordance with the plan.

Sanitary Sewer Overflows: All NPDES permits for POTWs in Minnesota contain requirements to report bypassing. SSOs are reported to the State. MPCA enters this information into its DELTA database. MPCA compliance staff check the information, review the corrective actions taken by the municipality, and take appropriate action. Where long-term solutions have been necessary to correct the causes of the SSO, MPCA has developed SSO permit language with requirements similar to the capacity, management, operation, and maintenance conditions envisioned by EPA.

NPDES permits prohibit overflows and require public notification if they occur. All permittees are required to notify the Minnesota Department of Public Safety Duty Officer of overflows in their systems. The State has developed an emergency notification poster and guidance to facilitate this reporting. The Duty Officer faxes the notification to MPCA, respective regional offices, and the local sheriff's office. After an overflow occurs, permittees must submit written documentation to the agency, including the cause of the overflow. Compliance staff and permit writers then review the information. Information collected by the Duty Officer includes the date the overflow began, duration, type, and receiving waters.

EPA Region 5:

CSOs: There are no CSOs within Indian Country in EPA Region 5.

SSOs: The NPDES permits issued to POTWs by the Region require notification of noncompliant discharges, including SSOs. Upon notification of an overflow, the Region determines whether public notification is needed on the basis of the location and quantity of the overflow.

6. Biosolids

The State of Minnesota:

The State of Minnesota does not have formal authorization from EPA to administer the biosolids program. MPCA does have the authority under State law to regulate all biosolids technical and permitting requirements as set in the federal codes [40 CFR 503, 40 CFR 123, and so forth]. Minn. R. chapter 7041 includes all the federal technical and permitting requirements. MPCA does not have the resources to seek authorization.

The technical requirements for biosolids at the federal and State levels are self-implementing (i.e., are effective without being included as permit conditions). Nevertheless, Minnesota implements the biosolids requirements through the NPDES permit program. The State has also accepted the responsibility for receiving annual reports that EPA would normally receive and for inputting data from those reports into the State's DELTA database, which can then be uploaded into PCS. This assistance saves EPA resources. Minnesota is also one of the few States that require biosolids haulers within the State to be trained and certified. This has helped to reduce the number of complaints in the State.

EPA Region 5:

EPA Region 5 carries out direct implementation of the federal biosolids program within Minnesota. The level of effort has been reduced due to reduced funding for the program nationwide. Because of limited resources, the Region includes biosolids requirements only in permits issued within Indian Country. Other Regional activities include providing outreach to the regulated community, assisting the States in seeking program approval, and providing technical and compliance assistance. Minnesota has agreed to accept facilities' annual reports and to monitor compliance. Enforcement actions related to biosolids are typically initiated in response to complaints or are part of more comprehensive enforcement actions.

To increase Regional activities and provide for more proactive management of the biosolids program in the future, both the permitting and enforcement programs in EPA headquarters will need to reinvest in the program or provide dedicated funds for program implementation to the Region.

Section III. NPDES Compliance Monitoring and Enforcement Response

In a separate initiative, EPA's Office of Enforcement and Compliance Assurance (OECA), EPA Regions, and the Environmental Council of the States have developed a tool for assessing State performance in enforcement and compliance assurance to ensure that States meet agreed-upon minimum performance levels and provide a consistent level of environmental and public health protection nationwide. OECA will use the State profiles to focus these efforts and identify areas needing further discussion and evaluation.

1. Enforcement Program

The State of Minnesota:

MPCA follows the traditional enforcement program direction set by EPA with respect to focusing its activities on managing the significant noncompliance (SNC) rate and active exceptions list for major facilities. In addition, MPCA pursues sector and watershed priorities based on MPCA or EPA initiatives. Targeting for compliance and enforcement is accomplished by several methods, including the QNCR from PCS for major facilities, monthly significant violation reports from DELTA for minor facilities, inspections, routine file reviews, permitting actions, and complaints.

With respect to the pretreatment program, findings of pretreatment compliance inspections and pretreatment audits of delegated POTWs are reviewed by knowledgeable staff who prepare reports and transmit them to the POTW, usually within 30 days. MPCA generally requires any necessary follow-up actions within 30 days. MPCA typically reviews annual reports within 30 days of receipt. Any missing information is generally required to be submitted within 30 days. If discrepancies are found, they are generally required to be corrected within 30 days. For 2003 MPCA reviewed eight pretreatment annual reports from the approved programs. No follow-up actions were required.

During the past year, MPCA conducted stormwater inspections at 400 construction sites. Historically, the majority of these inspections have been conducted as the result of receiving a complaint. MPCA is currently evaluating how these inspections should be prioritized through a unique stakeholder partnering effort. Under this arrangement, local partners and construction site inspection activity conducted by MS4s will be used to augment MPCA's inspection data. MPCA is considering a number of criteria for prioritizing when and where inspections are performed, including proximity to impaired or sensitive water bodies, size of development, percent of imperviousness project area, and other criteria.

MPCA developed and implemented enforcement response guidance in October 1999. The guidance is contained in the agency's Enforcement Response Plan (ERP). The ERP provides guidance to staff on how to respond to various types of noncompliance, a description of enforcement tools and their uses, guidance on how to bring a case to the enforcement forum (see below for the description of the enforcement forum), and enforcement tool templates. The ERP is designed to help ensure appropriate and consistent enforcement follow-up to noncompliance. The ERP is used for the training of new staff and is the starting point for staff when addressing noncompliance.

The State has a number of options to return facilities to compliance. Enforcement tools include letters of warning (LOWs), notices of violation (NOVs), administrative penalty orders (APOs), and stipulation

agreements. LOWs and NOVs carry no monetary penalty, but they identify the noncompliance and the corrective action needed to return to compliance with the appropriate schedule. In 1988 the State structured its NOV to be consistent with EPA's definition of a formal enforcement action, but since that time EPA's definition has changed and the NOVs are no longer considered formal enforcement actions under the revised definition. MPCA has developed a management work plan to integrate the various compliance tools. The plan integrates the efforts of staff working on permits, technical review, compliance evaluation, enforcement, assistance, information management, and policy development. Success is monitored through overall compliance rates, which reflect the State's efforts using all compliance tools.

Enforcement guidance exists for major and minor discharge sources, feedlots, and stormwater construction projects. All proposed enforcement cases that will result in issuance of a formal enforcement document are brought to an enforcement forum. The forum participants consist of the case lead, senior staff from the Water Quality program, an enforcement supervisor, and a representative from the State Attorney General's office. The forum participants discuss the case, the proposed action, and the corrective action(s), and must reach consensus on the appropriate enforcement response, including penalty (if applicable), before the case may proceed. If consensus cannot be reached, a dispute-resolution process is used. The ERP provides general guidance for addressing violations, whereas the forum process looks at case specifics and helps ensure appropriate and consistent enforcement follow-up to violations.

MPCA has a general penalty policy (MPCA's Board Penalty Policy) contained in the agency's ERP. MPCA also has specific penalty guidance documents for calculating penalties for water quality violations (ERP, Appendices V-3, V-7, and V-8). The appendices provide staff with guidance on how to determine a penalty appropriate to the violation(s) by looking at three penalty parts: (1) base penalty, (2) adjustments, and (3) economic benefit. The base penalty is calculated using a two-dimensional matrix. The two parameters used in the matrix are (1) the potential for harm to the public and/or the environment and (2) the deviation from compliance of the violation(s). Adjustments evaluated include the willfulness or culpability of the regulated party, history of past violations, and other factors. As mentioned earlier, all penalty calculations are brought through the enforcement forum process to discuss the appropriateness of the penalty to the violation(s), and consensus must be reached.

MPCA is developing timeliness goals for steps in the enforcement process. If initial action fails to return a regulated party to compliance, the case is brought back to the forum to discuss the appropriate next step. EPA welcomes this analysis and believes it could result in significant enhancement to the MPCA program because the average duration of SNC for major facilities has been over 30 months (twice the nationwide average).

The State reports that the total number of enforcement actions for major and minor facilities remained fairly consistent for the federal fiscal years (FFY) 2002 and 2003, with the majority of enforcement actions taken at minor facilities. At times the data in PCS have not supported this assertion. The State believes that this discrepancy has been due to reporting errors and that the data maintained in an internal State enforcement tracking database have not always been entered into PCS. This is an issue that EPA will monitor in the future to ensure that the necessary data are entered into PCS. MPCA had just finished an adjustment in its organizational structure realigning resources to water quality compliance and enforcement in early FFY 2002. This adjustment focused on major facility inspections in FFY 2002,

which likely explains the increase in total actions in FFY 2003. Total penalty dollars decreased between FFY 2002 and 2003 because four large stipulation agreements had been executed in FFY 2002.

The Region has historically evaluated the strength of the State's enforcement program against two key indicators—the percentage of facilities in SNC in any given quarter and the size of the active exceptions list—with the goal of maintaining the former below 10% and the latter below 2%. The Region has viewed these two indicators as the best evidence of whether the State's actions are timely and appropriate and penalty amounts sufficient. The State has routinely met these expectations. Over the course of the next several years, the Region will conduct file audits in all of its States, with the intent that these subordinate factors (e.g., timeliness, penalty size) will be more closely assessed to ensure that historic reliance on the two key indicators has been an appropriate means to assess the overall health of the enforcement program.

MPCA internally tracks the progress of enforcement cases from initiation through closure. MPCA tracks the following information for cases: discovery dates, forum dates, document issuance dates, facility response dates, penalty payments and supplemental environmental project values, and case closure date. This approach allows MPCA management to ensure that cases are progressing and that all cases are closed.

EPA Region 5:

The Region targets its efforts to ensure base program integrity, as well as to maximize the environmental benefits of its actions. In terms of the base program, the Region monitors the quarterly noncompliance report and the active exceptions list to ensure that they remain below 10% and 2% respectively. These targets are routinely met. Generally, because most NPDES program elements have been delegated, State enforcement action is the primary mechanism for managing against these goals. Environmental performance partnership agreements and annual work plans contain language that indicates that where these goals are not met, federal enforcement action will be a priority. Currently, a high priority for the Region is enforcement related to CSOs and SSOs. This has minimal impact with respect to CSOs in Minnesota because there are very few CSO communities, but SSOs remain an area of emphasis. Other wet-weather sources of pollution are also being targeted. To this end, the Region has also developed a CAFO permitting and enforcement strategy and is updating its stormwater strategy. It is in the early stages of developing a strategy to address failing on-site wastewater treatment systems.

The Region has direct implementation responsibilities for the federal biosolids program in Minnesota. In addition, it has direct implementation responsibilities within Indian Country. Enforcement actions related to biosolids are generally prompted by complaints. The need for enforcement actions in Indian Country has been rare.

EPA's NPDES program has had an enforcement management system since the 1980s. This system is out of date, and development of new operating procedures has been a priority for completion by the end of 2004.

The Enforcement Division has a manual system, maintained by the enforcement process manager, for monitoring the status of cases in the pipeline. A monthly meeting is held to update the status of all proposed actions. In addition, meetings are scheduled with the Office of Regional Counsel approximately every 6 weeks to review the status of cases and identify potential bottlenecks. In 2002 the Enforcement Division also consolidated a number of databases used to track permittees' progress in

complying with enforcement actions and made a concerted effort to review all open cases and close out those for which closure was appropriate. Approximately 40% of open cases were closed out as a result of this effort.

Traditionally, noncomplying major facilities in Minnesota have been addressed by the State well before they would have appeared on the active exceptions list. For this reason, federal enforcement in Minnesota has been minimal over the past few years. MPCA keeps EPA informed of issues and developments and often seeks EPA's advice on approaches to dealing with certain SNC events. On several occasions EPA has issued federal NOV's to encourage discussions between the State and noncomplying dischargers. QNCR data are available in PCS. Enforcement data are available, as necessary, through direct request to MPCA.

The Region develops formal administrative records in accordance with 40 CFR 124.18 for all the permits it issues.

2. Record Keeping and Reporting

The State of Minnesota:

The State maintains accurate and up-to-date records through the use of its DELTA system.

3. Inspections

The State of Minnesota:

The State commits to inspecting 100% of its major facilities every year and reports that it has routinely accomplished 90% of this commitment. Data available in PCS, however, indicate that the actual inspection rate ranged between 41% in 2000 and 71% in 2003. The Region believes that this discrepancy may be due to the State's inclusion of pretreatment inspections in its tally, whereas EPA includes only non-pretreatment inspections. The Region will work with the State to resolve this issue. In evaluating this performance, EPA notes that the number of major facilities in SNC declined from 20% in 2000 to 7% in 2003, which is well below the MPCA/Region 5 goal of less than 10% in any quarter.

With respect to minor facilities, inspections are conducted at approximately 20% of the traditional minors each year. Compliance is also monitored through monthly SNC reviews and detailed file reviews. Monthly significant violation reviews include effluent violations exceeding technical review criteria and failure to submit DMRs. Detailed file reviews are conducted in preparation for inspections, when reporting discrepancies are noted, or when complaints or concerns are raised about a particular facility.

Minor SSOs: Dischargers must report bypassing within 24 hours. Compliance staff follow up with appropriate compliance action or permit requirements.

CAFOs: MPCA agreed to inspect all CAFOs by December 31, 2003. After this initial inspection, the goal is to inspect them twice during the life of the permit (twice every 5 years). The inspections and compliance status are entered into the DELTA database.

Stormwater Permits: Currently, inspections of stormwater permittees are prioritized on the basis of complaints. The Region has established a goal of developing a stormwater enforcement strategy by

March 2005, with the intent that such a strategy could help prioritize stormwater enforcement efforts using additional factors, such as environmental impact. EPA Region 5 intends to develop this strategy with the input of the Region 5 States. Inspection results are entered into the DELTA database and tracked for compliance. Minnesota believes that improved stormwater permit compliance will be achieved through a combination of increased field presence, education and outreach, and technical assistance. All three of these efforts are being implemented at MPCA, as well as through Minnesota's Stormwater Steering Committee, a statewide stakeholder-driven effort. MPCA is embarking on a significant effort to use contracts with local units of government to increase its field inspection presence and to conduct stormwater education activities.

The most significant noncompliance issues have occurred in a number of sectors, including large, commercial developments in and around the State's most rapidly urbanizing areas; major highway construction projects that traverse sensitive or special waters or wetlands; and the cumulative impact of increasing imperviousness in Minnesota watersheds. Minnesota continues to experience unprecedented growth rates in areas that are rich in surface water resources (lakes, rivers, wetlands). These are the same areas that are most susceptible to inadequate stormwater controls and increasing imperviousness.

As stated above, MPCA follows the traditional EPA-prescribed approach to targeting its enforcement resources, against which inspection program performance continues to be measured. This approach focuses resources on addressing the violations reported on the QNCR. MPCA has also recently placed considerable emphasis on stormwater construction site noncompliance, as described above, and on CAFO inspections.

EPA Region 5:

The Region has developed a CWA inspection strategy that describes the manner in which inspections are prioritized and agreed to between the States and EPA. As described in this strategy, a variety of factors influence selection of inspection targets, including national and Regional priorities, case close-out needs, multimedia initiatives, complaints, and coverage requirements. The Region requests that the States perform all coverage inspections, though most of them have had difficulty in meeting these commitments in recent years. The Region is working with the States to increase the number of inspections they perform, but it does not have the resources to backstop any State shortfalls. In addition, the Region is concerned that the current requirements for coverage inspections might impede the States and EPA from focusing on those inspections that might result in the greatest environmental benefit. The Region believes that this is an issue that warrants policy discussion at the national level.

4. Compliance Assistance

The State of Minnesota:

The State has a robust compliance assistance program. Examples of compliance assistance follow:

- Wastewater-operator training and certification are conducted each year at approximately 12 sessions around the State. These sessions cover collection systems and treatment technologies that discharge to land and surface waters.
- On-site technical assistance (involving several visits) is provided to six facilities each year.
- Staff respond to many requests for information and assistance each year.

- Information management staff conduct DMR completion training around the State about three times each year.
- Staff work with the Minnesota Technical Assistance Program (MnTAP) to provide assistance in emerging priority areas such as phosphorus management. MnTAP is a nonregulatory assistance program associated with the University of Minnesota.
- Minnesota has also worked with public and private sector stakeholders to develop electronic and hard copy templates for SWPPPs. MPCA has developed a SWPPP checklist for the MS4 program and has provided MS4s with a BMP manual and technical assistance regarding SWPPP development. MPCA also has a CWA section 106(b) contract with Tetra Tech, Inc., to create a compliance assistance tool kit for the construction stormwater program. One element of this tool kit will be a sample SWPPP specifically designed for new, 1- to 5-acre permit holders.
- With respect to CAFOs, compliance assistance is most often given regarding administrative activities (e.g., record keeping, updating plans) or operational activities that could create a violation. Many activities conducted by MPCA staff toward feedlot facilities possessing or applying for an NPDES permit would be considered compliance assistance. These activities include phone calls, permit application review activities, engineering plan review activities, permit issuance activities, and onsite inspections. MPCA is developing a compliance strategy for CAFOs to describe and track the level of compliance and issues causing noncompliance at facilities to better inform technical assistance needs or targeted inspections.

MPCA is tracking the percentages of major and minor facilities in SNC. The effectiveness of both compliance assistance and enforcement activities is generally measured by the number of facilities brought back into compliance. Although pollutant loading reduction as a result of compliance assistance and enforcement activities is not measured at this time, MPCA is looking at ways to do this.

EPA Region 5:

The Region generally provides extensive compliance assistance when new federal regulations are promulgated. In recent years, considerable effort has been placed on compliance assistance related to implementation of the CAFO regulations and the Phase II stormwater regulations. This assistance includes workshops, formal presentations, development and distribution of guidance and technical documents, and individual site visits.

Within the first year after the new biosolids regulations were published, the Region hosted a satellite broadcast to explain the regulation and its requirements. The Region reached nearly half of the regulated community with the broadcast. The Region has also instituted a small community compliance assistance program for biosolids modeled after the operation and maintenance evaluation program. For the small community assistance program, the Region evaluates compliance assistance activities by reviewing annual reports for regulatory compliance.

Section IV. Related Water Programs and Environmental Outcomes

1. Monitoring

The State of Minnesota:

Minnesota is implementing a monitoring program that covers streams, rivers, lakes, Great Lakes, wetlands, and ground water. The State uses a 5-year rotating-basin cycle for much of its monitoring and incorporates a variety of monitoring designs, such as probabilistic monitoring, fixed-station networks, and special projects. In addition, the State is participating in the national probabilistic stream survey as part of a five-State consortium.

The State has developed a final strategy for water resource monitoring and worked with the Region to ensure that the strategy meets the 10 elements described in EPA's guidance "Elements of a State Water Monitoring and Assessment Program." Minnesota has developed design and cost estimates for (1) increasing monitoring coverage to between 30% and 100% of all State waters (depending on resources available), (2) finalizing indices of biotic integrity now under development throughout the State, and (3) improving access to environmental data.

Data from several of Minnesota's monitoring programs are used to support the NPDES permit program. Although much of the State's monitoring is done on a rotating-basin cycle, this cycle is not tied to the reissuance of permits. Monitoring program staff work closely with basin coordinators to respond to information needs associated with the NPDES program. Ambient monitoring is done to support the program at approximately 270 sites representing about 110 permits. The permittees conduct this monitoring. Monitoring frequencies vary from once a week to monitoring done only under low flow conditions. Biological data from MPCA are used to assess the effectiveness of the NPDES permitting program if they are collected with 5 miles downstream of the facility. In addition, the State samples effluent at about 50 sites every few years.

Minnesota uses a rotating-basin approach that includes probability monitoring, fixed-station monitoring, and other targeted approaches. The State monitors 80 fixed stations, approximately 125 stream sites, and 30 to 50 lakes each year; other monitoring is also conducted. Minnesota is working to increase the percentage of waters assessed through the use of probabilistic and targeted monitoring, remote sensing, and expansion of volunteer monitoring in the State. As the focus on parameters such as nutrients, bacteria, and sediment increases, the percentage of waters identified as impaired is likely to rise. Increased monitoring of fish tissue contaminants could also increase the number of waters with identified impairments. The inclusion of additional water body types (large rivers, headwater streams) might also result in increased identification of impaired waters

The best long-term data about Minnesota streams have come from measuring six key pollutants at 80 stream locations over the past 4 decades. On average, the data show significant reductions in ammonia, biochemical oxygen demand, phosphorus, total suspended solids, and fecal coliform bacteria. Nitrogen has increased over the same period.

One of the State's primary water resources is the Mississippi River. Measurements of the Mississippi's quality show that it has improved dramatically over the past few decades. Comparing three decades of water quality data for the Mississippi River shows that dissolved oxygen, necessary to support aquatic life, has increased; ammonia, a toxicant to aquatic life, has decreased; phosphorus, a primary nutrient contributing to excess plant and algae growth, has fallen slightly or remained steady; and 5-day biological oxygen demand (BOD5), a measure of organic matter that uses oxygen as it decays, has fallen significantly.

EPA Region 5:

To date, the Region has not coordinated its permitting with the State's monitoring program. Because EPA Region 5 coordinates with the State prior to drafting permits, the Region uses the data available at that time to write permits. In most cases, if a wasteload allocation is needed for the dischargers on a given receiving stream, the State will have included the dischargers that need to be permitted by the Region in the development of the wasteload allocation.

2. Environmental Outcomes

The State of Minnesota:

In 2002, 6.4% of the stream miles in the State were assessed for aquatic life and 1.5% were assessed for swimming. Of the stream miles assessed, 60% were fully supporting aquatic life use and 57% were fully supporting swimming. The State also assessed 78% of lake acres for swimming use. Of the assessed lake acres, 63% were fully supporting swimming.

EPA Region 5:

In FY2003 Region 5 received its first Tribal water quality inventory prepared under CWA section 305(b) from the Fond du Lac Band of Minnesota Chippewa. The Tribe had assessed river miles and lake acres against the criteria and designated uses in its water quality standards (WQS). Trends indicate that none of the waters assessed were "not supporting" the designated use category. All waters were classified as either "fully supporting" or "partially supporting" the designated uses. Minor impairments due to nutrients and pathogens were noted. Currently, all Tribes in Region 5 are being encouraged to develop a 305(b)-type report, regardless of whether their water quality standards have been approved by EPA.

3. Water Quality Standards

The State of Minnesota:

Minnesota's designated uses are found in section 7050.0200 of the Minnesota Rules. Section 7050.0200 identifies the classes of designated uses of Minnesota's surface waters as follows:

Use Class	Protected Uses
Class 1	Public water supply
Class 2	Aquatic life, recreation
Class 3	Industrial water consumption
Class 4	Agriculture and wildlife
Class 5	Aesthetic enjoyment and navigation
Class 6	Other uses
Class 7	Limited resource value waters

In addition, Minnesota has subclasses within some of the classes (for example, different subclasses of aquatic life). Minnesota has enacted Lake Superior Basin-specific rules in chapter 7052 of the Minnesota Rules. Minnesota's water quality criteria meet the requirements of CWA section 303(c)(2)(b) and include both numeric criteria and narrative criteria, with a mechanism for deriving numeric expressions of the narrative for application in NPDES permits. Minnesota completed its most recent water quality standards review in 2003. At present the State is working on a revision of its water quality standards that includes replacing its current bacteria criteria for protecting recreational uses with E. coli-based criteria and adopting nutrient criteria for lakes.

Use attainability analyses and changes to designated uses occur infrequently in Minnesota. The State performed the use attainability analyses for most of the waters identified as Class 7 in its water quality standards during the 1980s and has modified the list from time to time since then. Minnesota's water quality standards contain provisions that describe the applicability of the uses and the water quality criteria and implementation procedures for Minnesota's antidegradation policy. The Minnesota water quality standards in chapter 7050 do not address compliance schedules; the Lake Superior rules in chapter 7052 do. Minnesota does not have criteria for E. coli to protect recreational uses, but as noted above it intends to adopt E. coli criteria as part of its current water quality standards review. Minnesota has a nutrient criteria development plan that was reviewed and accepted by EPA. In addition, as part of its current water quality standards review, the State is working toward adoption of nutrient criteria for lakes where swimming is the most sensitive use.

4. Total Maximum Daily Loads

The State of Minnesota:

Although MPCA developed 20 TMDLs in FY2003, the pace has been slow due to a significant level of public involvement and challenges to the TMDLs. MPCA anticipates that the pace of TMDL development is unlikely to increase in the near future. To assist MPCA, EPA has offered additional financial and contractor support, with mixed results. The State and the Region are working to develop additional innovative solutions (such as statewide/areawide mercury TMDLs) that might address the slow pace. At this time, it appears that the causes of the slow pace are legal and political and do not lend themselves to being addressed by "working smarter." Individual point sources may be important sources of pollutant loadings in certain TMDLs, and the Region is encouraging the State to proceed with permit development in cases where TMDL development is delayed.

Permit staff are involved informally in the TMDL development process in Minnesota. MPCA is in the process of developing its first TMDLs requiring wasteload allocation reductions. Permit staff are involved in the discussions on load allocations and in peer review of the documents, ensuring that the permit program is aware of allocations that will affect point sources. MPCA will build on existing procedures in the permit-writing process to ensure that appropriate TMDL wasteload allocations are incorporated into the permits.

EPA Region 5:

At this time, none of the receiving waters to which Region 5-permitted facilities discharge are required to have a TMDL.

5. Safe Drinking Water Act

The State of Minnesota:

The Minnesota Department of Health (MDH) has completed its Source Water Assessment Program as required by the 1996 reauthorization of the Safe Drinking Water Act. The assessments for public water systems using surface water include information from the NPDES program such as ambient monitoring data, wastewater discharge permits, and feedlot permits. MDH is working with MPCA to integrate source water assessments into watershed assessments and other surface water protection programs conducted under the CWA.

EPA Region 5:

Currently, one Region 5 Tribe in Minnesota (the Fond du Lac Band of Minnesota Chippewa) has federally approved water quality standards. The Tribe is set to begin its triennial review in December 2004. EPA's water quality standards and NPDES programs will work cooperatively on the Region's triennial review.

When issuing federal permits in Indian Country, the Region requests water quality certifications ("401 certifications") from Tribes to ensure that the permits comply with all EPA-approved Tribal water quality standards. The Fond du Lac Band of Minnesota Chippewa has recently completed its 401 certification procedures and submitted them for review. For Tribes preparing water quality standards for EPA's final action, Region 5 proactively meets with the Tribes to discuss potential permitting issues.

The Region is not aware of any drinking water intakes in close proximity to permitted discharges in Indian Country. Should any be discovered, they would be taken into consideration in the development of appropriate effluent limits, including the need for disinfection.

Section V. Other Program Highlights

The State of Minnesota:

In 1995 the State completed a blue ribbon study that assessed its NPDES permitting and compliance programs. A number of process improvements were implemented as the result of this assessment. In 2001 a legislative water quality audit of the NPDES permitting and compliance programs was conducted. Additional activities, policy changes, and management strategies were implemented as a result of this audit. Both the blue ribbon assessment and the water quality audit were made available to the public. Since 2002 MPCA has developed an annual NPDES work plan. The results of this work plan are assessed twice a year. In addition, monthly individual and overall productivity are tracked and reported.

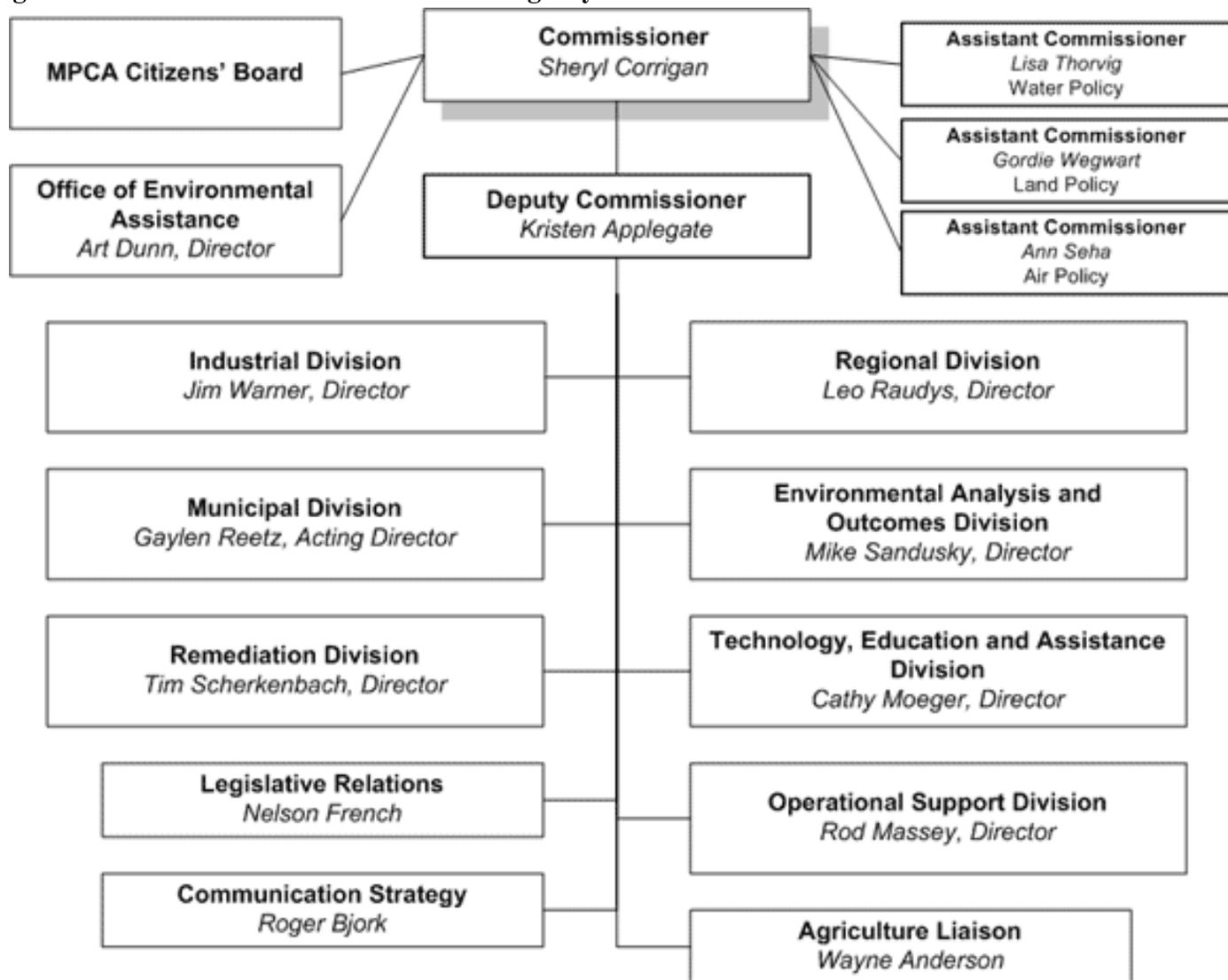
The annual work plan is available on MPCA's Web site at <http://www.pca.state.mn.us/water/pointsourceplan.html>.

Between November 2002 and May 2003, MPCA conducted a reengineering analysis of its effluent limit-setting process for NPDES permits. A trigger for the analysis was the agency's continuing effort to reduce its permit backlog. Two of the goals of the analysis were (1) to identify process improvements that would increase efficiency and decrease turnaround time for effluent limit request forms and (2) to begin gathering and analyzing data on errors in setting effluent limits.

Minnesota's CAFO program issued one of the first general NPDES permits in Region 5. The general NPDES permit applies to a wide range of facility types and animal species because it incorporates Minnesota's feedlot rules as permit standards. In addition, the permit anticipated the change in stormwater permitting requirements for construction and incorporated language to meet the new requirements upon the effective date of the Phase II regulations for stormwater. These innovations allowed Minnesota to issue first-time NPDES permits to nearly 500 facilities in 2 years.

MPCA has issued NPDES permits that authorize point/nonpoint source trading to a malting facility and a sugar beet processing facility.

Agency Organization: Minnesota Pollution Control Agency



-  [Overall Agency Structure](#) (updated October 2004)

MPCA Divisions

-  [Industrial Division](#)
-  [Municipal Division](#)
-  [Remediation Division](#)
-  [Regional Division](#)
-  [Environmental Analysis and Outcomes Division](#)
-  [Technology, Education and Assistance Division](#)
-  [Operational Support Division](#)
 - [library](#) (serves the environmental information needs of staff and provides information resources to the public)

MPCA Offices

NPDES Management Report, Fall 2004

Minnesota

			Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data	
						State Activities	EPA Activities	State Activities	EPA Activities
NPDES Progress									
Universe	1	# major facilities (6,690 total)	I.1		n/a	88	0		
	2	# minor facilities covered by individual permits (42,057 total)	I.1		n/a	823	17	752	20
	3	# minor facilities covered by non-storm water general permits (39,183 total)	I.1		n/a	343	0		
	4	# priority permits (TBD)	I.6			--	--		
	5	# pipes at facilities covered by individual permits (142,761 total)	I.7		n/a	3,489	--	1,546	
	6	# industrial facilities covered by individual permits (32,505 total)	I.1		n/a	426	18	282	
	7	# POTWs covered by individual permits (15,197 total)	I.1		n/a	507	8	450	
	8	# pretreatment programs (1,482 total)	II.2		n/a	9	--		
	9	# Significant Industrial Users (SIUs) discharging to pretreatment programs (22,158 total)	II.2		n/a	382	--		
	10	# Combined Sewer Overflow (CSO) permittees (831 total)	II.5		n/a	2	--		
	11	# CAFOs (current and est. future) (17,672 total)	II.3		n/a	725	--		
	12	# biosolids facilities (TBD '05)	II.6			--	--		
NPDES Program Administration	13	State or Region assessment of State NPDES program (none (N)/assessment (A)/profile (P))	I.1	50 states 2004	n/a	A, P	P		
	14	% pipes at facilities covered by individual permits w/ lat/long in PCS	I.7		46.3%	24.9%	--		
	15	State CAFO legal authority expected (mo/yr)	II.3	2005	n/a	NC	n/a		
	16	# Withdrawal petitions/legal challenges (22 total)	I.4		n/a	0	n/a		
	17	DMR data entry rate	I.7		95%	100%	--		
	18	# permit applications pending (1,011 total)	I.6		n/a	41	--		
NPDES Program Implementation	19	% major facilities covered by current permits	I.6	90%	83.7%	81.8%	n/a		
	20	% minor facilities covered by current individual or non-storm water general permits	I.6	90% 12/04	87.0%	88.3%	94.1%		
	21	# major facilities w/permits expired >10 yrs. (56 total)	I.6		n/a	0	0		
	22	% priority permits issued as scheduled (TBD '05)	I.6	95% 2005		--	--		
	23	% pretreatment programs inspected/audited during 5 yr. inspection period	II.2		85.3%	100.0%	--		
	24	% SIUs w/control mechanisms	II.2		99.2%	100.0%	--		
	25	% of CSO permittees with long-term control plans developed or required	II.5	75% 2008	82.2%	0.0%	--		
	26	% CAFOs covered by NPDES permits	II.3		35%	77%	--		
	27	% biosolids facilities that have satisfied part 503 requirements (TBD '05)	II.6			--	--		
	28	# Phase I storm water permits issued but not current (76 total)	II.4		n/a	0	0	3	
	29	# Phase I storm water permits not yet issued (5 total)	II.4		n/a	0	0		
	30	Phase II storm water small MS4 permits current (Y/N/D (draft)) (35 States)	II.4	100% states 2008	n/a	Y	n/a		
	31	Phase II storm water construction permit current (Y/N/D (draft)) (49 States)	II.4	100% states 2008	n/a	Y	Y		
NPDES Compliance Monitoring and Enforcement Response	32	% major facilities inspected	III.3		71%	71%	0%		
	33	(inspections at minors) / (total inspections at majors and minors)	III.3		76%	84%	100%		
	34	% major facilities in significant non-compliance (SNC)	III.1		20%	7%	--		
	35	% SNCs addressed by formal enforcement action (FEA)	III.1		14%	0%	--		
	36	% SNCs returned to compliance w/o FEA	III.1		70%	80%	--		
	37	# FEAs at major facilities (666 total)	III.1		n/a	12	0		
	38	# FEAs at minor facilities (1,660 total)	III.1		n/a	33	1		

Explanation of Column Headers:

Profile Section: For each measure, this column lists the section of the profile where the program area (including any additional data for the measure) is discussed.

National Data Sources: The information in these two columns is drawn from two types of sources:

(1) EPA-managed databases of record for the national water program, such as PCS, the National Assessment Database, and the National TMDL Tracking System. NPDES authorities are responsible for populating PCS with required data elements and for assuring the quality of the data. EPA is working to phase in full use of NAD and NNTS as national databases.

(2) Other tracking information maintained by EPA Headquarters for program areas such as CAFOs, CSOs, and storm water.

The [definitions document](#) accompanying this Management Report provides a detailed definition of each data element in the National Data Sources columns.

Additional Data: These columns provide additional data in cases where information from other data sources differs from information in the National Data Sources column for reasons such as different timing of the data "snapshot." Additional data should generally adhere to the same narrative definitions as data in the National Data Sources, and should be derived using similar processes and criteria. Our goal is to work with the States on these discrepancies to ensure consistent and accurate reporting. A State contact is available who can respond to queries. The profiles discuss each additional data element.

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EPA Activities: Information in these columns reflects activities conducted by the EPA Region within the State.

NPDES Management Report, Fall 2004

Minnesota

		Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data		
					State Activities	EPA Activities	State Activities	EPA Activities	
Water Quality Progress									
Universe	39	River/stream miles (3,419,857 total)	IV.2		n/a	91,944	n/a		
	40	Lake acres (27,775,301 total)	IV.2		n/a	3,290,101	n/a		
	41	Total # TMDLs in docket at end of FY 2003 (52,795 total)	IV.4		n/a	1,780	--		
	42	# TMDLs committed to in FY 2003 management agreement (2,435 total)	IV.4		n/a	14	0		
	43	# Watersheds (2,341 total)	IV.2		n/a	--	--		
Water Quality Administration	44	On-time Water Quality Standards (WQS) triennial review completed (42 States)	IV.3		n/a	Y	n/a		
	45	# WQS submissions that have not been fully acted on after 90 days (32 total)	IV.3	<25% submissions	n/a	n/a	0		
Water Quality Implementation	46	State is implementing a comprehensive monitoring strategy (Y/N) (TBD)	IV.1	all states 2005	--	--	--		
	47	% river/stream miles assessed for recreation	IV.2		13.8%	1.5%	n/a		
	48	% river/stream miles assessed for aquatic life	IV.2		22.0%	6.4%	n/a		
	49	% lake acres assessed for recreation	IV.2		49.4%	78.0%	n/a		
	50	% lake acres assessed for aquatic life	IV.2		48.5%	0.0%	n/a		
	51	# outstanding WQS disapprovals (23 total)	IV.3		n/a	0	n/a		
	52	WQS for E. coli or enterococci for coastal recreational waters (12 States)	IV.3	35 states 2008	n/a	N	n/a		
	53	WQS for nutrients or Nutrient Criteria Plan in place (13 States)	IV.3	25 states 2008	n/a	Y	n/a		
	54	Cumulative # TMDLs completed through FY 2003 (10,807 total)	IV.4		n/a	21	--		
	55	# TMDLs completed in FY 2003 (2,929 total)	IV.4		n/a	20	0		
Environmental Outcomes	56	# TMDLs completed through FY 2003 that include at least one point source WLA (5,036 total)	IV.4		n/a	21	--		
	57	% Assessed river/stream miles impaired for swimming in 2000	IV.2		--	37.3%	n/a		
	58	% Assessed lake acres impaired for swimming in 2000	IV.2		--	34.3%	n/a		
	59	# Watersheds in which at least 20% of the water segments have been assessed and, of those assessed, 80% or more are meeting WQS (440 total)	IV.2	600 2008	n/a	--	--		

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